PROBLEMS OF PROOF IN DISTINGUISHING SUICIDE FROM ACCIDENT*

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ALTHOUGH the duty of determining whether a death was suicidal or accidental may arise under a wide variety of circumstances,¹ this problem falls most frequently upon those courts and juries concerned in the litigation of life and accident insurance contracts. It is here that the refinements of trial practice have developed a colorful conflict between forms of judicial proof, with antiquated presumptions and even superstitions stubbornly resistant to the onslaughts of scientific proof. In many cases the contest is decided, not by the strength of either litigant, but by the weakness of that party who has the final duty of coming forward with evidence under the forum's current concept of the meaning of "burden of proof" and the procedural or evidential value of certain presumptions.

One entering the lists in any such encounter, well-equipped as he may be with weapons fashioned by science and tempered with familiar investigatory and trial techniques, should also know the historical and legal background of the field where he is to do battle. For the strategist armed with a bare presumption may unhorse his antagonist with that lance alone.²

* For another version of this article, with greater emphasis on medical aspects of these problems, see Richardson and Breyfogle, *Medico-legal Problems in Distinguishing Accident from Suicide* (1946) 25 ANNALS OF INTERNAL MEDICINE 22.

The instant article is a continuation of the Symposium Series on Scientific Proof and Relations of Law and Medicine. Symposium Editor-in-Chief: Hubert W. Smith, A.B., M.B.A., LL.B., M.D., Professor of Legal Medicine, University of Illinois.

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1. This determination is an every-day, important duty of coroners, medical examiners and physicians. After an inquest or other investigation, their conclusions become a part of death certificates which in many states are prima facie evidence of the cause of death. See note 38 *infra*. Most workmen's compensation laws deny benefits for death or disability due to injuries intentionally self-inflicted. 4 SCHNEIDER, WORKMEN'S COMPENSATION (3d ed. 1939) 4442. For illustrative cases where the issue was accident or suicide, see Note (1943) 143 A. L. R. 1227, and for the presumption in such cases, Notes (1920) 5 A. L. R. 1680, (1925) 36 A. L. R. 397. Other sources of the accident-suicide problem, where the *defensio* may be *accident*, are actions against hospitals or asylums charged with failure to prevent a suicide (Notes (1914) 7 N. C. C. A. 82, 88, (1914) 10 N. C. C. A. 749, (1935) 36 N. C. C. A. 612, (1923) 23 A. L. R. 1277), and suits under dramshop and civil damages acts for injury or death caused by the negligent sale of intoxicating liquors, the use of which by the purchaser has caused death or injury to himself or another. Notes (1940) 9 N. C. C. A. (N. s.) 176, 192-200, (1923) 23 A. L. R. 1276. For liability of a druggist for furnishing the means to commit suicide, see Note (1942) 11 N. C. C. A. (N. s.) 752.

2. For example, *Laventhal v. N. Y. Life Ins. Co.*, 40 F. Supp. 157 (E. D. Mo. 1941) was decided solely upon conflicting presumptions and the burden of proof.

In ancient times suicide was not frowned upon by the Church.³ Neither Moses nor Christ mentioned it. When the deed was noticed, it was recorded merely as a historical fact without moral evaluation.⁴ Only when soldiers' suicides threatened to weaken and demoralize an army were attempts punished as crimes.⁵

However, by the Middle Ages, suicide had come to be considered an offense so heinous in England that the law pursued it after death.⁶ A stake was driven through the body, and it was buried in the public highway. All of the suicide's estate was forfeited to the Crown. These barbaric sanctions have in recent times been ameliorated, although even today a few sects refuse a Christian funeral to a sane suicide, either by rites or burial in hallowed ground.⁷ In some states and in England it is still a crime to attempt to commit suicide⁸ or to aid or abet another by pact or otherwise in so doing.⁹

But popular sentiment long ago disapproved of these anachronistic practices and sought means to avoid them. Since the poor, unfortunate suicide who took his life while bereft of reason was not disgraced (nor were his heirs punished), it soon became customary for the coroner's jury to include in its verdict of suicide the exculpatory phrase, "while suffering from a temporary mental aberration."¹⁰ So, also, if it was certain that the suicide was sane, the jury could always disregard the evidence and find that death was accidentally met and not intentionally embraced. These convenient escape mechanisms continue in modern favor, not only at coroners' inquests,¹¹ but in civil suits where a verdict

3. Bunzel, *Suicide* (1934) 14 ENCYC. SOC. SCI. 455-6. DUBLIN AND BUNZEL, TO BE OR NOT TO BE (1933) contains an exhaustive bibliography of source material and treatises on suicide and its problems.

