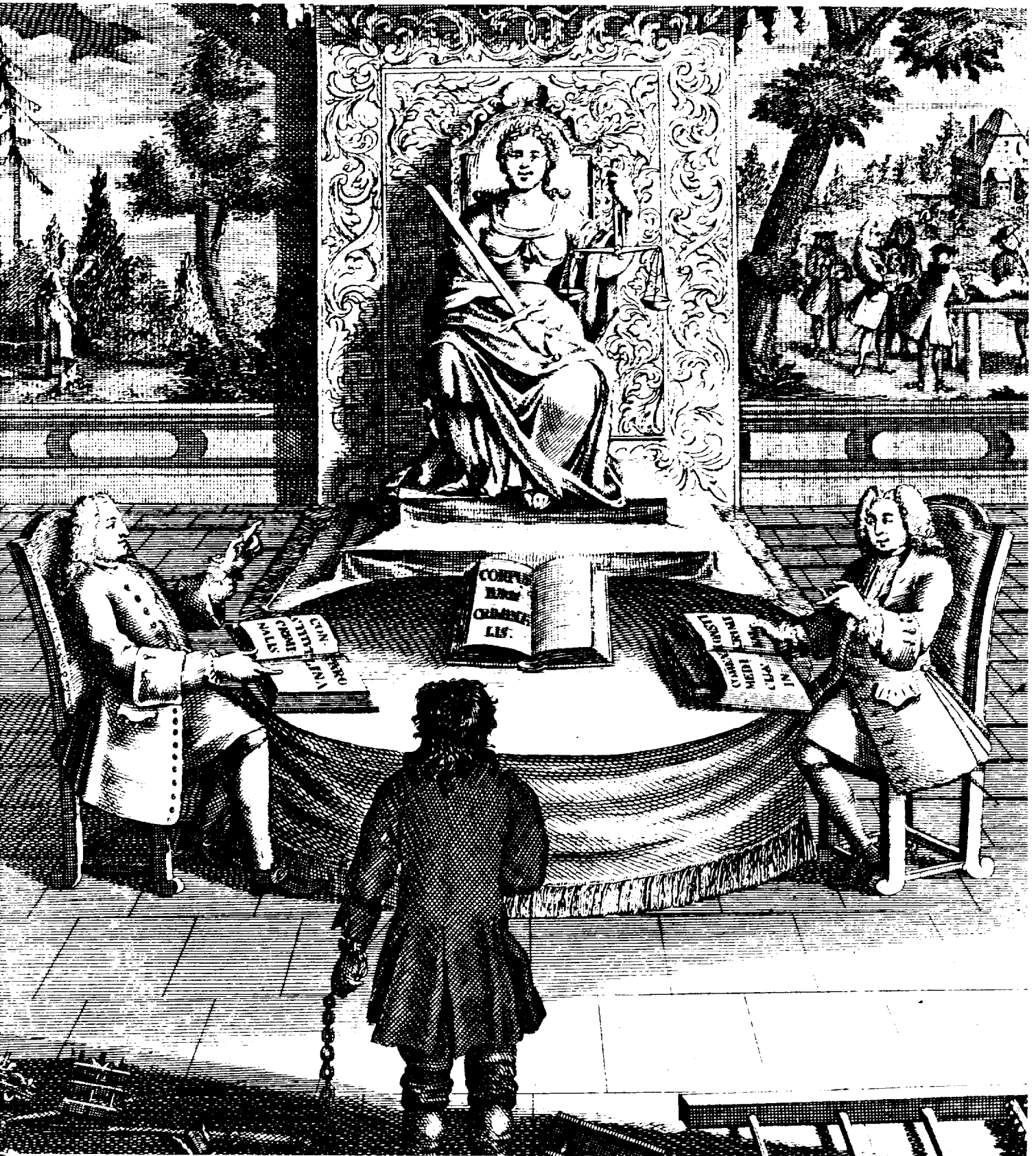


# Highlights in Medicolegal Relations



Cover

Illustration from Michael Alberti's book Commentatio in Constitutionem Criminalem Carolinam Medica (1739)

The figure of Justice, with scales and sword, is seated in the center; depicted, upper right, is the obduction of a cadaver. The scene at upper left shows a woman apparently contemplating the drowning of a child. A lawyer sits before Justice at the left, and a physician at the right. As they debate the case, using the criminal code to buttress their arguments, the manacled defendant faces Justice.

# HIGHLIGHTS IN MEDICOLEGAL RELATIONS

Compiled by Dr. Jaroslav Nemeč

These "Highlights" are a selection, arranged chronologically, from among the major events in the field of medicolegal relations. The compiler chose them in the course of his work on the World List of Medicolegal Serials, 1736-1967 (in press) and while assembling material for this exhibit. (1968)

It is hoped that the list of memorable events and figures in the interaction of law and medicine will serve not only those who visit the current exhibit at the National Library of Medicine, but students and scholars everywhere.

---

NATIONAL LIBRARY OF MEDICINE  
8600 Rockville Pike  
Bethesda, Md. 20014

Jaroslav Nemeč was born in 1910 in Orechov, Czechoslovakia, where he was a student at the school of which his father was principal. In 1937, he earned the degree of Doctor of Juridical and Political Sciences (corresponding to the Doctor of Laws in the U. S.) at Masaryk University in Brno (Brünn), Czechoslovakia.

Following the required military service, Dr. Nemeč practiced law in his District Court. In November 1939, he left German-occupied Czechoslovakia to join the Czechoslovak Army Abroad, serving successively as Military Justice in France and England, and Military Field Prosecutor in England. In 1944, he became General Field Prosecutor of the Czechoslovak Army (an office similar to the U. S. Army's Judge Advocate General), first in Russia and then in Czechoslovakia.

After coming to the United States in March 1952, Dr. Nemeč held various posts. In 1956, he earned a Master of Science degree in Library Science at the Catholic University of America. He served as research librarian in the Washington office of the American Medical Association until August 1959, when he joined the NLM staff as Reference Librarian specializing in medical jurisprudence.

Dr. Nemeč's publications are many and varied: their subjects include history and the history of law, physicians in the U. S. Congress, forensic medicine, etc. Now in press is his comprehensively annotated World List of Medicolegal Serials, 1736-1967, to be published by the National Library of Medicine.

Dr. Nemeč is a member of the Society of Medical Jurisprudence and the American Association for the Advancement of Slavic Studies.

