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POLICE SCIENCE TECHNICAL ABSTRACTS AND NOTES

Joseph D. Nicol*

Cannabis Sativa—Bibliography—A bibliography of Cannabis Sativa, both book and periodicals references, of the nineteenth and twentieth centuries is given in the *UN Bulletin on Narcotics*, 3:59-78 (Jan. 1951) and 3:42-48 (April, 1951).

The Structure of Morphine—P. B. Weill and Ulrich Weiss discuss the structure of morphine and several useful derivatives with some mention, at least qualitatively, of toxicity and habituation. Also mentioned in the article in the *UN Bulletin on Narcotics*, 3:12-31 (April, 1951), are a number of synthetic analgesics in the Morphinane, Pethidine, and Methadone series.

Imitation Morphine Tablets in the Illicit Traffic—The use of counterfeit labels, containers, and revenue stamps to simulate medicinal morphine and enhance the price to addicts is disclosed in the UN Bulletin on Narcotics, 3:4-6 (April, 1951). Several examples are given of counterfeited labels made to represent labels by well established pharmaceutical firms in United States, England, and Spain.

Relationship between Addiction to Narcotic Drugs and Crime—Violators of narcotic laws head the list of all criminals in the United States having previous fingerprint records; with 2 per cent of the Federal personnel concerned with enforcing criminal laws, the Bureau of Narcotics accounts for approximately 10 per cent of the commitments to Federal prisons; many of the migratory criminals and schemers are addicted to narcotics; these are some of the highlights of H. J. Anslinger's article in the UN Bulletin on Narcotics, 3:1-3 (April, 1951). Suggestions as to the most appropriate methods of searching suspects and belongings are also given.

Forensic Medicine—The Practicing Physician and the Coroner's Office—Although their remarks are based upon California law, this treatment of an important subject by F. D. Newbarr and R. O. Myers merits reading. Their article in the *Annals of Western Medicine and Surgery*, 5:638-42 (July, 1951) admonishes physicians to be on the alert for suspicious cases to prevent mass poisonings as has happened in the past. An excellent discussion of the case material coming under the scope of the Coroner's Office is included.

Comparison of Inks by Chromatography—Wilmer Souder and W. H. Smith presented a discussion of the comparison of inks by chromatography at the 36th Annual Conference of the International Association for Identification at Philadelphia. Their technique is capable of distinguishing between different inks even though the inks appear to be identical in color. The method consists of dipping a narrow strip of filter paper into a drop of distilled water on a section of writing and noting the number and sequence of colors. A test is first made of the interval required for a drop of water to be taken up by the paper supporting the writing. Then in the actual test, the filter paper is inserted at one-half the interval determined above. It was also found

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necessary to run a blank on the supporting paper to determine what contribution, if any, it made to the resulting chromatogram of the ink.

The Striagraph—Notes and Comments—In the August issue of the Finger-print Magazine, 33:3-6 (Aug., 1951), J. E. Davis answers some of the questions which frequently arise concerning the striagraph. This article will serve to give a critical view of this instrument and its applicability to identification problems.

Connecticut to Require Laundry and Cleaner Mark Registration—According to the Fingerprint Magazine, 33:31 (Aug., 1951) Connecticut passed a law requiring the registration of laundry and cleaner marks on a state-wide basis. Sample marks must be furnished the commissioner of the state police and any changes reported. Fines or imprisonment are provided for failure to comply.

Bogus Money "Aged" in Coffee-Counterfeiters are dipping counterfeit money into coffee to give it an aged appearance according to the New York Times, September 9, 1951. However, the bills still smell of coffee. (Submitted by R. C. Steinmetz.)

Radio-Activation Analysis—The September 9, 1951 issue of the New York Times contained an article on page 14 concerning the analysis of hair for arsenic by exposing the hair to neutron bombardment and changing the arsenic to As 76, a radioactive isotope. By analyzing the depth or extent of penetration of the arsenic with a Geiger counter, the period of time over which arsenic was administered could be determined. (Submitted by R. C. Steinmetz.)

Chemical Investigation of the Cause of Fires—A review of many of the common causes of fires by chemical action is given by Herbert Franke in Die Neue Polizei, 3:(8) 159-61 (Aug., 1949). The mechanism of bacterial action on organic material is discussed.

Breaking Up Blood Clots—Test Talks, 3:3 (Aug., 1951) contains a suggestion by L. W. Bradford in regards to breaking up blood clots for the analysis of the blood for alcohol. If the blood sample is placed in a tissue homogenizer (Microchemical Specialties Co. No. 7500), a satisfactory solution can be obtained without the danger of the addition of contaminants or the differential absorption of alcohol.