4. Saul threw himself upon his sword, but the inhabitants of Jabesh buried him, and David pronounced a funeral oration over him. 1 Sam. xxxi 4, 10-3; 2 Sam. i 17-27. Achitophel "hanged himself, and died, and was buried in the sepulchre of his father." 2 Sam. xvii 23.

5. "Self-murder, the pretended heroism, but real cowardice, of the Stoic philosophers, who destroyed themselves to avoid those ills which they had not the fortitude to endure, though the attempting it seems to be countenanced by the civil law, yet was punished by the Athenian law with cutting off the hand which committed the desperate deed." 4 BL. COMM. *189.

6. 4 BL. COMM. *190; 60 C. J. 996-7 (1932).

7. Bunzel, *loc. cit. supra* note 3; cf. 9 HALSBURY, LAWS OF ENGLAND (2d ed. 1933) 455.

8. Note (1934) 92 A. L. R. 1180; 13 R. C. L. 720 (1916); 60 C. J. 997 (1932); see 4 BL. COMM. *189. Insanity is a defense (*ibid.*) but drunkenness is no excuse, although it is a fact to be considered in determining whether an accused intended to commit suicide. Regina v. Doody, 6 Cox C. C. 463 (1854); Rex v. Moore, 3 Car. & Kir. 319, 175 Eng. Reprints 571 (1852).

9. Note (1921) 13 A. L. R. 1259; 60 C. J. 998 (1932).

10. Today, and under the common law, a death by insane suicide or unprovoked homicide is an accident. CORNELIUS, ACCIDENTAL MEANS (1932) 52-62; 4 BL. COMM. *189.

11. In England, where a sane suicide is a crime, coroners' inquests in 4,846 suicides in 1928 returned the verdict of "*felo-de-se*" (sane suicide) in only 88 cases. East, *Suicide from the Medicolegal Aspect* (1931) 2 BRIT. M. J. 241, 242.

of "insane suicide" or "accidental death" may carry with it a substantial monetary benefit payable by an employer or an insurance company.

The development of popular desire to avoid the verdict of *felo-de-se* (sane suicide), with its escheats and attainments punishing innocent relatives and vilifying the dead, has been reflected in judge-made law, such as the presumption against suicide. This is a legal fiction, not built upon reality or scientific analysis, but erected as one presumption upon still another drawn from criminal law, the naive belief that any particular individual under scrutiny must be innocent because most men obey the law. This presumption against suicide which, by the generous touchstone applied to all proceedings against insurance companies, becomes wondrously transmuted into a more precious metal, a presumption in favor of accidental death,¹² is a true product of the evolution of the common law under the pressure of popular sentiment and the heat of expedience.¹³

Few legal philosophers could now be found to debase the product of this process had not the rule out-lived its reason. In relieving the suicide and his family of the consequences of the deed during past centuries when it was so severely condemned in ecclesiastical and criminal law, the purpose of the presumption was completely fulfilled and exhausted. No one will seriously contend that it is either moral or desirable to shield self-murder with an artificial presumption so as to permit a suicide to create an insurance estate from the reserves underlying contracts of other policyholders.¹⁴ Yet it is in the trial of civil controversies involving insurance claims that the presumption against suicide most grievously plagues the judicial body. And it is this vestigial survival of a dead age that should be exposed and excised from the corpus juris.

12. *Laessig v. Travelers Protective Ass'n*, 169 Mo. 272, 69 S. W. 469 (1902). But cf. *N.Y. Life Ins. Co. v. Ross*, 30 F. (2d) 80 (C. C. A. 6th, Tenn., 1928) (dissenting opinion) criticizing the presumption of accident as a non-sequitur. Some courts require proof of an "unexplained" violent death before permitting the presumption to arise. Compare *Occidental Life Ins. Co. v. U. S. Nat. Bank of Denver*, 98 Colo. 126, 53 P. (2d) 1180 (1935), with *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942).

13. The metaphor is derived from the now familiar thesis of the late Mr. Justice Holmes that the life of the law is not logic but is experience, that which is most expedient for the community concerned. This view of the law has been expounded more recently in RADIN, *LAW AS LOGIC AND EXPERIENCE* (1940).