## HIGHLIGHTS IN MEDICOLEGAL RELATIONS

- 30th cent. B. C. Imhotep (ca 2980-2900 B. C.) personifies medicolegal relations in ancient Egypt. He was personal physician to Pharaoh Zoser, as well as his chief justice. His medical fame was so great that he was later worshipped as a god.
- ca 2050 B. C. The Ur-Nammu Code, promulgated by the Sumerian king, Ur-Nammu, is the oldest known code of laws. It stipulates monetary compensation for bodily injury and is therefore more progressive than many later codes, which still permitted talio (an eye for an eye, a tooth for a tooth).
- ca 1700 B. C. The Hammurabi Code of Laws, the first known Semitic code, was patterned after similar collections of Sumerian laws. Intended to regulate all economic relations in Babylonia, it includes tables of fees for medical services, as well as cruel penalties to be inflicted on the physician whose treatment is unsuccessful.
- 14th or 13th cent. B. C. The Hittite Code sets financial compensation (in silver) for murder, and sets fees for most bodily injuries.
- 900-600 B. C. The Dahrma-shastra, the science of law or the Code of Manu, India, forbade the corporal punishment of pregnant women.

- 715-673 B. C.      The Lex regia of Numa Pompilius ordered Caesarean section after the death of a pregnant woman [Negat lex regia, mulierem quae praegnans mortua sit humari antequam partus excidatur]
- ca 450 B. C.      Deuteronomy contains some indications that physicians participated as expert witnesses in the execution of Mosaic law.
- 449 B. C.      The Leges duodecim tabularum in Rome contained the following provisions of medicolegal importance:  
a/ The time of gestation can not exceed 300 days.  
b/ The foetus in utero has the same rights to the estate of its father as the child already born.  
c/ Insane persons and their estates are the responsibility of their clansmen.  
d/ For personal injuries, either talio or fixed monetary compensation is permitted.  
e/ Pater familias (the chief of a clan) has ius vitae necisque, i. e. , he may decide about the need to kill a severely deformed child.
- ca 415 B. C.      The aphorism, De vulneribus lethalibus, ascribed to Hippocrates (460-ca 377 B. C.), is one of the earliest writings of medicolegal importance. Hippocrates is also credited with the first known description of epilepsy (De sacro morbo).
- ca 350 B. C.      Diocles taught that a child born in the seventh month of pregnancy may be able to survive, an opinion that was later accepted.
- 81 B. C.      The Lex Cornelia de sicariis et veneficiis ordered punishment for malpractice and for poisoning.

- 44 B. C.                   The dead body of Gaius Iulius Caesar was examined by the physician Antistius. He found and described 23 wounds, the second of which was fatal.
- 1st cent.  
A. D.                       Students of the Rabbi Ishmael boiled the body of an executed prostitute and counted the bones, finding a total of 252.
- 14-37                       Celsus completed his De re medicina libri octo. Only a brief treatise on the lethality of wounds is of medicolegal importance. The chapter on melancholy and mania is also quite interesting.
- 2nd cent.                   Galen (130-201) wrote Quomodo morbum simulantes sint deprehensi - the first known treatise to be entirely concerned with a medicolegal topic.
- 3rd cent.                   In China, a physician named Wu P'u was able to settle legal cases by means of his knowledge of medicine. This is the first known mention of any relation between the law and medicine in China.
- 5th cent.                   Formula comitis archiatrorum - the earliest code of medical ethics.
- 466-485                   The Lex Visigothorum, also called Codex Euricianus, was promulgated during the reign of King Euric over the Western Goths in Spain. A considerable part of the code is devoted to physicians and the practice of medicine. Physicians were not favored; on the contrary, they were restricted in their practice by rules similar to Babylonian or early Roman provisions.
- 486-511                   The Lex Salica, one of the oldest of the Leges barbarorum, admits physicians as witnesses to the courts and sets monetary compensation (Wergeld) for injuries.

- 5th or  
6th cent.      The manuscript, De adventu medici ad aegrotum, is one of the earliest deontological texts.
- 6th cent.      Gregory of Tours (538-593) mentions that physicians in France were sometimes summoned as expert witnesses by the courts.
- 6th cent.      Chinese tradition holds that, in this century, a famous doctor, Hsu Chich-Ts'si, wrote the Ming Yuan Shih Lu, the world's first treatise on forensic medicine. Unfortunately, it is lost.
- 533              Justinian's Digests (XXV tit. 4), De inspiciendo ventre et custodiendo partu, order the examination of women by a midwife in cases concerning pregnancy.
- 9th cent.      At the start of the century, Charlemagne issued his Capitularia, which ordered judges to use medical expertise in cases of injury, murder, infanticide, suicide, rape, impotence, and bestiality. All judicial cases had to be decided on the basis of reliable evidence; ordeals were not permitted.
- 10th cent.      Of many works by the first Moslem physician of distinction, Ali Razi, or Rhazes (860 - 932 A. D.), two concern us: his Essay on medical accidents, which is a defense of trained physicians against quacks, and The book of antidotes.



- ca 900-950 Celtic law in Wales was codified by King Hywel Dda. The Code placed a fixed monetary value on everything that could be the subject of a law suit. There was a fixed price for every part of the body (galanas). Most valuable was the tongue, because "it defends the rest." Physicians were called by the courts as expert witnesses.
- 1100 The Assizes et bon usages du royaume de Jérusalem, a code of ethics for the European crusaders in Palestine, was proclaimed; it stipulates that physicians and surgeons may testify concerning the inability of a knight to perform his duties. The first reference to the use of this code in Europe was in 1250. Some authors give 1073 as the date of promulgation of the Assizes.
- 1131 The Council of Rheims forbade clerics to practice medicine. The same stricture was imposed on the clerics of Byzantium in 1157.
- 1140 Roger II, King of Apulia and Sicily, proclaimed the law which, in its art. 36, De probabili experientia medicorum, orders that anyone wishing to practice medicine must submit to examination of his medical knowledge.
- 1163 The Council of Tours decided that, "the Church detests blood" (Ecclesia abhorret a sanguine), which especially delayed the development of surgery. On the other hand, however, it did free medicine from ecclesiastical influence.
- 1207 Norman law mentions the use of surgeons' expertise in court.

