

Complete List of Contents

Volume 1

Publisher's Note	v	Atomic absorption spectrophotometry	86
Contributors	ix	Attention-deficit/ hyperactivity disorder medications	88
Complete List of Contents	xi	Autoerotic and erotic asphyxiation	90
Accelerants	1	Autopsies	92
Accident investigation and reconstruction	3	Back-spatter	99
Acid-base indicators.	6	Bacteria	101
Actuarial risk assessment	7	Bacterial biology	104
Adipocere.	10	Bacterial resistance and response to antibacterial agents	105
Air and water purity.	11	Ballistic fingerprints	108
Airport security	14	Ballistics	109
Alcohol-related offenses	17	Barbiturates	111
Algor mortis	20	Beethoven's death	114
ALI standard.	21	Benzidine	117
American Academy of Forensic Sciences	22	Beslan hostage crisis victim identification.	118
American Journal of Forensic Medicine and Pathology	23	Biodetectors.	119
American Society of Crime Laboratory Directors.	25	Biohazard bags	121
Amphetamines	27	Biological terrorism	122
Anabolic Steroid Control Act of 2004	29	Biological warfare diagnosis	126
Analytical instrumentation	30	Biological weapon identification.	128
Anaphylaxis	32	Biological Weapons Convention of 1972	131
Anastasia remains identification	34	Biometric eye scanners.	134
Ancient criminal cases and mysteries	36	Biometric identification systems	135
Ancient science and forensics	41	Biosensors	139
Animal evidence	45	Biotoxins	140
Antemortem injuries	47	Bite-mark analysis	143
Anthrax	48	Blast seat	145
Anthrax letter attacks.	51	Blood agents	146
Anthropometry.	54	Blood residue and bloodstains	148
Antianxiety agents	57	Blood spatter analysis	150
Antibiotics	59	Blood volume testing	152
Antipsychotics	62	Bloody Sunday	153
Argentine disappeared children	64	Blunt force trauma	155
Arsenic	66	Body farms	157
Arson	69	Body Fluid Trace Analysis	160
Arson Dogs	72	Bomb damage assessment	161
Art forgery	75	Bombings	163
Asian tsunami victim identification	78	Borderline personality disorder	168
Asphyxiation	81	Botulinum toxin	169
Assassination	82	Brain-wave scanners	172
Athlete drug testing	84		

Breathalyzer	173	Coroners	272
Brockovich-PG&E case.	174	Counterfeit-detection pens.	274
Bubonic plague	177	Counterfeiting	275
Bullet-lead analysis	179	Courts and forensic evidence	280
Bureau of Alcohol, Tobacco, Firearms and Explosives	180	Crack cocaine	283
Buried body locating	182	Crime laboratories	285
Burn pattern analysis	184	Crime scene cleaning.	288
Cadaver dogs	187	Crime scene documentation	289
Canine substance detection	188	Crime scene investigation	291
Carbon monoxide poisoning	191	Crime scene measurement.	295
Casting	193	Crime scene protective gear	296
Celebrity cases	194	Crime scene reconstruction and staging	298
Centers for Disease Control and Prevention	200	Crime scene screening tests	300
Chain of custody	204	Crime scene search patterns.	302
<i>Challenger</i> and <i>Columbia</i> accident investigations	206	Crime scene sketching and diagramming.	303
Check alteration and washing.	209	Criminal personality profiling.	304
Chemical agents	211	Criminalistics.	309
Chemical Biological Incident Response Force, U.S..	212	Criminology.	311
Chemical terrorism.	215	Croatian and Bosnian war victim identification.	313
Chemical warfare.	218	Cross-contamination of evidence	315
Chemical Weapons Convention of 1993.	219	Cryptology and number theory	316
Chicago nightclub stampede.	222	<i>CSI: Crime Scene Investigation</i>	318
Child abduction and kidnapping	222	Cyberstalking.	320
Child abuse	228	<i>Daubert v. Merrell Dow Pharmaceuticals</i>	324
Choking	231	Decomposition of bodies	326
Chromatography	232	Decontamination methods	330
Class versus individual evidence	233	Defensive wounds	334
Closed-circuit television surveillance	234	<i>Diagnostic and Statistical Manual of Mental Disorders</i>	335
Club drugs	237	Dial tone decoder	337
CODIS	240	Direct versus circumstantial evidence	338
Coffin birth	243	Disturbed evidence.	340
Cognitive interview techniques	244	DNA analysis.	341
<i>Cold Case</i>	247	DNA banks for endangered animals	343
Columbus remains identification	248	DNA database controversies.	343
Column chromatography.	249	DNA extraction from hair, bodily fluids, and tissues	346
Competency evaluation and assessment instruments	250	DNA fingerprinting	349
Composite drawing.	252	DNA isolation methods	350
Computer crimes	255	DNA profiling.	353
Computer forensics.	261	DNA recognition instruments	354
Computer Fraud and Abuse Act of 1984	264	DNA sequencing	355
Computer hacking	266	DNA typing	358
Computer viruses and worms	267	Document examination	359
Confocal microscopy	268	Dosimetry.	362
Control samples	270	Driving injuries.	363
Controlled Substances Act of 1970	271	Drowning	365
		Drug abuse and dependence.	366
		Drug and alcohol evidence rules.	368