Techniques of Determining Economic Motives in Arson Cases-The following is a summary taken from A. C. Guy's article in the News Letter of the International Association of Arson Investigations, 2:19-26 (Oct., 1951).

- 1. Careful audit of owner's books and records.
- Careful survey of owner's merchandise, if remaining.
 Determination of moral hazard.
 Does insurance record seem satisfactory?

- 5. Has market condition changed?
- 6. Has there been any change in the neighborhood affecting the owner's business?

- 7. Is the manager or operator suspected of shortages?
- 8. Is the owner falsifying his tax reports?
 9. Has the premises lost its utility value?
- 10. Do you suspect over-insurance?
- 11. Has the owner's business become unprofitable?

Essentials in Arson Investigation—A reprint of the seventeen requisites for firemen, essential to an arson investigation, published originally in the News Letter of the Ohio State Fire Marshall, is to be found in the International Association of Arson Investigators News Letter, 2:(2) 32-3 (Oct., 1951). This material might be of interest to instructors in police schools.

Index for Identifying Spectrograms Viewed on a Comparator—An accessory for use with an A.R.L. comparator-densitometer is described by A. J. Mitteldorf in the Analytical Chemistry, 23:(7) 1055 (1951). Constructional details are included with this discussion. This accessory enables an analyst to project an identifying number at the edge of each spectrogram on to the densitometer screen. It is especially valuable when a number of spectrograms have been photographed on a single plate and are liable to be confused one with another. (Submitted by Clemens R. Maise, St. Louis Police Laboratory.)

Homicide Investigation Seminar—The Kettering Laboratory in the Department of Preventative Medicine and Industrial Health, College of Medicine, University of Cincinnati, is conducting a seminar on the investigation of homicide for police officers December 3-7, 1951. This seminar is held in cooperation with the Coroner's Office of Hamilton County and the Cincinnati Police Department. Participating in the program are outstanding medicolegal authorities of the middle west and as well as a number of police specialists and members of the legal profession. Subjects to be covered include various aspects of investigating the crime scene and recording of physical evidence and medico-legal discussions of causes of violent deaths. The law pertaining to homicide and the inter-relationship between coroner, police, and prosecutor are further subjects of discussion.

Document Examiner's Meeting—The annual meeting of the American Society of Questioned Document Examiners was held during the last week of August in Rochester, New York. The program included visits to several plants in Rochester and Syracuse, including the Todd Company, Inc., manufacturer of checkwriters, Bausch & Lomb, the Eastman Kodak Company, and the L. C. Smith-Corona Typewriter Company. Conferences were held with representatives of these companies at which problems of mutual interest were discussed. In addition, scientific papers dealing with ink examination and the preparation of court exhibits were read. Special guests included Jose Del Picchia Filho of the University of Sao Paulo, Brazil, and Dr. Wilson R. Harrison of the Forensic Science Laboratories, Cardiff, Wales. (O. H.)

NEW PRODUCTS

EDITOR'S NOTE: It is the purpose of this additional service to our readers to call their attention to new products deemed helpful in the police fields. Data presented will be abstracts of the manufacturer's literature or reports of demonstrations. Only those products considered most suitable to police science will be included. The mention of any product in this Journal, however, is not to be construed as an endorsement by the Journal.

New Protective Coating for Firearms Collections—Police departments and others who have considerable firearms collections will be interested in a new corrosion inhibiting wax (Industrial Wax No. W6118, by S. C. Johnson Co., Racine, Wis.) which will solve much of their cleaning and corrosion problem. Easily applied with a cloth or brush it spreads out to a thickness of .0003 of an inch and as such is practically invisible—and of no hindrance to mechanical functioning. While it will not resist the latter for long on moving parts, it has been found to hold up well under considerable manual handling. Besides its other features it will withstand temperatures up to 300 degrees F. before deteriorating. Its use for the protection of Museum specimens, particularly firearms, has shown very favorable results. (Submitted by Harry Wandrus, Museum Branch, U.S. National Park Service.)

FOREIGN LANGUAGE PERIODICALS AND ARTICLES OF INTEREST IN THE FIELD OF POLICE SCIENCE*

Compiled by Kurt Schwerin**

Algemeen politieblad van het Koninkrijk der Nederlanden. The Hague. 100th year, no. 12, June 12, 1951.

M. H. Tromp, Voedselvergiftiging en voedselinfectie (Foodpoisoning and food infection) (p. 219-220).

International criminal police review. Paris. no. 50, Aug./Sept. 1951. (English edition).