- 1209 Pope Innocent III accepted the expert testimony of physicians in an ecclesiastical court for a case concerning the lethality of a wound. [ . . . peritorum iudicio medicorum talis percussio asseretur non fuisse letalis . . .] This decision established a precedent which was often cited and followed in all European legal orders.
- ca 1210 The College de Saint Côme was organized in Paris. It consisted of surgeons of "long robes" and "short robes" (barber-surgeons and barbers).
- 1213 Trial by ordeal was abolished in England.
- 1231 Emperor Frederick II, in the Constitutiones regni Siciliae, extended the provisions of Roger II (1140) concerning medical practice. He ordered eight years of study, then practice, and, finally, an examination in Salerno. If he passed successfully the student received his doctoral degree and a written document from the Emperor.
- 1234 The Decretales Gregorii IX (5 books) were promulgated by the Pope. They contain the provision that impotentia coeundi, the occasion for ecclesiastical divorce, be ascertained by an attempt of intercourse in the presence of witnesses (e.g. cum septima manu). This was the so-called "proof of congress."
- 1238 Emperor Frederick II ordered that a corpse be dissected every five years to provide material for study at the medical school. This is the first known authorization of dissection.
- 1249 Hugo de Lucca, of Bologna (ca 1160-1257), issued medical certificates required by the court of justice.

- 1260 Coutume de Paris, a book of French common law, mentions the use of surgeons' expertise.
- 1276 The statute, De officio coronatoris, regulated the duties of the coroner in England.
- 1286 The first record of a postmortem examination by an anonymous physician in Cremona.
- 1295 The Jus vetus Uplandicum of Sweden required that, in a case of bodily injury, the defendant had to provide the injured person with the necessary medical care and, to this end, offer him three experienced surgeons from whom he could select one. Only then was the defendant absolved from paying Wergeld (blood money).
- 1300 In the bull, De sepulturis, Pope Boniface VIII forbade the practice of boiling dead bodies (evisceratio cadaverum eorumque in aqua decoctio). This practice became widespread during the time of the crusades.
- 1302 Bartolomeo de Varignana was ordered by the Bologna court to perform an autopsy (suspicion of poisoning).
- 1311 Philip the Fair, King of France, ordered the examination of surgeons, government control of the surgical profession, and reporting of deaths and injuries by sworn physicians, surgeons, and midwives.

- 1316 Mondino de Luzzi finished his Anatomia, the most popular textbook before Vesalius. It was first printed in Padua (1487) and went through 39 editions and translations. In it, he describes the postmortem examination of two female cadavers.
- 1319 The first known criminal prosecution for "body snatching" was initiated in Bologna. Those involved were local students and their master, one Albert.
- 1326 Pope John XXII issued the bull, Super illius specula, against the practice of magic.
- 1337 John of Luxemburg, King of Bohemia, hired a French physician in Breslau to treat his eye. When the physician's treatment failed, the king ordered that he be drowned in the River Oder.
- 1341 A public dissection was performed in Padua by Gentile de Foligno.
- 1363 The first book of Guy de Chauliac's Chirurgia magna was devoted to anatomy.
- 1374 Venice imposed on travelers what was probably the earliest quarantine, banning travelers from countries with bubonic plague. In 1403, it was ordered that travelers from the Levant be isolated in a hospital for 40 days.
- 1374 The Medical Faculty at Montpellier obtained permission to open human cadavers.
- 1391 University of Lerida (Spain) permitted the dissection of one human body every three years.

- 1394                   Medicolegal autopsies were first authorized in Pavia.
- 1406                   The practice of surgery in Germany was regulated by the Emperor Wenceslas.
- 1409                   The first insane asylum was established in Seville (Spain).
- 1471                   The postmortem examination of the body of George of Poděbrady, King of Bohemia, revealed the liver half-destroyed, and a stone the size of a pigeon egg in the gall-bladder.
- 1484                   Pope Innocent VIII issued a bull, Summis desiderantes, which authorized the hunting and burning of witches.
- 1486                   A private autopsy was performed on the body of King Stephan Batory of Poland.
- 1497                   Hieronymus Brunschwig (1450-1533) of Strassburg, a surgeon, published the first known detailed description of gunshot wounds.
- 1500                   Jacob Nufer, a pig-gelder in Switzerland, performed the first known Caesarean section performed on a living woman. His own wife, was the patient, the operation successful.
- 1507                   Johann (Stark) von Schwarzenberg (1463-1528) drafted the Bambergische Halsgerichtsordnung (Constitutio Bambergensis, also called Mater Carolinae), which was promulgated by George, Bishop of Bamberg. It ordered judges to summon physicians in certain criminal cases.

- 1507                    Antonio Benivieni's (1440-1502) work, De abditis nonnullis ac mirandis morborum et sanationum causis, containing pathological findings from twenty autopsies, was posthumously printed.
- ca 1519                Juan de Morales, surgeon on the flagship of Magellan, performed an autopsy.
- 1525                    The Great Court of Naples ordered the determination of materia before courts of justice by means of scientific expertise.
- 1528                    Albrecht Dürer (1471-1528), German painter and engraver, published Vier Bücher von menschlicher Proportion, the first example of anthropometry in art.
- 1532                    Emperor Charles V promulgated the Constitutio criminalis Carolina (Peinliche Halsgerichtsordnung) for all German states. It orders the courts to summon physicians, surgeons, or midwives in cases of abortion, murder, manslaughter, poisoning, suicide, bodily injury, or accountability, and for the application of torture. Moreover, physicians had to testify in cases of malpractice and to record in writing their autopsy findings .
- 1533                    Local authorities on the island of Hispaniola ordered an autopsy of Siamese twins to determine whether they were one or two individuals and whether they possessed one or two souls.
- 1537                    The first recorded medicolegal examination in Russia of a person's physical status was performed by a physician named Maghel.

- 1541 Jean Milles de Sovigny (Joannes Millaeus), "subprefectus" of the Paris Court of Laws, published his Praxis criminis persequendi, which describes the expertise of surgeons.
- 1542 The Witchcraft Act was promulgated in England (but repealed in 1547). Another law against witchcraft was enacted in 1563.
- 1543 Vesalius laid the foundation of modern anatomy with his De fabrica humani corporis.
- 1545 Ambroise Paré (1510-1590), adviser and first surgeon to the King of France, published La manière de traicter les playes faictes par hacquebutes et autres bastons à feu - the most successful treatise on the treatment of gunshot wounds up to that time.
- 1547 Antonius Blancus, in his Tractatus de indicibus homicidii, was probably the first to raise the question of the reliability of ius cruentationis. This was originally a custom of Germanic tribes, often invoked by the German courts. It was based on the firm belief that a cadaver would start to bleed when touched by the murderer. Ius cruentationis was applied in the courts of Germany until about 1750.
- 1549 The first known anatomical theater was opened in Padua.
- 1554 Joost de Damhouder (1507-1581), lawyer of Bruggs, published Enchiridion rerum criminalium, a textbook of criminal procedure. Chapter 77 (De invasione) describes the form of medical and surgical reporting in cases of murder and injury.