Complete List of Contents

Drug classification	371	Drug Enforcement Administration, U.S.	375
Drug confirmation tests	373	Drug paraphernalia	378

Volume 2

Ear prints	381	Forensic accounting	462
Ebola virus	382	Forensic anthropology	467
Electrical injuries and deaths	383	Forensic archaeology	471
Electromagnetic spectrum analysis	385	Forensic botany	474
Electronic bugs	386	Forensic entomology	476
Electronic voice alteration	388	<i>Forensic Files</i>	479
Electrophoresis	389	Forensic geoscience	481
Energy-dispersive spectroscopy	390	Forensic linguistics and stylistics	482
Environmental Measurements		Forensic nursing	485
Laboratory	391	Forensic odontology	488
Epidemiology	393	Forensic palynology	490
Epilepsy	395	Forensic pathology	492
<i>Escherichia coli</i>	396	Forensic photography	498
Ethics	399	Forensic psychiatry	500
Ethics of DNA analysis	402	Forensic psychology	503
European Network of Forensic Science		Forensic Science International	507
Institutes	405	<i>Forensic Science Policy & Management: An</i>	
Evidence processing	406	<i>International Journal</i>	508
Exhumation	408	Forensic Science Service	509
Expert witnesses	410	Forensic sculpture	510
Eyewitness testimony	414	Forensic toxicology	512
Facial recognition technology	419	Forgery	516
False memories	421	Fourier transform infrared	
Fax machine, copier, and printer analysis	424	spectrophotometer	520
Federal Bureau of Investigation	426	Fracture matching	521
Federal Bureau of Investigation DNA		<i>Frye v. United States</i>	522
Analysis Units	430	Gang violence evidence	524
Federal Bureau of Investigation Forensic		Gas chromatography	525
Science Research and Training Center	431	Genocide	526
Federal Bureau of Investigation		Geographic information system	
Laboratory	433	technology	528
Federal Law Enforcement Training		Geographic profiling	530
Center	436	Geological materials	531
Federal Rules of Evidence	437	Gestational age determination	533
Fibers and filaments	439	Glass	534
Fingerprints	442	Guilty but mentally ill plea	535
Fire debris	447	Gunshot residue	537
Firearms analysis	449	Gunshot wounds	538
First responders	451	Habeas corpus	541
Flight data recorders	453	Hair analysis	542
Food and Drug Administration, U.S.	455	Halcion	543
Food poisoning	456	Hallucinogens	545
Food supply protection	458	Handwriting analysis	548
Footprints and shoe prints	460		

Hanging	551	Journalism	624
Hantavirus	552	Kennedy assassination.	629
Harrison Narcotic Drug Act of 1914.	554	Kennewick man	631
Hemorrhagic fevers	555	Kidd blood grouping system	633
Hesitation wounds and suicide	556	Knife wounds	634
High-performance liquid chromatography	557	Laser ablation-inductively coupled	
Hit-and-run vehicle offenses.	558	plasma-mass spectrometry	636
Hitler diaries hoax	559	Lasers	636
<i>Holland v. United States</i>	561	Lead	637
Holocaust investigation	562	Legal competency.	638
Homicide	564	Less-lethal weapons	641
Homogeneous enzyme immunoassay	569	Lincoln exhumation	644
Hostage negotiations.	570	Lindbergh baby kidnapping	646
Hughes will hoax	573	Literature and forensic science	649
Hypothermia	574	Living forensics.	655
Identity theft	576	Livor mortis.	657
Illicit substances	579	Locard's exchange principle	658
Imaging	583	Lock picking	660
Immune system.	585	Louis XVII remains identification.	661
Improvised explosive devices	587	Luminol	663
Incident Command System	588	Mad cow disease investigation	665
Inconsistent Witness Testimony	590	Mandatory drug testing	667
Infrared detection devices	592	Markov murder.	670
Inhalant abuse	593	Marsh test	671
Innocence Project.	596	Mass graves.	672
Insanity defense	599	Mass spectrometry	673
Integrated Automated Fingerprint		Medicine	675
Identification System	602	Medicolegal death investigators.	678
Integrated Ballistics Identification		Megan's Law	680
System	604	<i>Mens rea</i>	684
International Association for		Mercury	685
Identification	605	Metal detectors	686
International Association of		Meth labs	687
Forensic Nurses	606	Microcrystalline tests	690
International Association of		Micro-Fourier transform infrared	
Forensic Sciences	607	spectrometry.	691
International Association of Forensic		Microscopes	692
Toxicologists	609	Microspectrophotometry	694
Internet tracking and tracing	610	Minnesota Multiphasic Personality	
Interpol	612	Inventory	695
Interpol, U.S. National Central Bureau of	614	<i>Miranda v. Arizona</i>	696
Interrogation	615	Misconceptions fostered by media.	697
Iris recognition systems	617	Mitochondrial DNA analysis and typing	700
Irresistible impulse rule	618	Multisystem method	702
Isotopic analysis	619	Mummification	703
Jefferson paternity dispute	621	Mustard gas	705
Journal of Forensic Sciences.	622	Mycotoxins	707

