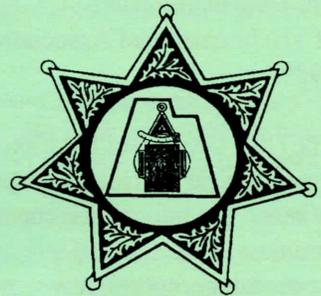


*The International Association For Identification*

**Utah Division of I.A.I.**

*Chartered 1989*

# **NEWSLETTER**



## **PRESIDENT'S MESSAGE**

By

**Vice-President Kent W. Timothy**

You know, the better the weather gets, the harder it is for me to concentrate on all those little lines and squiggles we call fingerprints. But, such is the price we pay! I'm writing again on behalf of Don Thurgood, the division president. He continues his fight and sends his best wishes for all. Now on to business. Our spring training session was a great learning experience not just in the classroom but also as a lesson for me. We had a great day with Dr. John McCullough from the "U" Anthropology department, Karen Kido from Salt Lake P.D. and the ever-popular Rudy Reit from the State Office of the Medical Examiner. Once again let me apologize for not getting the word out earlier and let me begin to make amends by reminding you of what we have scheduled for the rest of 1998.

On August 18<sup>th</sup> at West Valley City Hall, the Utah Division and the Utah Sexual Assault Forensic Nurse Examiners are sponsoring a course on the recovery of fingerprints from human skin. This is the same class taught nationwide by Mr. William Sampson, formerly of the Metro-Dade Police Department. Mr. Sampson is an I.A.I. certified Senior Crime Scene Analyst, A distinguished member of the I.A.I., a member of the British Fingerprint Society and author of the book Recovery of Latent Fingerprint Evidence from Human Skin. This promises to be well worth the nominal fee of \$79.95. If you haven't received a mailer about this course I can Fax you one or you can call The Lynn Peavey Company directly 800-255-6499.

In October, our fall conference will be combined with a three day conference co-sponsored by the Utah State Attorney Generals Office, office of Prosecution Council. The conference will be held in Ogden at the Park Hotel. The conference will be concentrating on coordination the efforts of all those involved in a criminal investigation from the scene of the crime, though the presentation of the evidence in a court. This also promises to be a great learning experience for all. To make reservations you can contact Carma Morris at 801-366-0202.

Once again let me issue the invitation for you all to contact me regarding training you would like to see come to the state or any other issues you feel are relevant to the I.A.I. You can call me at West Valley P.D. 801-963-3229, send me a fax at 801-963-3333 or send me something by e-mail (nothing virulent) to [ktimothy@ci.west-valley.ut.us](mailto:ktimothy@ci.west-valley.ut.us).

**Kent W. Timothy**  
**Vice-President**  
**Utah Division of I.A.I.**

## Utah Division of I.A.I. Newsletter

The Utah Division of I. A. I. has been chartered division of The International Association for Identification since 1989.

The Utah Division of I.A.I. Newsletter is published four times a year during the Spring, Summer, Fall, and Winter. The information contained within the newsletter is either in the form of submitted articles, information from other investigative publications, or reported information.

The Utah Division of I.A.I. Newsletter will accept any article or information of those wishing to submit to the editor. It is requested the submitted articles or information be in typewritten form or on 3.5" disks using WordPerfect 8.0 or lower format.

Please send items to be published to the editor:

**Scott R. Spjut; Editor, Utah I.A.I.**  
**West Valley City Police Dept.**  
**Forensic Services Unit**  
**3600 Constitutional Blvd.**  
**West Valley City, Utah 84119**

The Utah Division of I.A.I. Newsletter reserves the right to reject or modify any submitted articles deemed to be slanderous, derogatory, or inappropriate for the members of the association.