14. Public policy may bar recovery on a life insurance policy even though the incontestable period has expired if the insured took his life for the express purpose of maturing his policy. *Beresford v. Royal Ins. Co.*, 54 Times L. R. 789 [1938] 2 All Eng. R. 602, *aff'g* [1937] 2 K. B. 197 (C. A.). For changing concepts of public policy, compare *Ritter v. Mutual Life Ins. Co. of N. Y.*, 169 U. S. 139 (1898), with *Northwestern Mut. Life Ins. Co. v. Johnson*, 254 U. S. 96 (1920); see also Note (1925) 35 A. L. R. 1491. On grounds of public policy recovery of disability benefits is denied for injuries sustained by an unsuccessful, sane attempt at suicide. *Elwood v. New Eng. Mut. Life Ins. Co.*, 305 Pa. 505, 158 Atl. 257 (1931). *Contra*: *Prudential Ins. Co. v. Rice*, 222 Ind. 231, 52 N. E. (2d) 624 (1944).

LEGAL FRAMEWORK

Most life insurance contracts exclude coverage of death by suicide, sane or insane, occurring within a contestable period usually fixed at one or two years after the issuance of the policy. Most accident insurance policies and clauses in life contracts providing for double indemnity in case of accidental death likewise exclude payments for suicidal deaths, while sane or insane. Many substantive questions arise from conflicting interpretations of the different wording of policies containing or omitting such exclusions and statutes modifying contract rights.¹⁵

The problem of distinguishing accident from suicide becomes more subtle and perplexing on the procedural level where burdens of pleading and proof are settled or shifted by construction of the insurance contract, supplemented by various presumptions such as those against suicide and homicide, in favor of accident, and that the insured was sane and intended the consequences of his act.¹⁶ In a suit on a life insurance policy where suicide is an affirmative defense, the burden of proof is on the defendant to plead and prove as an exclusion from the general coverage that the insured committed suicide. On the other hand, in a suit on an accident insurance policy or on a life policy for double indemnity, the defendant is not required to plead or prove suicide as a defense since the plaintiff has the burden of pleading and proving that death resulted from accident, a cause within the coverage, so that the defendant, merely by denying the plaintiff's assertion, may prove any fact, such as suicide, which tends to disprove the plaintiff's theory of accident.¹⁷

15. See, generally, 1 APPLEMAN, *INSURANCE LAW AND PRACTICE* (1941) 419-51; 6 COOLEY, *BRIEFS ON THE LAW OF INSURANCE* (2d ed. 1928) 5363-76, 5397-489; CORNELIUS, *ACCIDENTAL MEANS* (1932) 52-62; 5 COUCH, *CYCLOPEDIA OF INSURANCE LAW* (1929) 4020-2; 6 *id.* at 4611-67; 4 JOYCE, *THE LAW OF INSURANCE* (2d ed. 1918) 4407-80; 1 C. J. 443-4; 37 C. J. 551-6; 29 AM. JUR. 697-704. Exclusions are fully discussed in 1 APPLEMAN, *supra*, 487-743; 6 COOLEY, *supra*, 5293-397; 6 COUCH, *supra*, 4509-787; 4 JOYCE, *supra*, 4320-480. The distinction between sane and insane suicides is beyond the scope of this article. Numerous additional problems arise in the construction of statutes and policies either granting or withholding the defense of suicide where the insured was insane. See Notes (1925) 35 A. L. R. 160; (1942) 138 A. L. R. 827; (1944) 153 A. L. R. 801.

16. For general reference to presumptions and the burden of proof in general, see THAYER, *PRELIMINARY TREATISE ON EVIDENCE* (1898) 365, 379, 383-4; 9 WIGMORE, *EVIDENCE* (3d ed. 1940) 284-91; 1 JONES, *COMMENTARIES ON THE LAW OF EVIDENCE* (2d ed. 1926) 57-66; Note (1935) 95 A. L. R. 878. For reference to the burden of proof and presumption against suicide in life and accident insurance law, see Notes (1920) 7 A. L. R. 1226, (1935) 95 A. L. R. 878, (1936) 103 A. L. R. 185, (1938) 114 A. L. R. 1226, (1945) 158 A. L. R. 747. The presumption of sanity and evidence of insanity may both affect the presumption against suicide. Note (1938) 112 A. L. R. 1278. The mere fact that the insured committed suicide is no evidence of insanity, and jurors with a preconceived notion otherwise should be disqualified. *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942); 37 C. J. 620 (1925). But *cf.* *Honrath v. N. Y. Life Ins. Co.*, 65 S. D. 480, 275 N. W. 258 (1937).