Reports on The 20th General Assembly of the International criminal police commission; Lisbon, June 11-15th, 1951. Reports on special topics, among them: Progess report (p. 224-230).—Scientific detection of lies (230-232).—The International centre of technical documentation (233-34).—Criminal statistics (237-38).—Small fire-arms (240).—The illicit traffic of drugs (241-44).—Criminal police and civil and commercial aviation (247-49).—Mr. F. E. Louwage (Belgium) re-elected President, Mr. Marcel Sicot (France) elected Secretary General, succeeding Mr. Louis Dueloux.

Kriminalistik. Heidelberg. vol. 5, nos. 17/18-19/20, September-October 1951. Major Julier, 50 Jahre Kriminaltechnik, I (50 years criminal technology, I) (no. 17/18, p. 173-76).—Max Frei-Sulzer, Die Sicherung von Mikrospuren (Securing micro traces through adhesive tape) (no. 19/20, p. 190-94).

Minerva medicolegale. Archivio di antropologia criminale psichiatria e medicina legale. vol. 71, no. 4, July/August 1951. Torino.

Guglielmo Guareschi. Criteri diagnostici differenziali fra suicidio, omicidio ed accidente (Differental diagnostic criteria of suicide, homicide and accident in injuries resulting from explosives) (p. 89-96).

Die Neue Polizei. Munich. 5th year, no. 8, August 1951.

I. J. Liebenberg, Herstellung eines Abdruckes von einem mumifizierten Finger (Taking prints from a mumified finger) (p. 125-126).

Polizei-Praxis, Frankfurt a/Main. 5th year, no. 11/12, June 1951.

Theodor Mommsen. "Dentoskopie": Zahnspuren zur Ueberführung—Zahnschau zur Personen-Identifizierung ("Dentoscopy": Dental traces for conviction—dental exhibit for identification) (p. 180-82).

^{*}All periodicals listed are available in the Elbert H. Gary Library, Northwestern University School of Law, 357 East Chicago Ave., Chicago.

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Revista brasileira de criminologia. Rio de Janeiro. 5th year, nos. 14/15, Jan. June, 1951.

Claudio Pickersgill de Madeiros, O emprêgo da narco-análise (The application of narco-analysis) (p. 30-33).

Revista de medicina legal. Madrid. 6th year, nos. 64/65, July/August 1951. Ricardo Royo-Villanova y Morales, La prueba pericial caligrafica (The caligraphic expert test) (p. 246-260).

Revue de criminology et de police technique. Geneva. vol. 5, no. 3, July/

September 1951.

Jacques Pinel, La sélection automatique. Une nouvelle méthode de classement et de recherche dans les trés grands fichiers décadactylaires (Automatic selection. A new method for classification and research in large dactyloscopic files) (p. 206-215).—Walter Hepner, Un nouvel engin pour forcer les coffres-forts (A new tool to force safes) (p. 215-222).

NOTES FROM PROFESSIONAL ORGANIZATIONS International Association of Arson Investigators

The eighth annual Seminar and Training Course for Arson Investigators will be conducted at Purdue University, Lafayette, Indiana, April 28-May 2, 1952, according to an announcement by Professor J. L. Lingo, Director of Purdue's Public Safety Institute.

This seminar and training course offers an opportunity for specialized study and discussion of arson investigation problems under the guidance of outstanding police and fire specialists from all parts of this country and Canada. The seminar is conducted by the Public Safety Institute of Purdue University, with the cooperation of local, state and national organizations interested in arson control and prevention.

Since its establishment in 1945, the Purdue Arson Investigators' Seminar has achieved international recognition as the center for such specialized training. Being the only program devoted exclusively to the study of arson detection and investigation, the seminar is attended each year by persons from the United States, Canada and other countries. It has been widely endorsed by leading fire, police and insurance organizations as a valuable medium for the training of those persons charged with the responsibility for fire investigations.

The effective detection and investigation of suspicious fires is recognized today as an important phase of public safety. It is also recognized today as a technical and somewhat specialized field requiring first hand knowledge of modern techniques and methods. Present trends indicate a steady increase in the number of set fires and the use of even more ingenious methods by the arsonist to escape detection. These factors place an even greater responsibility for effective action on the part of all agencies dealing with the investigation of suspicious fires.

The annual seminar will serve as a training course for investigators and other persons interested in modern and effective techniques of arson control and prevention. It offers an opportunity for full discussion and study of arson problems, actual case histories and new developments in the field. It also serves to determine the responsibilities of the various agencies dealing with arson cases and points out effective methods of apprehending and convicting the criminal fire setter.

Further information and complete details of the 1952 Arson Investigators' Seminar are available from the Public Safety Institute, Purdue University, Lafayette, Indiana.