### Editor's Note:

This will be my last issue of the Utah Division of I.A.I. Newsletter. I have recently taken on a great deal of responsibilities and can no longer create, write, and publish this quarterly newsletter in a timely manner. I have enjoyed the many articles and correspondence from the members of our Division and look forward to working with you in the future. Vice-President Kent Timothy has chosen a new editor who I know will do an excellent job! Thank you for your support.

**Scott R. Spjut, 1995-1998 Editor**  
**Utah Division of I.A.I.**

Volume IX. No. 2



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The annual membership dues to the Utah Division of I.A.I. are currently \$15.00 per membership, or \$200.00 for a lifetime membership. Dues can be mailed to:

**Ms. Debbi Herrera-Parkin**  
**Utah Division of I.A.I.**  
**Salt Lake County Sheriff's**  
**Office Identification Section**  
**437 South 200 East**  
**Salt Lake City, UT 84111**

**Look At Your Address Label!**  
Debbie has been in the process of updating membership records. Below your name you will see your Membership Number, the last year membership dues were paid, and possibly three asterisks (\*\*\*) . If your address label has three asterisks, it is a warning your membership will be dropped from our records unless current payment is received for 1998. Please use the enclosed Membership Application to update your dues if so noted. Thank you!

**Submitted Article**  
**CHRONOLOGICAL HISTORY**  
**OF FINGERPRINTS**

By: George J. Throckmorton, Manager  
Salt Lake City Police Department Crime Lab

Fingerprints have been an important element of criminal investigation procedures for many years. Each year they are used in hundreds of criminal investigations throughout Utah. Yet, as often as they are used it is rare that the fingerprint practitioner is familiar with the history of this first and most used form of forensic science.

In order for a person to testify as an expert witness in the courtroom he/she is frequently asked qualifying or voir dire questions to confirm whether or not they are truly an expert on fingerprints. It has frequently been said that an "expert" witness is someone who knows a lot of information about a limited area of expertise. In this case it is someone who knows a lot of trivia about fingerprints.

Several years ago I began to compile a chronological list of significant events in fingerprint history. Obviously any list is NOT now, nor could it ever be a comprehensive list of events, but it is designed to provide certain concise information which may assist in this qualifying process.

I thought I would share this information with other Utah Division, IAI members in an attempt to provide the fingerprint expert in Utah with more historicity or trivia. I hope it will be of value to those who testify in court, and get asked some of those qualifying questions that can only come from attorneys.

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250 B.C. - Chinese Emperor Te'in Shi used the imprint of his thumb as an official seal on documents.

35 A.D. - Roman scholar Marcus Fabius Quintillanus wrote concerning the use of a palm print in a murder trial.

650 - Chinese law book "Yung-Hwui" described the use of fingerprints in divorce procedures.

702 - Japanese Emperor Taiho enacted a law requiring the placement of fingerprints on certain legal documents.

1150 - The author Shi-naingan wrote a book that told of fingerprints used on contracts involving the sale of children.

1563 - de Barros published a book entitled "Asia" in which he described the use of fingerprints as being fairly common among the Chinese people on various legal documents.

1684 - Dr. Nehemiah Grew presented a paper to the Royal Society of London that dealt with the anatomical descriptions and uses of glandular pores on the hands and feet.

1685 - Govard Bidloo, an anatomist from Holland wrote a book "Anatomica Humani Corporis" which included a drawing of the detailed ridge formation on a thumb.

1686 - Professor Marcello Malpighi published "De Externo Tactus Organo," a book that described the layer of the skin. The book also mentioned the various ridge patterns found in fingerprints.

1788 - J.C.A. Mayer wrote an atlas of anatomical illustrations in which he illustrated and described the ridge details on the tips of the fingers. He asserted that skin ridge details were never duplicated in any two people.

1809 - Thomas Bewick, famous wood and copperplate engraver, placed his fingerprint in the book "British Birds as an indication that this was "his mark."

1814 - J.F. Schroter contributed to the literature of fingerprints in a study done concerning the morphology of the palmar skin with illustrations of the ridges and pores on the fingers.