17. *Dimmer v. Mutual Life Ins. Co.*, 287 Mich. 168, 283 N. W. 16 (1938); *Ryan v.*

Some courts have clouded this rather simple dichotomy between life and accident policies. Life insurance decisions have been cited as precedent in accident cases for the inapplicable proposition that the burden of proof of suicide rests upon the insurer. Still others seem to fix the burden of proof upon the proper party, but then evaluate the concept as if it imposed merely a burden of going forward with the evidence. Under this view the burden of proof is discharged either by a presumption or the introduction of a scintilla of evidence. But a majority rule seems to be emerging, which recognizes that the burden of proof is essentially the risk of non-persuasion and abides throughout a trial with the party upon whom it was originally cast.¹⁸

The procedural framework is further cluttered by a number of presumptions. It is generally presumed that most men love life and fear death. This broad generalization characterizing human motive and action cannot logically be applied to the complex of forces which influence the individual man contemplating suicide. But irrespective of logic, the courts unanimously indulge a presumption that a violent death was neither suicide nor murder. Some courts go one step further to raise an affirmative presumption that a violent death was accidental. Insofar as this presumption is related to the criminal law which assumes innocence, it is understandable. But occasionally, in a civil action, courts have transcribed the criminal law doctrine to the extent of imposing upon an insurer-defendant in a civil action the burden of proving suicide beyond a reasonable doubt.¹⁹

Metropolitan Life Ins. Co., 206 Minn. 562, 289 N. W. 557 (1939) and cases cited. Other leading cases developing the sound majority rule concerning the presumption against suicide and its function in a trial are: *N. Y. Life Ins. Co. v. Gamer*, 303 U. S. 161 (1938); *Jefferson Standard Life Ins. Co. v. Clemmer*, 79 F. (2d) 724 (C. C. A. 4th, Va., 1935) *Watkins v. Prudential Ins. Co.*, 315 Pa. 497, 173 Atl. 644 (1934).

18. In suits where the burden of proving accident rests upon the beneficiary, the insurer's failure to prove suicide as a matter of law does not relieve the beneficiary of his burden. *Scales v. Prudential Ins. Co.*, 109 F. (2d) 119 (C. C. A. 5th, Fla., 1940); *Moss v. Equitable Life Ins. Co. of Iowa*, 71 F. (2d) 795 (C. C. A. 8th, Mo., 1934); *Anderson v. N. Y. Life Ins. Co.*, 140 Fla. 198, 191 So. 307 (1939); *Koycheff v. Mutual Ben. H. & A. Ass'n*, 305 Mich. 660, 9 N. W. (2d) 883 (1943); *Waldron v. Metropolitan Life Ins. Co.*, 347 Pa. 257, 31 A. (2d) 902 (1943); *Whigham v. Metropolitan Life Ins. Co.*, 349 Pa. 149, 22 A. (2d) 704 (1941); *Bryan v. Aetna Life Ins. Co.*, 25 Tenn. A. 496, 160 S. W. (2d) 423 (1941) with which compare *s.c.*, 174 Tenn. 602, 130 S. W. (2d) 85 (1939). But *cf. Lennig v. N. Y. Life Ins. Co.*, 122 F. (2d) 871 (C. C. A. 3d, Pa., 1941), *s.c.* 130 F. (2d) 580 (1942); but see facts not mentioned in either decision but upon which the district court acted. *5 C. C. H. Life Cases* 746 (1941). That the correct placing of the burden of proof may decide the suit is demonstrated in several cases where the beneficiary sued both for the life indemnity and double indemnity of a policy. Juries have found that neither party sustained his burden of proof, i.e., judgment for plaintiff on the life indemnity because no proof of suicide but judgment for defendant on the double indemnity because no proof of accident: a logical result in cases where the true cause of death cannot be established without resort to guesswork. *Hoholik v. Metropolitan Life Ins. Co.*, 289 Mich. 242, 286 N. W. 228 (1939).