Volume 3

Napoleon's death	709	Product liability cases	796
Narcotics	711	Product tampering	801
National Church Arson Task Force	712	Prostate specific antigen test for post-mortem presence of spermatozoa	803
National Crime Information Center.	713	Pseudoscience in forensic practice.	805
National DNA Index System	715	Psychological autopsy	809
National Institute of Justice.	717	Psychopathic personality disorder	811
National Transportation Safety Board	720	Psychotropic drugs	813
Nerve agents	723	Puncture wounds	815
Nervous system.	725	Quality control of evidence.	817
Nicholas II remains identification.	728	Quantitative and qualitative analysis of chemicals.	819
Night vision devices	729	Questioned document analysis	821
Nipah virus	730	Racial profiling	823
Nuclear detection devices	731	Radiation damage to tissues.	826
Nuclear spectroscopy.	732	Rape.	828
Oblique lighting analysis	734	Rape kit	832
Oklahoma City bombing	735	Reagents	835
Opioids	737	Restriction fragment length polymorphisms	837
Oral autopsy	740	Ricin.	838
Orthotolidine	742	Rigor mortis	840
Osteology and skeletal radiology	742	Ritual killing	841
Paint	746	Sacco and Vanzetti case	844
Paper	748	Saliva	846
Parasitology	751	Sarin	847
Parental alienation syndrome	753	Satellite surveillance technology	849
Paternity evidence	755	Scanning electron microscopy	850
Paternity testing	757	Scent identification.	851
Pathogen genomic sequencing	758	Secret Service, U.S.	853
Pathogen transmission.	759	Semen and sperm	856
People v. Lee	761	Separation tests	858
Performance-enhancing drugs.	762	September 11, 2001, victim identification.	859
Peruvian Ice Maiden	765	Serology	863
Petechial hemorrhage	767	Sex determination of remains	865
Phenolphthalein	768	Sexual predation characteristics	867
Photograph alteration detection.	769	Shaken baby syndrome	868
Physical evidence.	770	Sherlock Holmes stories	870
Physiology	771	Short tandem repeat analysis	872
Poisons and antidotes	773	<i>The Silence of the Lambs</i>	873
Polarized light microscopy	774	Silencers for firearms	874
Police psychology	777	Silicone breast implant cases	875
Pollen and pollen rain	780	Silkwood/Kerr-McGee case	877
Polygraph analysis	781	Simpson murder trial	881
Polymerase chain reaction.	785	Sinus prints.	883
Postconviction DNA analysis	786	Skeletal analysis	883
Presumptive tests for blood	788		
Prints	790		
Problem of under-policing minority populations	793		

Forensic Science

Smallpox	887	Trial consultants	957
Smoke inhalation.	892	Truth serum	959
Sobriety testing.	893	Tularemia.	960
Soil	895	Typewriter analysis	962
Soman.	897	Ultraviolet spectrophotometry.	964
Spectroscopy	898	Unabomber case	965
Sports memorabilia fraud	899	University of Tennessee Anthropological Research Facility	968
St. Valentine’s Day Massacre	901	U.S. Army Medical Research Institute of Infectious Diseases	969
Stalking and stalker typologies	905	ValuJet Flight 592 crash investigation	971
Steganography	912	Victimology	973
Stimulants	913	Violent sexual predator statutes	977
Strangulation.	915	Viral biology	979
Strengthening Forensic Science in the United States: A Path Forward.	916	Voiceprints	983
Structural analysis.	922	Who watches watchmen?: Judicial Conduct Commission or Board	985
Suffocation	924	Wildlife forensics	987
Suicide	925	World Trade Center bombing	990
Superglue fuming	927	Writing instrument analysis.	993
Tabun	929	Wrongful convictions.	994
Tape.	930	X-ray diffraction.	1000
Taphonomy	931	Y chromosome analysis.	1002
<i>Tarasoff</i> rule	932		
Tattoo identification	936	Appendixes	
Taylor exhumation	938	Guide to Internet Resources	1007
Telephone tap detector.	940	Television Programs	1009
Thalidomide	941	Key Figures in Forensic Science	1015
Thanatology	943	Time Line	1025
Thin-layer chromatography	945	Bibliography.	1038
Tire tracks	945	Glossary	1046
Tool marks	946		
Toxic torts.	948	Category Index	1047
Toxicological analysis	950	Subject Index	1057
Trace and transfer evidence	952		
Training and licensing of forensic professionals.	954		