1823 - Johannas E. Purkinje divided the fingerprint patters into nine major categories.

1856 - Herman Welcker took an inked impression of his right palm in 1856 and again in 1897. He compared the two prints and found no significant differences in pattern configuration over this 41 year period.

1858 - Sir William Herschel began taking palm and fingerprints as part of his job with the British East India Company in Bengal, India.

1873 - E.R. Henry was appointed Assistant Magistrate Collector in the Indian Civil Service.

1874 - Dr. Henry Faulds arrived in Japan to begin his mission for the United States Presbyterian Church of Scotland.

1877 - Faulds devised a system of taking fingerprints by using printer's ink.

Herschel introduced fingerprint identification into the jails in Hooghly District, India. He also requested permission to use them as a form of identification in all the jails in Bengal; permission was denied.

While studying skin diseases and glandular excretions, the French physician Aubert, developed a method that made latent prints on paper become visible. His method involved the use of silver nitrate and is still being used by many law enforcement agencies throughout the world.

1879 - Alphonse Bertillon devised a method of personal identification called "Anthropometry." This method was regarded as the first attempt to scientifically identify a person in such a manner that his criminal record could be retrieved without access to the individual's name.

1880 - Henry Faulds wrote a letter to Charles Darwin suggesting the use of fingerprints in his research. Darwin forwarded the letter to his cousin, Francis Galton, who showed no interest in fingerprints at that time.

1882 - Bertillon was appointed head of the Paris Police Identification Section.

1883 - Mark Twain wrote the book "Life on the Mississippi" in which his fictional characters make use of a thumb print to identify a corpse. This novel helped to stimulate an interest in fingerprints among the American people.

1887 - William N. Jennings attended a lecture on fingerprints at the Franklin Institute in Philadelphia. He went to his home and took an inked impression of his right hand. Many years later in 1945, he took another inked impression of his right hand and found the ridge details unchanged. This covered a span of 58 years and proved to be the longest time-span study ever done on fingerprints.

1888 - Galton lectures before the Royal Institution about fingerprints.

A veterinarian in Germany named Wilhelm Eber discovered a way of developing latent prints found at the scene of a crime by using iodine vapors. He offered his idea to the Prussian Minister of Interior and the Chief of Police in Berlin, but they both dismissed the proposal as being impractical.

1890 - Several American police chiefs met in Chicago and discussed the problems of identifying immigrants. They agreed that the use of anthropometry would alleviate many of the problems.

1891 - Galton published his research on fingerprints in a scientific journal, but little notice was given to it by most people.

Juan Vucetich who lived in Argentina read about Galton's research and worked out a system of fingerprint classification which would enable an individual to classify, file, and retrieve fingerprints. Vucetich established his classification system in La Plata Police Department in Argentina, and this was the first classification system for fingerprints ever put into practical application anywhere in the world.

1892 - Francis Galton published his book "Finger Prints" and shortly thereafter a Civil Bureau of Personal Identification was established in London, England.

1893 - Bertillon published a book on anthropometry.

Edward Henry visited Galton and discussed the need of a simple method to classify fingerprints.

Secretary of State for the Home Department of England appointed a committee to investigate the various identification practices in use at that time. The purpose of this committee was to find a method that would be best suited for use in the identification of habitual criminals.

1894 - The Committee recommended a combination of methods to be used to identify criminals. This combination would consist of photography, general description, and anthropometry; with the ultimate proof of identity being fingerprints.

Mart Twain wrote the book "Puddenhead Wilson" which described a murder case being solved through

identification of a fingerprint. This book created great public interest concerning the possibilities of using fingerprints in real criminal matters.

1895 - Bertillon relented in his complete opposition to fingerprints and allowed a place on his Anthropometry card for their inclusion.

1896 - Argentina became the first country in the world to base its entire criminal identification system solely on fingerprints.