19. It is frequently held that where evidence is circumstantial, the insurer must negate

These presumptions may seem difficult to rationalize with the concept of burden of proof. Thus, for example, in an accident case the notion that the burden of proof of accident is upon the claimant might seem irreconcilable with the presumption against suicide which is raised by the fact of violent death. Only if burden of proof is limited to mean the risk of non-persuasion, and presumptions are confined to imposing upon the adversary the burden of coming forward with evidence, can sensible results be reached. Even this resolution, however, indicates that as a matter of practice the insurer will almost invariably be compelled to gather and be prepared to present evidence of suicide if it hopes to defeat the claim on that ground. Even where the claimant may intend to rely ultimately on a theory of the insured's insanity at the time of suicide, retreat to this position may be necessary only after the insurer in the first instance has established suicide. Thus it is apparent that whenever there appears the question whether an insured's demise was accident or suicide, factual proof, not legal doctrine, will be the ultimate test. No matter what the contract, the statute, or the pleading, the pre-trial investigation utilizing all the accessories of legal, medical and scientific proof will be a crucial stage.

Thus in spite of the apparent public sentiment against suicide, and a general attitude in this, as in other fields of law, that no one should profit by his own crime, legislatures and courts have ostensibly thrown a protective cloak of presumption around an insured. Further difficulty for the insurer is, of course, presented by the well-known predilection of juries to find verdicts against insurance companies. To overcome these handicaps, insurer-defendants have developed over the years an arsenal of investigatory and evidentiary devices to buttress their suspicions of suicide. With this competitive armament attorneys representing insurance beneficiaries have kept equal pace. The general tendency is in keeping with the modern trend to relax the rules of evidence and to admit any evidence reasonably relevant to proof of the accident or suicide.²⁰

every reasonable hypothesis of death by accident before it is entitled to a directed verdict. *N. Y. Life Ins. Co. v. Satcher*, 152 Fla. 411, 12 So. (2d) 108 (1943); *Gilpin v. Aetna Life Ins. Co.*, 234 Mo. A. 566, 132 S. W. (2d) 686 (1939); 6 COOLEY, *BRIEFS ON THE LAW OF INSURANCE* (2d ed. 1928) 5473-81. This may be true in criminal cases but it is not the rule in civil trials. *Cox v. Metropolitan Life Ins. Co.*, 139 Me. 167, 28 A. (2d) 143 (1943). See *Mutual Life Ins. Co. of N. Y. v. Hamilton*, 143 F. (2d) 726 (C. C. A. 5th, Fla., 1944). Notice that in life cases and even in accident cases under the minority view the insurer is required to exclude only "reasonable" hypotheses of accident. *Oubre v. Mutual Life Ins. Co. of N. Y.*, 21 So. (2d) 191 (La. 1945) (dissenting opinion). The insurer is not required "to eliminate every speculative, fantastic, conjectural, frivolous and imaginary hypothesis of death in any other way." *Newdigate v. Acacia Mut. Life Ass'n*, 180 La. 979, 990, 158 So. 358, 362 (1934), *quoted with approval in N. Y. Life Ins. Co. v. Hunter*, 60 Ariz. 416, 424, 138 P. (2d) 414, 417 (1943).

20. Surrounding circumstances: *Brotherhood of Maintenance of Way Employees v. Page*, 197 Ark. 498, 123 S. W. (2d) 536 (1939); *Falkinburg v. Prudential Ins. Co.*, 132 Neb.

EVIDENTIARY FRAMEWORK

The factual questions which proof alone must ultimately resolve are, first, whether the injuries were self-inflicted and, second, whether the deceased intended thereby to end his life. Because a suicide is generally a clandestine affair, investigation must seek out circumstantial evidence bearing upon these two points.²¹ Determination of the first question, of whether the injury was self-inflicted, requires initially an investigation of the physical circumstances of the death. The most important items to be noted and determined are (1) the physical cause of death;²² (2) the location, size, direction, course, nature and extent of all wounds or other evidence of the body's reaction to the lethal agency;²³ and

831, 273 N. W. 478 (1937). Motive or its absence: *Occidental Life Ins. Co. v. Graham*, 22 F. (2d) 528 (C. C. A. 8th, Colo., 1927); *Prudential Ins. Co. v. Morris*, 72 F. (2d) 824 (C. C. A. 3d, Pa., 1934); *Smith v. Metropolitan Life Ins. Co.*, 317 Ill. A. 624, 47 N. E. (2d) 330 (1943); *Bertschinger v. N. Y. Life Ins. Co.*, 166 Ore. 307, 111 P. (2d) 1016 (1941). See also 2 JONES, COMMENTARIES ON THE LAW OF EVIDENCE (2d ed. 1926) 1116-9.