- 1556 Henry II, King of France, promulgated the law that any woman who had concealed her pregnancy and destroyed the child, would be condemned to death. She could escape this penalty only if a surgeon testified that the child was not at term or stillborn.
- 1556 Emperor Charles V was advised by the University of Salamanca that the dissection of human cadavers serves a useful purpose and is therefore permissible to Christians.
- 1556 The first known exhumation in Bohemia was conducted in Mělník on a dead body buried for about one week.
- ca 1560 Jakub Kamenický, a physician of Prague, conducted the first pathologo-anatomical dissection in Bohemia, and found gall-bladder calculi in the dead body.
- 1561 Gabriele Fallopio (1523-1562) published his famous Observationes anatomicae.
- 1562 The first judicial postmortem in France was conducted by Ambroise Paré (1510-1590).
- 1562 Witchcraft became a capital crime in England.
- 1563 Johann Weyer (ca 1516-1588), a physician of Duke William of Clèves, published De prestigiis daemonum et incantationibus ac veneficiis libri quinque in Basel. He tried to prove in it that magicians and demoniacs are actually subjects of hysteria and hypochondriasis. He however, believed in the existence of witches and of sorcery, but considered them rare. The reaction of the public was violent. The book was listed in the Index librorum prohibitorum, his disciple was strangled and burned, and Weyer himself was lucky to escape the same fate.



- 1564 Giovanni Filippo Ingrassia (1510-80), Italian clinician and epidemiologist and professor in Naples and Palermo, published the Constitutiones et capitula necnon iurisdictiones regii protomedicatus officii cum pandectis eiusdem reformatis. This was among the first medicolegal publications.
- 1564 Julio Cesare Aranzio (1530-89), of Bologna, published De humano foetu, an important contribution to the advancement of embryology.
- 1565 An experiment with a poison and its antidote was conducted, in Prague, on a murderer sentenced to death. He survived and received amnesty, as promised. At about the same time, a similar experiment was performed in Clermont, France, by order of King Henry II. A condemned cook took the poison and the antidote, but died in the presence of Ambroise Paré, who performed the autopsy.
- 1565 The dissection of executed criminals was permitted in England by Queen Elizabeth.
- 1570 Felix Plater (1536-1614) of Basel urged the psychiatric treatment of the insane.
- 1575 Ambroise Paré (1510-1590), the first surgeon to the King of France, published a treatise on medical reports, as well as a description of monoxide poisoning.
- 1578 Giovanni Filippo Ingrassia (1510-1580) published Methodus dandi relationes pro mutilatis torquendis. No copy has survived, but the manuscript itself is preserved in Palermo.

- 1580 German law forbade shepherds and herdsmen to practice obstetrics on human subjects.
- 1594 Hieronymus Fabricius ab Aquapendente (ca 1533-1619) built a new anatomical amphitheater in Padua.
- 1594 Andreas Libavius (1546-1616) of Halle published De cruentatione cadaverum et de unguento armario, which greatly strengthened the position of the Ius cruentationis.
- 1595 Andreas Libavius (1546-1616) published his Alchymia, the first treatise on chemistry.
- 1597 Giovanni Battista Codronchi (1547-1628) published his Methodus testificandi, a guide to physicians on the preparation and presentation of medical expertise. Two years before, his De morbis veneficis ac veneficiis libri quatuor was printed in Venice; it described illnesses caused by witchcraft and sorcery.
- 1597 A text of this date contains the first indication that ius cruentationis was in force in Scotland.
- 1598 Severin Pineau ( ? -1619) published De notis integritatis et corruptionis virginum, which became the textbook on virginity, still cited as an authoritative source in the 19th century.
- 1600 Joannes Jessenius de Magna Jessen (1566-1621) conducted the public dissection of the body of an executed criminal in Prague. The dissection, with about 1000 spectators, lasted five days.

- 1601 The Court of the City of Mělník, Bohemia, dismissed the charges against a pregnant woman for stealing. The reason: "Pregnant women do many strange things. "
- 1602 Fortunato Fedele (1550-1630), a physician from Sicily, published De relationibus medicorum libri quatuor. It is the first relatively comprehensive and well-organized treatment of forensic medicine and physicians' activities in the field of public hygiene.
- 1603 Jean de la Rivière, first physician to Henry IV, King of France, was ordered to appoint in every city, under royal jurisdiction, two persons "de l'art de médecine et de chirurgie, " to examine and report on cases of sudden death and injuries. This arrangement lasted to 1692, when the right of appointment was transferred to the municipal authorities.
- 1614 Rodericus à Castro (1541-1627), a Hamburg physician, published Medicus politicus: sive De officiis medico-politicis tractatus. While devoted to medical ethics and problems concerning the medical profession, it also contains many chapters on forensic medicine.
- 1615 Andreas Libavius (1546-1616) published Chirurgia transfusoria, a treatise on blood transfusion.
- 1616 Fortunio Liceti (1577-1657), professor in Pisa, Padua, and Bologna, published his famous book, De monstrorum causis, natura et differentiis. It was reissued several times and even translated into French. It served, however, only to compound the medieval confusion of both forensic medicine and obstetrics.

- 1621 Paolo Zacchia (1584-1659), personal physician to the Pope, Protomedicus to the Church State, and adviser to the Sacra Rota Romana, published the first of his Quaestiones medico-legales. In eleven books, he assembled problems concerned with the application of medicine to canon, civil, and criminal law and to public hygiene. In the last two books, he included decisions of the Sacra Rota Romana. His work is the first systematic compilation of medical expert opinions and forms the cornerstone of forensic medicine.
- 1628 William Harvey (1578-1657) published De motu cordis.
- 1629 Bernhard Suevus (fl. 1617-1629) published his Tractatus de inspectione vulnerum lethalium - one of the earliest German treatises of medico-legal importance on lethal wounds.
- 1629 One of the earliest examples of psychiatric expertise in Europe concerned a case in Poland, where physicians examined a woman-prophet, Poniatowska, to determine her sanity. Her prophetic powers were credited for some time by such celebrities as Comenius.
- 1639 The Assembly of Virginia passed a law regulating medical practice.
- 1642 Daniel de Luna, a Polish military surgeon, published his Quaestiones legales in Prague.
- 1647 Massachusetts Bay Colony imposed quarantine restrictions against ships from Barbados. This is probably the first record of quarantine in the USA.
- 1649 America's Old Colony Laws regulated the practice of medicine.

