

LEGAL MEDICINE ANNUAL:

NINETEEN SEVENTY-TWO
series editor CYRIL H. WECHT

LEGAL MEDICINE ANNUAL 1972

Series Editor

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The 1972 Legal Medicine Annual is dedicated to my dear friend and esteemed colleague, Dr. Milton Helpern, Chief Medical Examiner of New York City, and Professor and Chairman, Department of Forensic Medicine, New York University School of Medicine, on the occasion of his 70th birthday.

Throughout the many years that Dr. Helpern has been actively involved in forensic pathology and legal medicine, he has always adhered to the highest levels of professional competency and integrity. He has consistently demonstrated his skills and abilities as a teacher and practitioner, and his many contributions to the overall field of forensic medicine are well-known to both the medical and legal professions, not only in the United States, but throughout the world.

It is with great personal and professional pleasure that we dedicate this book to Dr. Milton Helpern—a warm human being, a true gentleman, and an international giant in the field of forensic pathology.

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PREFACE

In compiling and editing the various chapters included in the 1972 Legal Medicine Annual, I have attempted once again to present a variety of medical-legal subjects, each of which should be of practical interest and concern to physicians, attorneys, and forensic scientists whose professional activities deal with some aspect of legal medicine. Obviously, not every article contained within this book will be of equal interest and usefulness to all our readers, but hopefully, everyone will find the great majority of chapters to be of some professional benefit and assistance.

As I have stated in previous volumes, the primary purpose and the major objective of this Legal Medicine Annual is to contribute to the continuing education of those individuals who are interested and engaged in the fields of legal medicine and the forensic sciences. Through the presentation of many chapters by outstanding experts in law, medicine, and other related scientific fields, readers should acquire much valuable new information that can be applied to their daily professional practices and to educational programs.

To each of the contributing authors, I express my deep appreciation and gratitude. It is not a simple task to take time from an active practice to prepare a chapter for a book. It requires an unselfish willingness to share one's experiences and knowledge with professional colleagues.

I also want to take this opportunity to thank the personnel at Appleton-Century-Crofts who have so graciously rendered assistance to me in the preparation and publication of this book.

I also want to acknowledge the technical assistance of Dr. Sidney P. Shanor, Professor of Pharmacology, Duquesne University School of Pharmacy, and Associate Toxicologist, Allegheny County Coroner's Office. His efforts have been of great value to me in preparing this volume.

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FORENSIC SCIENCE AND THE UNITED STATES SUPREME COURT: THE IMPACT AND SIGNIFICANCE OF PAST DECISIONS

The past decade quite literally has witnessed a judicial revolution in the field of criminal law. Indeed, the use of the word "revolution" is most appropriate, inasmuch as there have been continuing statements of hostility, resentment, and bitterness expressed by numerous individuals and groups throughout the country concerning the decisions made by the United States Supreme Court in the 1960's in the field of criminal law.

The *Miranda*, *Gideon*, *Escobedo*, and several other cases of similar import, indirectly created an entirely new approach to criminal investigation. This has been particularly true with regard to the use and application of the various forensic sciences in the investigation of known, alleged, or suspected criminal activities.

While the philosophical, sociological, and legal objectives and primary thrusts of the United States Supreme Court's decisions were most probably set forth by the learned justices without any cognizance or consideration of the role of forensic sciences in the criminal justice system, their decisions nevertheless affected the activities of forensic scientists more than any other single event in modern time in the United States.

The importance of applying sound, basic, intelligent forensic scientific principles within the field of criminal law has always been recognized by a relatively small number of professional people who have dedicated their lives and careers to this area of endeavor. However, such understanding and recognition of the importance of the forensic sciences has not generally been found among prosecuting attorneys, law enforcement officers, the lay public, or indeed, for that matter, among most trial judges.

Fortunately, forensic scientists were ready and willing to fill any vacuum that may have been created by the Supreme Court decisions of the 1960's. These men, associated with Medical Examiner and Coroner's Offices, and Crime Labs throughout the country, have expanded their activities, developed new investigative techniques, created innovative devices, and used existing personnel and facilities more intensively in order to render the assistance and cooperation that law enforcement officers, courts, and attorneys must have if the criminal justice system in this country is to work fairly and effectively.

Detection of crime leading to the apprehension, arrest and conviction of guilty individuals is most important in any society. The other side of the coin is of equal or even greater importance, namely, the exculpation of the innocent or falsely accused. Perhaps nobody can help accomplish these goals more effectively than the trained forensic scientist.

Professor James W. Osterburg is one of the outstanding criminalists in the United States. He has been a frequent contributor to the literature and is the author of an excellent textbook used by students and teachers of criminalistics throughout the country. Professor Osterburg is a past president of the American Academy of Forensic Sciences, and has always demonstrated keen interest and awareness of all the forensic sciences. His close involvement with law enforcement agencies throughout his professional career makes him deeply appreciative of the problems confronting them, and the necessity and importance of calling upon trained forensic scientists to assist them in their endeavors.