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Police Science Technical Abstracts and Notes

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POLICE SCIENCE TECHNICAL ABSTRACTS AND NOTES

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Abstractors

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A Practical Means for Routine Approximation of the Time of Recent Death—C. C. Lushbaugh, Jesse Rose, and Dean Wilson, *Police*, 5(1): 10-3 (September-October 1960). By means of a single thermistor bridge thermometer, continuous measurement of body temperature is possible. The data obtained is extrapolated back to 37.6° C for the time of death. Reference is made to variables cited in other literature. However, except in the case of head gunshot wounds, the author states that time of death can be predicted within forty-five minutes of the true time. (JDN)

Spoon Cases: A Quick Method of Identifying Heroin—William King, *Police*, 5(1): 73 (September-October 1960). Where a very thin film of heroin remains on a spoon or medicine dropper, the test reagents, Marquis or Mecke, can be applied directly to the surface of the object. Likewise, mercuric iodide solutions can be applied to the surface and transferred to a slide for crystal identification. Only 15-20% of the total specimen need be consumed by this process. (JDN)

A Simple Specific Confirmatory Test for the Detection of Silver Nitrate as a Chemical Entrapment Device—H. L. MacDonell, *Bulletin, Bureau of Criminal Investigation, New York State Police*, 25(3): 3-4 (1960). Stains from silver nitrate used as theft detection powder are treated with a solution of iodine in potassium iodide and then with a solution of sodium thiosulfate. This treatment leaves light yellow stains. Redevelopment by photographic developer, applied under light, confirms the presence of silver. (JDN)

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Gas-Solid Chromatographic Separation of Some Light Hydrocarbons—T. A. McKenna, Jr. and John A. Idleman, *Analytical Chemistry*, 32(10): 1299-1301 (September 1960). A column composed of ten feet of Alcoa F10 alumina (activated) plus ten feet of Davison Grade 62 silica gel (activated) will resolve mixtures of saturated and unsaturated hydrocarbons through C₄'s. The output of the column is analyzed by means of a Perkin-Elmer Model 154B Vapor Fractometer. (JDN)

Microelectrophoresis on Cellulose Acetate Membranes—B. W. Grunbaum, P. L. Kirk, and W. A. Atchby, *Analytical Chemistry*, 32(10): 1361-2 (September 1960). Greater speed and clarity are possible through the use of cellulose acetate films, rather than filter paper, for supporting media for microelectrophoresis. (JDN)

Document Falsification Through Additional Postscript with Ball Point Writing—Ludwig Franzheim, *Kriminalistik*, 13(10): 436-9 (October 1959). Writing on one side of the document could be dated by reliable witnesses. A postscript on the reverse side was questioned as to date of execution. By means of oblique light study of the indentations of the crossing lines it was established that the postscript was made after the main copy was written. The indentation of the postscript was raised above the trough of the main writing. (JDN)

Investigation of Selfsealing Envelopes After Opening and Resealing—W. Hofmann, *Kriminalistik*, 13(10): 440-4 (October 1959). Selfsealing letter envelopes, sealed with latex rubber, were investigated. Any mechanical opening, regluing, and resealing could be detected. Certain mechanical operations during manufacture cause blemishes that can be mistaken for forceful opening. Where high heat, 145°C, is used, the flap opens, but the

discoloration of the adhesive is obvious. The general discoloration of heat can be differentiated from the localized discoloration of aging and oxidation. Only when the sealed envelop is placed in an atmosphere of carbon tetrachloride or benzene for some time, will the flap unseal of its own accord. It may be resealed after removal from the solvent atmosphere. Inspection of printed matter or ball point pen ink may show characteristic diffusion if this method is used. (JDN)

How to Recognize and Handle Abnormal People—U.S. Public Health Service, Audiovisual Section, Communicable Disease Center, Atlanta 22, Georgia. A 33 minute, 16 mm sound film entitled *Booked for Safekeeping* has been prepared and planned to be used in connection with a manual for police officers, *How to Recognize and Handle Abnormal People*. While every psychiatrist knows that most cases of mental illness do not involve violence, nevertheless the sort of cases called to the attention of the police often do. How to handle these excited people is a matter of great concern to the police. The film is made with the needs of the officer and of the excited person in mind. The film is available for free loan from the U.S. Public Health Service. The manual can be obtained from the National Association for Mental Health, 10 Columbus Circle, New York 19, New York, for 65 cents a copy. (OH)

Journal—The Forensic Science Society (England)—Vol. 1, No. 1 of the *Journal, The Forensic Science Society*, was published September 1960 under the editorship of S. S. Kind and presents several papers dealing with road accident problems which were a part of the first meeting of this English society. Plans are to publish the Journal twice yearly. Subscription rate is two pounds per year and the business office is % Rossett Holt, Pannal Ash Road, Harrogate, Yorkshire, England. (OH)

Psychological Studies in Handwriting—D. M. Duke, *Royal Canadian Mounted Police, Seminar #5*:¹ 24–29 (1958), reports on several psychological

¹ EDITOR'S NOTE: The entire proceedings of Seminar #5 of the Royal Canadian Mounted Police entitled, *Questioned Documents in Crime Detection*, has been published in bound form and is available from the Queens Printer, Ottawa, Canada, price \$3. This proceedings includes all of the papers presented most of which are abstracted in this section together with a summary of discussions and an edited transcript of various panel discussions held during this Seminar.

studies of interest to handwriting examiners and discusses prevalent attitudes of many in the identification field toward psychological studies. (OH)

Left-Handed Writer—A. Zitzelsberger, *R.C.M.P., Seminar #5*: 31–39 (1958), discusses distinguishing elements of left-handed writing. Ambidextrous writings are also discussed and illustrated. (OH)

Potentialities of the Blink Microscope Principle in Typewriting Comparisons—R. A. Huber, *R.C.M.P., Seminar #5*: 41–43 (1958). When two typewritten characters are viewed under a modified comparison microscope and illuminated alternately at a rapid rate of alteration and there are slight differences in design, there appears to be movement in the image; but when identical, there is none. Special equipment used is described and preliminary evaluation method is given. (OH)

Proportional Spacing Typewriter Identification—Linton Godown, *R.C.M.P., Seminar #5*: 46–55. Proportional spacing typeface designs found on Justwriters, Flexowriters, Remington, and Vari-Typers are discussed and illustrated. Excellent comparisons are made with similar IBM proportional spacing types. This is a basic reference article for all document examiners. (OH)

Escapement Actions of Typewriters—David J. Purtell, *R.C.M.P., Seminar #5*: 57–63 (1958), describes the method of operation of typewriter escapements on different makes of machines. Causes of various classes of spacing defects—crowding or piling of letters and skipping—are analyzed. Typewriting identification experts will find valuable basic information in a well organized form. (OH)

Cash Register and Cash Adding Machine Identification—J. Warren, *R.C.M.P., Seminar #5*: 89–99 (1958). An illustrated discussion of numeral designs and other identifying features of these machines are presented together with an analysis of the means of identifying the individual machine. (OH)

A Review of the Printing and Duplicating Processes—A. M. Headrick, *R.C.M.P., Seminar #5*: 101–119 (1958), surveys types of printing machines, kinds of printing processes, typography,