- 1650 Johann Michaelis (1607-1667), professor of pathology and therapy at the University of Leipzig, lectured on forensic medicine.
- 1658 Jan Swammerdam (1637-1680) of Amsterdam was the first to recognize and describe red blood-corpuscles.
- 1662 René Descartes (1596-1650) published the first treatise on physiology, De homine.
- 1666 Coroners were appointed for each county in Maryland.
- 1670 The Faculty of Medicine of the University of Prague decreed that the expert opinion of the Faculty concerning any injury could be pronounced only after a session of the Dean, a Professor, three barber-surgeons, and two barbers.
- 1670 Paul Ammann (1634-1691) published Medicina critica, sive decisoria - a collection of expert opinions issued by the Faculty of Medicine of the University of Leipzig.
- 1670-1672 In the first recorded medicolegal cases in North America, Governor Lovelace of New York granted four divorces on grounds of impotence.

- 1676 Karel Rayger (1641-1707), anatomist of Bratislava, was the first to suggest that the so-called hydrostatic test of the lungs of the newborn be used in the courts as proof of infanticide. He reported on his dissection of a child in Miscellanea curiosa medico-physica Academiae naturae curiosorum 1675/6, concluding: "Argumentum credo indubitatum ad convincendas infanticidas . . . an infans in utero mortuus, vel demum post partum quocunque modo strangulatus vel occisus."
- The first record of the application of this test in criminal law is dated 1682. It was brought to the attention of the court by a Bavarian physician, Johann Schreyer. The hydrostatic test of the lungs was a very fashionable topic until the mid-19th century. One of its last defenders was a professor at the University of Vienna, Joseph Bernt (1770-1842).
- 1677 The so-called "proof of congress," established in 1234 under the Decretales Gregorii IX to determine impotence, was abolished in France. The chief reason was the scandal concerning the Count of Langey who, a divorcé generally known to be impotent, produced seven children in a second marriage.
- 1679 Théophil Bonet (1620-1689) published Sepulchretum sive anatomia practica, with about 3,000 anatomical findings. He is considered to be the forerunner of G. B. Morgagni.
- 1680 The death penalty for witchcraft was abolished in France.
- 1681 Gerard Blaes (1625-1692), Dutch anatomist, published the first comprehensive treatise on comparative anatomy.

- 1684                    Nicolas de Blegny (1652-1722) published La doctrine des rapports de chirurgie, on the obligation of surgeons to report any suspicion of crime, and how to prepare expert opinion for presentation before the court.
- 1689                    Johannes Bohn (1640-1718) published De renunciatione vulnerum, seu vulnerum letalium examen - the best work on fatal injuries of that period.
- 1691                    An autopsy was performed on New York Governor Henry Sloughter because of suspected poisoning. It was ordered by the Provincial Council and conducted by six surgeons. The verdict: natural death.
- 1692                    During the Salem witchcraft trials, twenty persons were accused and executed. The accusations were afterwards found false, and the Governor halted the trials in 1693.
- 1697                    An anatomical theater was opened in Edinburgh.
- 1700                    The Province of Pennsylvania proclaimed "An act to prevent sickly vessels coming into the government."
- 1706                    Johann Friedrich Zittmann (1671-1758) published Medicina forensis, based on a collection of expert opinions by the Leipzig Medical Faculty from 1650 to 1700.
- 1710                    The Quarantine Act was passed in England.
- 1712                    Jane Wenham was the last person convicted (though later pardoned) of witchcraft in England.

- 1714                    Russia's Military Instructions and Articles  
ordered the postmortem examination of  
dead soldiers to find the cause of death.  
Written reports then had to be submitted  
to the courts of justice.
- 1714                    The Tabulae anatomicae, which had been  
completed by Bartolommeo Eustachi  
(1524-1574) in 1552, were the first  
anatomic plates to be printed on copper.
- 1715                    Physicians of Prague participated as  
medical experts in the inquiries preceding  
the canonization of John of Nepomuk  
(drowned at the end of the 14th century).  
On opening his grave, they found his tongue  
still well preserved.  
John of Nepomuk was finally canonized in  
1729. For historians, however, the  
identity of the canonized person as well  
as the reasons for canonization are more  
than questionable.
- 1723                    Hermann Friedrich Teichmeyer (1685-1746),  
a professor of Jena, published the Institutio-  
nes medicinae legalis vel forensis. It was  
used as a standard textbook for many years  
and republished several times.
- 1725                    The practice of medicine was regulated  
in Prussia.
- 1725                    Johann Franz Löw von Erlsfeld (1648-1725),  
professor of anatomy and surgery at the  
University of Prague, published his  
Theatrum medico-juridicum.
- 1730                    Thomas Cadwalader (1708-1779) started the  
teaching of anatomy by dissection, in  
Philadelphia.
- 1735                    English laws against witchcraft were repealed.



- 1736 Michael Alberti (1682-1757), professor of medicine and natural sciences at Berlin, published his Systema jurisprudentiae medicae, a mixture of backwardness and progress. Alberti was still in favor of torture and cruentation, and he believed in magic and demons. On the other hand, he considered sorcery a mental disease and had a critical attitude toward other medical problems.
- 1737 Physicians in all Russian cities were ordered to participate in medicolegal investigations.
- 1740 The first lecture on forensic medicine was delivered at Copenhagen University by George Detharding.
- 1746 Christian Ehrenfried Eschenbach (1712-88) of Rostock wrote Medicina legalis, brevissimis comprehensa thesibus in usum auditorii conscripta, in which he treated forensic medicine quite apart from public hygiene.
- 1751 A Royal Ordinance issued in Denmark provides that the bodies of all murder victims be autopsied.
- 1755 The earliest serial devoted wholly to forensic medicine, Der medicinische Richter oder Acta physico-medico-forensia Collegii Onoldini, was started by Johann Georg Hasenest (1688-1771) in Onolzbach (Ansbach), Germany.
- 1759 The first public dissection was conducted in the American colonies by John Bard and Peter Middleton.
- 1760 Regulation of the practice of medicine in New York City.