A group of American Chiefs of Police met in Chicago and discussed the problems they were having in the use of Anthropometry.

1897 - India officially adopted the use of fingerprints over anthropometry.

1899 - Henry presented his system of fingerprint classification and filing before the Dover meeting of the British Association for Advancement of Science.

1900 - Henry published "Classification and Uses of Finger Prints"

A committee was appointed by Secretary of State in London to investigate the effectiveness of identifying criminals through the use of bodily measurements and fingerprints. Henry was called to this committee and explain his classification system. The committee recommended that the Henry system of classification should completely replace the use of anthropometry.

1901 - Henry was appointed as Assistant Commissioner of Police at the New Scotland Yard and later that same year his fingerprint system was officially adopted for use by the English Government.

1902 - On September 15th the London Daily Telegraph wrote about the detection of a burglar by means of a fingerprint identification.

Dr. Henry P. DeForest, Chief Medical Examiner for the New York City Civil Service Commission required all civil service applicants be fingerprints.

1903 - Captain James Parke introduced fingerprints into the New York State Prison System.

**Will West was sentenced to Federal Prison at Leavenworth, Kansas where it was found he had a double in every respect except his fingerprints.**

**This incident proved to be an important turning point in the acceptance of fingerprints over anthropometry in the U.S.A.**

1904 - The World's Fair was held in St. Louis, Missouri and Sgt John Ferrier was present to protect the British Crown Jewels. Ferrier was an authority on the Henry Fingerprint Classification System and he taught it to nine police authorities at the fair. St. Louis Police Department adopted the use of the fingerprints that same year and became the first municipality in the U.S. to do so.

1905 - U.S. Army officially adopts the use of fingerprints.

Chicago adopts the use of fingerprint in its police department.

1906 - U.S. Navy officially adopts the use of fingerprints.

1907 - Academie de Sciences of Paris voted the Vucetich classification method the best system of fingerprint classification; much better than the Henry system.

1911 - The Illinois Supreme Court accepted fingerprints testimony in a criminal case; People vs. Jennings

1914- Bertillon proposed that artists place their fingerprints on their artwork to prevent fraud, after which several famous artists including Rodin ascribed to the system.

1915 - A group of fingerprint experts met in California and founded the first professional organization dealing with fingerprints; the International Association for Identification.

1916 - The Institute of Applied Science was founded in Chicago, Illinois; this was the first institution in the world that taught fingerprint techniques. Although it has moved several times and changed management, it still exists today as the American Institute of Applied Science located in Youngsville North Carolina.

1919 - The first American text book on fingerprints was written by Frederick Kuhne.

Fingerprint and Identification Magazine was first published by the Institute of Applied Science. For

many years this was the only professional journal dealing with fingerprints and other forms of identification. The last issue was published sometime in the late '70's or early '80's.

1922 - Utah Division of IAI organized in Ogden Utah with 16 Charter members. First President was R.H. Wollen, Chief of Police of Ogden. This initial organization eventually evolved into the Utah Peace Officers Association.

1923 - The Los Angeles Police Department, under the direction of August Vollmer, created the first Crime Laboratory in the United States.

1924 - The International Association of Chiefs of Police combined their fingerprint records with the records from Leavenworth Penitentiary. These records were moved to Washington, D.C., were consolidated by the F.B.I. into a centralized pooling system, and were made available to all law enforcement agencies throughout the U.S.

1927 - Utah State Legislature enacts legislation for a State Bureau of Criminal Identification.

1928 - A total of 12 state Bureaus of Identification were in operation in the U.S.

1930 - Congress gave the F.B.I. authorization to use fingerprints in criminal matters; however, the F.B.I. had already been using them unofficially for six years prior to this authorization.

1932 - Federal Bureau of Investigation, under J. Edgar Hoover, organized a national crime laboratory to assist law enforcement agencies.