21. Investigation of the physical facts will show whether the deceased died by his own hand; evidence of motive or lack of it bears principally upon the intent of the deceased at the time. Both are important, and either one alone may show suicide as a matter of law though the other be inconclusively determined. Compare *Connecticut Mut. Life Ins. Co. v. Lanahan*, 112 F. (2d) 375 (C. C. A. 6th, Mich., 1940), s.c. 113 F. (2d) 935 (1940) (stressing physical facts) with *Webster v. N. Y. Life Ins. Co.*, 160 La. 854, 107 So. 599 (1926) (stressing motive).

22. Where there are multiple wounds as possible causes of death, it must be determined which injury was inflicted first, whether it alone was sufficient to cause death, whether the other injuries could have been accidentally or self-inflicted thereafter, and what disease and wounds and other causes actually contributed to bring about death. Suicides and homicides may be concealed by burning. A determination of the concentration of the alcohol in the blood may help to prove either accident or suicide. Jetter, *When is Death Caused by or Contributed to by Acute Alcoholism?* (1943) 1 CLINICS 1487. The policy may exclude liability if death occurred while the insured was intoxicated or under the influence of liquor, and it is usually not necessary to show a causal connection. 1 APPLEMAN, INSURANCE LAW AND PRACTICE (1941) 574-87. As to admissibility and weight of evidence based upon scientific tests for intoxication, see Notes (1940) 127 A. L. R. 1513, (1945) 159 A. L. R. 209, (1943) 29 VA. L. REV. 749. Disease may cause a fall or auto accident and death may result from either disease or accidental injuries or both. If disease causes an accident, the injury or death is sometimes held accidental, but may be excluded by the usual clause providing no coverage for a loss resulting from or caused directly or indirectly or in whole or in part by disease. CORNELIUS, ACCIDENTAL MEANS (1932) 42-50. The percentage of saturation of the blood with carbon monoxide may disclose that a body burned or exposed to carbon monoxide did not perish from those causes. Gettler and Freimuth, *The Carbon Monoxide Content of Blood under Various Conditions* (1940) 10 AM. J. CLIN. PATH. 603. A murderer may hang his victim's body to conceal the crime. See *Deweese v. Sovereign Camp*, 110 Kan. 434, 204 Pac. 523 (1922).

23. Medical jurists have evolved many rules of thumb of little practical value in any one case. BECK and BECK, ELEMENTS OF MEDICAL JURISPRUDENCE (5th ed. 1835); DRAPER, TEXTBOOK OF LEGAL MEDICINE (1905); EWELL, A MANUAL OF MEDICAL JURISPRUDENCE (2d ed. 1909); GLAISTER and GLAISTER, MEDICAL JURISPRUDENCE AND TOXICOLOGY (5th ed. 1931); GONZALES, VANCE and HELPERN, LEGAL MEDICINE AND TOXICOLOGY (1937); HATCHER, TEXTBOOK OF FIREARMS INVESTIGATION, IDENTIFICATION AND EVIDENCE (1935);

(3) the source of that agency, the deceased's access to it when the injury was presumably inflicted, and the physical relation of the agency to the body of the deceased after death. As a result of this investigation, one may then reconstruct the events taking place when the injury occurred, and, of course, that is exactly what the jury will be thinking of from the opening moments of the trial. The important guiding question will be whether there is substantial evidence from which a logical conclusion may be reached or whether one must speculate or guess in order to reconstruct the event.²⁴

Occasionally the fact that the injury was self-inflicted may be shown by the testimony of an eye-witness or proof of an unquestioned photo-