- 1761 Giovanni Battista Morgagni (1682-1771) published De sedibus morborum, the basis of pathological anatomy.
- 1763 Carl von Linné (1707-1778), Swedish physician and naturalist, published Genera morborum in auditorum usum - the first scientifically valuable classification of diseases.
- 1768 William Heberden (1710-1801) of England introduced the term "angina pectoris" and gave its first thorough description; his report was published in 1802.
- 1779 Johann Peter Frank (1745-1821) began publishing his System einer vollständigen medicinischen Polizey, the first well-organized and comprehensive work on public health. The last (6th) volume appeared in 1816.
- 1781 Joseph Jacob Plenck (1739-1807) stated, in his famous Elementa medicinae et chirurgiae forensis, that the only proof of poisoning is the chemical identification of the poison in the organs of the body. This opinion was not generally accepted until Orfila's work on poisons had appeared.
- 1782 The first medicolegal journal, the Magazin für die gerichtliche Arzneikunde und medicinische Polizei, was started in Stendal, Germany, by Konrad Friedrich Uden (ca 1750-1830?).
- 1784 At Ingolstadt, Prof. Franz Anton Ferdinand Stebler (1705-1789) began lecturing on forensic medicine in the German language (instead of Latin).

- 1785 E. V. Guldener von Lobes (1763-1827) was appointed to the chair of forensic medicine and "medical police" at the Medical School of the University of Prague. His lectures were to be collegium privatum (paid for directly by the students).
- 1786 Antoine François Fourcroy (1755-1809) and Michel Augustin Thouret (1748-1810) first described adipocere.
- 1788 Samuel Farr (1741-1795) published Elements of Medical Jurisprudence, the first book on forensic medicine in the English language. It is actually an abridged translation of J. F. Faselius' Elementa medicinae forensis (1767), to which a chapter "Upon Madness" was added by Farr.
- 1789 The French physician, Joseph Ignace Guillotin (1738- ? ), as a member of the Constituent Assembly, was instrumental in introducing the law requiring all death sentences to be carried out by "means of a machine." From 1792 on the machine designed (but not invented) by him was referred to as the guillotine.
- 1790 John Hunter (1728-1793), English surgeon, recommended a method of artificial insemination to a patient.
- 1792 In France, the Law of "14 frimaire an III" (Dec. 14, 1792) created chairs of forensic medicine at all French medical schools.
- 1793 Philip Syng Physick (1768-1837) and Isaac Cathrall (1763-1819) made a number of autopsies during the yellow fever epidemic in Philadelphia.

- 1794 Johann Daniel Metzger (1739-1805), professor at the medical school in Königsberg, where he lectured mainly on forensic medicine, published Systema medicinae forensis.
- 1794 Thomas Percival (1740-1804) published privately his Code of medical ethics. It was first printed for general distribution in 1803.
- 1797 Instructions issued concerning the rights and duties of the Boards of Physicians in Russia, also contain some rules of medical expertise.
- 1798 Philippe Pinel (1745-1826), with the consent of the National Assembly, released 49 insane patients of a Paris hospital (Bicêtre) from chains.
- 1799 Francois-Emmanuel Foderé (1764-1835), physician in Marseille, wrote Les lois éclairées par les sciences physiques: ou Traité de médecine-légale et d'hygiène publique. This book marked a new era of legal medicine in France and the advancement of the whole field.
- 1801 Andrew Duncan, Sr. (1744-1828) offered lectures on medical jurisprudence at Edinburgh.
- 1801 Philippe Pinel (1745-1826) published his famous Traité médico-philosophique sur l'aliénation mentale, ou La manie, which subsequently appeared in many editions.

- 1801 Prof. Giuseppe Tortosa (1743-1811) published Istituzioni di medicina forense, one of the first Italian publications with progressive and critical views but still not completely free of old superstitions.
- 1802 A Chair of Forensic Medicine was established at the University of Berlin.
- 1803 A Chair of Legal Medicine was established at the University of Edinburgh.
- 1804 A Chair for Staatsarzneikunde was established at the University of Vienna on the basis of a new plan of medical studies prepared by Johann Peter Frank.
- 1804 A Chair of Anatomy, Physiology and of Forensic Medicine was established at the University of Moscow.
- 1805 A Chair of Forensic Medicine was created at the Jagellon University in Cracow.
- 1807 A Chair of Forensic Medicine was established as a salaried position at the Medical School of the University of Prague.
- 1809 Adolph Christian Heinrich Henke (1775-1843), professor at the University of Erlangen, started lectures on forensic medicine for both physicians and lawyers.

- 1810 Benjamin Rush (1745-1813), American physician, introduced medical jurisprudence into his lectures on institutes of medicine at the University of Pennsylvania. The contents of his course, published in 1811, chiefly concerned forensic psychiatry.
- 1810 Franz Joseph Gall (1758-1828) and Johann Caspar Spurzheim (1776-1832) started the publication of Anatomie et physiologie du système nerveux, a four-volume work on cerebral functions which stimulated further research into the brain, but also led to the creation of a pseudo-science, phrenology.
- 1811 James S. Stringham (1775-1817) was appointed Professor of Medical Jurisprudence at the College of Physicians and Surgeons in New York.
- 1813-5 Mathieu Joseph Bonaventure Orfila (1787-1853) published two volumes of his Traité de poisons. It marked the beginning of modern experimental and forensic toxicology.
- 1814 James S. Stringham (1775-1817) published the syllabus of his lectures on medical jurisprudence in the American Medical and Philosophical Register.
- 1817 Starting in about 1798, John Haslam (1764-1844) published a number of works in England on insanity. The best known was his Medical Jurisprudence as it Relates to Insanity (1817).

- 1818 In Pisa, Giacomo Barzelotti (1758-1839) published Medicina legale secondo lo spirito delle leggi civili e penali veglianti nei governi d'Italia, which describes the application of medicine in Italian law, both criminal and civil.
- 1818 Pieter de Riemer (1760-1831), Dutch anatomist, was probably the first to use a frozen body for anatomical dissection.
- 1818 Joseph Bernt (1770-1842), professor of forensic medicine at the University of Vienna, started the first Austrian medicolegal serial, the Beyträge zur gerichtlichen Arzneykunde.
- 1821 Adolph Christian Heinrich Henke (1775-1843), professor at the University of Erlangen, started the Zeitschrift für die Staatsarzneikunde, a leading periodical in Germany on public health and forensic medicine.
- 1821 John Gordon Smith (1792-1833), professor at the University of London, published The Principles of Forensic Medicine - the earliest English work on medicolegal problems of bodily injuries.
- 1823 Mathieu Joseph Bonaventure Orfila (1787-1853), professor of forensic medicine at the University of Paris, published the Leçons de médecine légale - a modern textbook with new chapters on putrefaction and post-mortal wounds.