1937 - "Sarge" A.H. Rogers retires from Salt Lake City Police Department after collecting more than 80,000 sets of fingerprints.

1938 - There was now a total of 34 state Bureaus of Identification in use throughout the U.S.

1940-45 - Salt Lake County Sheriff's Office implements a Crime Laboratory under the direction of Sgt. Bill Foxley.

1948 - The Criminal Justice Act of 1948 in England states in essence that fingerprints shall be sufficient proof of identity regarding a person's previous convictions.

1964 - Weber County Sheriff and Ogden City Police Department formed the Combined Ogden City/Weber County Crime Lab.

1966 - Combined Ogden City/Weber County Crime Lab split into two different labs; one was operated by the Weber County Sheriff's Office and the other by the Ogden City Police Department.

1970 - I.A.I. completes a three year world wide study relating to the number of points needed to make an identification. They concluded that no minimum number of points would be required but should be left up to the discretion of the latent print examiner based upon his/her experience and qualifications.

Weber State College under the direction of Jim Gaskill, implemented the first "Crime Laboratory" to serve law enforcement agencies in the State of Utah.

1977 - Latent Print Certification Board established at the 62nd Annual Conference of the I.A.I. in New Orleans, LA. This provided an objective Certification program for latent print examiners based upon their professional record of education, training, experience, and achievement; as well as the results of a formal examination.

1980 - State of Utah Criminalistics Laboratory System officially began it's operation at the State Office Building next to the State Capital in Salt Lake City. Robert Brinkman was the first Director of the Lab; and it provided limited services involving latent finger prints, questioned document examination, and photography.

1981 - The State Crime Lab moved into its present location and expanded it services to be a full service laboratory.

1989 - Utah Division of the International Association for Identification was chartered with 12 members. Ed Colbert, Salt Lake County Sheriff's Office was the first President.

1991 - Weber State University implements a combined Crime Scene Investigation Unit which serves all law enforcement agencies in Weber County.

1995 - Salt Lake City Police Department converts the Police Crime Lab from sworn officers to non-sworn personnel.

## Submitted Article

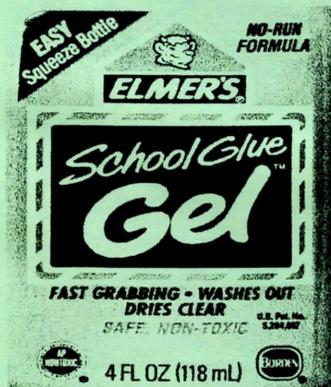
Processing Textured Surfaces  
for Latent Prints

by

Melanie A. Schertz, Crime Lab Technician  
Salt Lake City Police Department

How many times have those of us who process for latent prints looked at a textured surface and said that there is no way we will get prints, so we don't even try. This unfortunately seems to happen quite often. However, currently on the market there are liquid products which aid in lifting latent prints off of textured surfaces. These liquid lifting products offered through many fingerprinting product catalogs work great and are easy to use. They also vary in price averaging around \$13.00 a bottle. However I have found a product which is just as effective, for a lot less cost.

The method is using a simple product - *Elmer's School Glue Gel*® or a similar brand. These glue gels are priced from \$1.00 to \$2.00 per bottle depending on the store. Likewise the bottles can be found in most locations which sell office and school supplies. With the glue gel and an ordinary drinking straw, you now have a method of lifting prints off of textured surfaces.



Here is how to use this method. Process the latent print on the textured surface with magnetic fingerprint powder, preferably a black or bichromatic powder depending on the color of the textured surface. I have also used basic violet with likewise good results. Once you develop visible latent prints with the powder, you should clean the developed latent print using a

regular fingerprint brush (non-magnetic). Once the latent print is cleaned up and reflects good contrast, you will begin the lifting technique. Place a small dot of glue directly on the latent print. How much glue depends on how big the surface is you need to cover. If you don't get enough the first time, more can easily be applied. After the glue has been placed on the latent print, take a straw and blow the glue gel across the print area. You will want to blow the glue gel as thin as possible. At this point the glue needs to be dry to the touch. You can let it air dry, use a hair blower, or even pressurized air from a compressor. Drying times vary due to conditions. If you blow the glue gel as thin as possible, and air dry, the normal drying time will be approximately 15 to 30 minutes. If you are working in the cold, plan on a much longer drying time.

Once the glue gel is fully dry, place your regular left tape over the gel covered latent print and rub the tape onto the surface. Then pull the tape off the surface like you would with a regular lift. Place the lift on an ordinary latent lift card (being careful to flatten as placing it on the card - remember there is no adhesive behind the glue gel. You should now have a successfully developed and lifted latent print from a textured surface.

We have found this method works well on plastics, metallic surfaces, Styrofoam, some wood surfaces. The method can be used on skin, but use a light silicone release agent after dusting the print on the skin, but prior to placing the glue drop on the latent.

Using this technique will give you more success at preserving latent prints on textured surfaces. Good Luck!

**Upcoming Training Opportunity**

**Advanced Forensic  
Fingerprint Identification  
and  
Testimony Course  
August 10-14, 1998**

Course Length: Five (5) Days  
40 Hours

Instructor: Ivan R. Futrell

**Ivan R. Futrell Biography:**

Retired FBI Assistant Unit Chief, Latent Fingerprint Section, with 37 years of experience in the field of fingerprint science includes 30 years experience as a latent print examiner, and 10 years as an instructor at the FBI Academy in Quantico, Virginia. I.A.I. Certified Latent Print Examiner.

The focus of this course will be to acquaint the student with information concerning latent print comparisons and to prepare for and testify as a fingerprint expert.

The course will provide detailed instruction and practical application of fingerprint pattern interpretation; the study and evaluation of friction ridge characteristics; digit determination; the orientation of latent prints to known prints; and evaluation and comparison of latent prints.

Extensive practical exercises will be conducted in the evaluation and comparison of latent prints. Class instruction and practical exercises will include the preparation of fingerprint evidence for court testimony. Each student will prepare a set of charted

enlargements of latent and inked fingerprints.

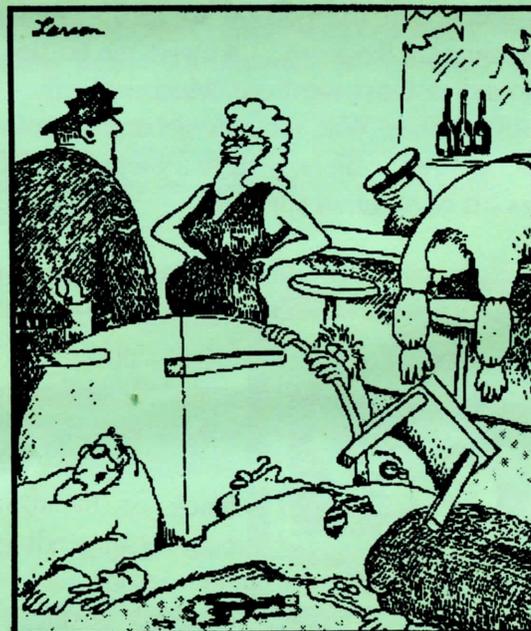
A significant aspect of this course will be the presentation of direct expert testimony by cross-examination of the student.

The class will be taught at the State of Utah Police Officers and Standards Training building (POST).

Tuition is \$375.00 per student.

For applications or additional information please contact:

Mr. Richard L. Wright, L.P.E.  
State of Utah Dept. Of Public Safety  
Bureau of Forensic Services  
BOX 148285  
Salt Lake City, UT 84114-8285  
Phone: (801) 965-4501  
psmain.rwright@state.ut.us



"So then the little sailor dude whips out a can of spinach, this crazy music starts playin' and ... well, just look at this place."