- 1823                   Theodoric Romeyn Beck (1791-1855), American physician, medical writer, and educator, published the Elements of Medical Jurisprudence - the first authoritative book on the subject in the United States and one of the best in the English language. It was republished several times in England and translated into German and Swedish.
- 1823                   Jan Evangelista Purkyně (1787-1869), a Czech pioneer in experimental physiology, histology, and embryology, and one of the greatest microscopists, investigated finger-prints, and devised their first classification.
- 1826                   A Chair of Forensic Medicine was established at Josefinum, the military medical academy in Vienna. Forensic medicine had been taught at this institution from the start (1785), but not as an independent subject in its curriculum.
- 1829                   Thomas Addison (1793-1860), English physician, wrote, with John Morgan (1797-1847), the first book in English on the action of poisons in the living body.
- 1829                   The first French medicolegal journal, Annales d'hygiène publique et de médecine légale, began publication in Paris.
- 1830                   Massachusetts passed an anatomical law concerning the disposition of unclaimed bodies.



- 1832                    An institute entitled Praktische Unterrichts-Anstalt für die Staatsarzneikunde was established at the Friedrich-Wilhelms Universität in Berlin. The lectures covered the examination of living persons, dead bodies, and food and drugs, and instructions on public health legislation.
- 1832                    The Anatomy Act was passed in England.
- 1832                    Sergeï Alekseevich Gromov (1774-1856), professor of forensic medicine at the Military Medical Academy in St. Petersburg, published Kratkoe izlozhenie sudebnoi meditsiny . . ., the first book on forensic medicine in the Russian language. In 1837, it was translated into Polish and in 1838, appeared in its second Russian edition.
- 1833                    Robert Carswell (1793-1857), professor of pathology at the University College of London, published his Atlas of Pathological Anatomy.
- 1836                    Marie Guillaume Alphonse Devergie (1798-1879), second only to Orfila in French legal medicine, published his two-volume work, Médecine légale, théoretique et pratique, which reached several editions.
- 1838                    Isaac Ray (1807-1881), American psychiatrist, published his Treatise on Medical Jurisprudence of Insanity, the best work of that time in English and still a recognized authority in courts of law today.

- 1838            Jean Étienne Dominique Esquirol  
(1772-1840), French psychiatrist,  
published his work, Des maladies  
mentales considérées sous les rapports  
médicale, hygiénique et médico-  
légal - - one of the first modern text-  
books of psychiatry.
- 1838            August Timoleon Wistrand (1807 - 1866),  
published Handbok i forensiska medicinen,  
the first textbook of forensic medicine in  
Sweden.
- 1840            Trial of Marie Lafarge (France), who  
poisoned her husband. M. J. B. Orfila's  
expert testimony about the presence of  
arsenic in the dead body was the decisive  
factor in the verdict of life imprisonment  
for Lafarge. This trial is often cited as  
the first occasion on which scientific  
toxicology was introduced to the courts  
of justice.
- 1843            A Chair of Forensic Medicine was founded  
in Madrid.
- 1845            A Chair of Forensic Medicine was founded  
at McGill University in Montreal.
- 1847            The first Code of Ethics of the American  
Medical Association was adopted in  
Philadelphia.
- 1849            The House of Delegates of the American  
Medical Association, at its session in  
May, approved the appointment of a  
Committee on Forensic Medicine.

- 1850 Jean Servais Stass (1813-1891), a chemist of Brussels, developed a method of extracting alkaloids from cadavers. His success encouraged similar studies by others.
- 1850 Horace Nelson (1821-?) and F. J. d'Avignon started in Plattsburgh, N.Y., the first medicolegal journal in the United States, The Northern Lancet and Gazette of Legal Medicine.
- 1851 Magnus Huss (1807-1890), Swedish physician, published Alcoholismus chronicus. It is a profound study and definition of alcoholism.
- 1855 Frank H. Hamilton (1813-1886), professor of surgery in New York, published Deformities After Fractures, which greatly influenced the outcome of malpractice suits. It appeared in several editions.
- ca 1855 Ambroise August Tardieu (1818-1879), pupil of Orfila, started publishing his "Études" - monographs on various problems in forensic medicine. Tardieu was a casuist, an outstanding medical expert, and, therefore, a "star" in many civil and criminal proceedings.
- 1856 Johann Ludwig Casper (1796-1864), professor in Berlin, medical writer and editor, published his Praktisches Handbuch der gerichtlichen Medicin, which contained a great wealth of facts and was unsurpassed for a long time. Reprinted several times, it was also translated into English. Casper reformed German forensic medicine, and freed it from previous judicial formalism and dependence on other sciences.

- 1860 John Johnson Elwell (1820-1900), physician and lawyer, professor of medical jurisprudence in Ohio, published A Medico-Legal Treatise on Malpractice and Medical Evidence, Comprising the Elements of Medical Jurisprudence. It went through four editions.
- 1862 Samuel Wilks (1824-1911), described dissecting-room warts (verrucae necrogenicae).
- 1863 Karl Ludwig Kahlbaum (1828-1899), German physician, classified varicous forms of insanity and defined paraphrenia.
- 1864 At the first Red Cross convention, delegates approved rules for the protection of sick and wounded soldiers.
- 1864 The Deutsche Psychiatrische Gesellschaft was founded in Berlin.
- 1865 The Arkhiv sudebnoi meditsiny i obshchestvennoi gigieny, the first medicolegal journal in Russia, started publication.
- 1867 The Medico-Legal Society of New York was established.
- 1867 Theodore George Wormley (1826-1897), American toxicologist, published Micro-chemistry of Poisons, an important contribution to the identification of poisons and the first American book devoted entirely to toxicology.
- 1868 The Société de médecine légale was founded in Paris by Alphonse Dévergie (1798-1879).

- 1869 John Ordronaux (1830-1908), American physician and lawyer, teacher and writer, published his Jurisprudence of Medicine, concerning jurisprudence in medical practice.
- 1870 The first American National Prison Congress was held in Cincinnati. Its "Declaration of Principles" became the cornerstone of modern prison reform.
- 1871 Pierre Paul Broca (1824-1880), French anthropologist and founder of craniometry, started publication of his Mémoires d'anthropologie.
- 1875 Emil Theodor Kocher (1841-1917) of Bern published his first short treatise on wounds caused by bullets from small-calibre guns. Other treatises appeared in 1880 and 1895.
- 1876 Cesare Lombroso (1836-1909), founder of criminology, published a book on criminal personality, L'uomo delinquente. It appeared in several editions and translations.
- 1877 In Massachusetts, the office of Coroner was abolished and replaced by the office of Medical Examiner. Several other states followed suit.
- 1877-8 Eduard Hofmann (1837-1897), professor of forensic medicine at the University of Vienna, published his Lehrbuch der gerichtlichen Medizin, which was translated into several foreign languages. It helped to reform forensic medicine and revive interest in it.

- 1878                   The first Congrès international de médecine légale was held in Paris.
- 1879                   A Chair of Forensic Medicine was established at the University of Jassy, Rumania.
- 1882                   Louis Adolphe Bertillon (1853-1914), French anthropometrist, devised the first scientific system for physical identification of individuals (eleven bodily measurements were suggested). He is often regarded as the creator of what is now called forensic science.
- 1882                   Universitas Carolo-Ferdinanda in Prague was divided into two administratively independent units: German and Czech. Forensic medicine at the German University was taught by Joseph Maschka (1820-1899). Courses in forensic medicine at the Czech University, School of Law, were given from 1883 by Václav Bělohradský (1844-1896); at the School of Medicine, from 1884, by Josef Reinsberg (1844-1930).
- 1883                   Pennsylvania passed an Anatomical Law.
- 1883                   The Medico-Legal Society of New York began publishing its Medico-Legal Journal.
- 1885                   The Medical Defence Union for the support and protection of medical practitioners was founded in London.
- 1887                   John Harvey Girdner (1856-1933), American physician, devised an electric instrument for the detection of bullets in the body tissues.

- 1887 The Institute of Legal Medicine was established in Tokyo.
- 1891 Juan Vucetich (1858-1925) of Argentina devised a new system for the classification of fingerprints (all fingers).
- 1892 Francis Galton (1822-1911), English scientist, explorer, and anthropometrist, introduced identification by fingerprints (dactyloscopy).
- 1894-96 A four-volume work of encyclopedic features, Medical Jurisprudence, Forensic Medicine and Toxicology, was published in the United States. Edited by Rudolph A. Witthaus and Tracy C. Becker and with many contributors, it was a standard comprehensive source of information for many years.
- 1895 Wilhelm Konrad Roentgen (1845-1923), German physicist, discovered X-rays.
- 1896 X-ray pictures were admitted as evidence in English courts (London) and in the United States (Wichita, Kansas, and Denver, Colorado).
- 1896 The Instituto de Medicina Legal y la Morgue was established by Law 3379 in Buenos Aires.
- 1901 The Medico-Legal Society was founded in London.
- 1901 The Medico-Legal Journal was established in Cambridge, England.

- 1906 The Congrès pour la répression de l'exercice illégal de la médecine took place in Paris.
- 1907 Hans Gross (1847-1915), Austrian criminologist, published his Criminal Investigation, which remains among the classics of criminology.
- 1900 Paul Hermann Martin Sudeck (1866-1938), German surgeon, described traumatic osteoporosis (Sudeck's atrophy).
- 1910 The Laboratoire de police technique was established in Lyon.
- 1910 The University of Copenhagen Institute of Forensic Medicine was established.
- 1913 The Associazione Italiana di Medicina Legale was founded in Torino.
- 1914 The Servicio de Medicina Legal was organized in Bogotá, Colombia.
- 1918 The Office of Coroner was abolished in New York and replaced by the Office of the Chief Medical Examiner of the City of New York. In New York City, at that time, there were about 6,000 violent deaths a year.
- 1919 Reinhardt von den Velden (1880-1941), introduced intracardiac injections to renew the action of the heart.
- 1921 The Institute for Medico-Legal and Mental Tests was founded in Moscow.



- 1922 The American Society of Clinical Pathologists was founded in Denver, Colorado.
- 1925 The Scopes trial, or the so-called "Monkey Trial," was held in Dayton, Tenn.
- 1927 The Council on Medical Education and Hospitals of the AMA suggested to the Association of American Medical Colleges that the subjects of medical economics, medical jurisprudence, medical history, and, perhaps also in some instances, pastoral medicine might be conveniently grouped with that of medical ethics under the general title of "Social relations of physicians."
- 1928 The Conferencia Latino-Americana de Neurología, Psiquiatría y Medicina Legal took place in Buenos Aires.
- 1929 The first forensic science laboratory in the United States was established by private interests at Northwestern University, Chicago.
- 1931 Kenneth Merril Lynch (1887- ), American pathologist, reported the first fatal case of asbestosis in the United States.
- 1938 The first Congrès international de médecine légale et de médecine sociale was held in Bonn.
- 1946 In the U. S. S. R. , the Vsesoiuznoe nauchnoe obshchestvo sudebnykh medikov i kriminalistov [All-Union Society of forensic physicians and criminologists] was organized, with thirty-five branches.

- 1946                   The Pan-American Congress of Legal Medicine, Forensic Odontology and Criminology took place in Havana.
- 1947                   Ten points describing those medical experiments which may be performed on human beings constituted part of the decision handed down by Military Tribunal I. at Nürnberg. The defendants were men and women who had conducted criminal medical experiments on non-German nationals, especially in concentration camps. The ten points became the foundation of an international code of medical ethics; they are known as the "Nürnberg Ten-Points Code of Medical Ethics."
- 1948                   The International Digest of Health Legislation, the only periodical covering nearly all the countries of the world appeared in Geneva, published by the World Health Organization.
- 1949                   The Geneva Convention prohibited mutilation, cruel treatment, torture, and biological experiments on human beings in time of war.
- 1950                   Richard Harold Lawler (1895-     ), American surgeon, with other physicians, successfully transplanted a human kidney.
- 1952                   The House of Delegates of the AMA encouraged "increased activity on the part of the Subcommittee on Teaching of Legal Medicine and Medical Jurisprudence in medical schools to the extent that the teaching of these subjects will become a part of medical school curriculum."

- 1955 At the first Congrès international de moral médicale, Paris, several lectures and discussions were presented on human experimentation.
- 1958 The Food Additives Act, introduced in Congress by Senator Lister Hill, became Public Law 85-929. It prohibits the use of additives not sufficiently tested to ensure consumer health.
- 1962 The first Inter-American Conference on Legal Medicine and Forensic Science was held at Rio Piedras, Puerto Rico.
- 1963 The Hill-Harris Act, providing assistance in constructing facilities for the mentally retarded and mentally ill, was approved by President Kennedy. Subsequent amendments helped to initiate further services to the inmates. This legislation was important to forensic psychiatry.
- 1964 The Declaration of Helsinki - the code of ethics of the World Medical Association - concerning human experimentation.
- 1968 Medicolegal aspects of procurement of human tissue for research were reviewed and discussed at the conference arranged by the National Institutes of Health (Extramural Forum and the NIH Seminar on Science and Public Policy) at Airlie House, Warrenton, Va.

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

**National Institutes of Health**