HERZOG, MEDICAL JURISPRUDENCE (1931); KERR, FORENSIC MEDICINE (1935); McNALLY, TOXICOLOGY (1937); MORITZ, THE PATHOLOGY OF TRAUMA (1942); Moritz and Dutra, *Scientific Evidence in Cases of Injury by Gunfire* (1944) 37 ARCH. PATH. 340; PHELPS, TRAUMATIC INJURIES OF THE BRAIN AND ITS MEMBRANES (1897); SMITH, FORENSIC MEDICINE (8th ed. 1943); SNYDER, HOMICIDE INVESTIGATION (1944); STEWART, LEGAL MEDICINE (1910); TAYLOR, MEDICAL JURISPRUDENCE (12th Amer. ed. 1897); Vandegrift, *Suicide and Homicide by Violence* (1941) 25 M. CLIN. NORTH AMERICA 423; Walker, *Bullet Holes and Chemical Residues in Shooting Cases* (1940) 31 J. CRIM. LAW & CRIMINOLOGY 497; WEBSTER, LEGAL MEDICINE AND TOXICOLOGY (1930); WHARTON and STILLÉ, MEDICAL JURISPRUDENCE (3d ed. 1873); WITTHAUS and BECKER, MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY (2d ed. 1906). See also Notes (1910) 17 AMER. & ENG. ANN. CAS. 35-7, ANN. CAS. 1913 C 1260.

24. A "fanciful theory of accident" cannot be spun out on bare possibilities since verdicts must rest upon probabilities. *Love v. N. Y. Life Ins. Co.*, 64 F. (2d) 829, 831-2 (C. C. A. 5th, Miss. 1933). In a large number of jurisdictions one will find that the court, even in an accident insurance case, will permit a recovery on a speculative possibility that an accident occurred when there was no substantial evidence in support thereof. These opinions may be explained in a number of ways, but their chief error is a misplacing of the burden of proof on the defendant and a misconception of the function of the presumption against suicide. Other courts, however, refuse to permit verdicts based upon bare possibilities, conjecture, guess, and unsupported theories. *Supreme Forest Woodmen Circle v. Newsome*, 63 Ga. A. 550, 11 S. E. (2d) 480 (1940); *Svihovec v. Woodmen Acc. Co.*, 69 N. D. 259, 285 N. W. 447 (1939); *Whigham v. Metropolitan Life Ins. Co.*, 349 Pa. 149, 22 A. (2d) 704 (1941); *Tower v. Equitable Life Assur. Soc.*, 125 W. Va. 563, 26 S. E. (2d) 512 (1943); *Lambert v. Metropolitan Life Ins. Co.*, 123 W. Va. 547, 17 S. E. (2d) 628 (1941). "We do not think these theories can be accepted with any show of reason, or that they would be seriously considered, if this were not a controversy between a bereaved widow and an insurance company." *Brotherhood of Maintenance of Way Employees v. Page*, 197 Ark. 498, 500, 123 S. W. (2d) 536, 537 (1939). "Jurors are not permitted to shut their eyes to what everybody else sees and understands and wander off into fields of imagination and suspicion in order to reach verdicts. Courts are more and more realizing and declaring that they must not permit themselves to be more ignorant than anybody else or fail to see what is plain to everyone and everybody except a court." *Deweese v. Sovereign Camp*, 110 Kan. 434, 440-1, 204 Pac. 523, 526-7 (1922). Too frequently "judge and jury alike have been unable to take a common sense view of the facts of life, and have seemed to be the only persons in the community who did not clearly understand what had taken place." *Jefferson Standard Life Ins. Co. v. Clemmer*, 79 F. (2d) 724, 731 (C. C. A. 4th, Va., 1935). If there is no substantial evidence of accident, then the issue of accident cannot be submitted to the jury and it is immaterial where the burden of proof lies in a suit for accidental death benefits. *Fox v. Mutual Ben. H. & A. Ass'n*, 61 Ga. A. 835, 7 S. E. (2d) 403 (1940).

graph of the scene or death wound. The extreme importance of this type of evidence becomes manifest under the rule that upon the adduction of direct evidence of a suicide, there is no need to resort to circumstantial evidence or to lay stress upon motive.²⁵

The same rule applies to direct evidence developed in answer to the second question, the intention of the deceased, since this may occasionally be shown by such direct evidence as a threat before the act,²⁶ a suicide note accompanying it,²⁷ or admissions during a survival period.

25. *Webster v. N. Y. Life Ins. Co.*, 160 La. 854, 107 So. 599 (1926). A good illustration of the importance of photographs is *Gilpin v. Aetna Life Ins. Co.*, 234 Mo. A. 566, 132 S. W. (2d) 686 (1939) where the deceased with adequate motive for suicide was found in his car with a revolver wound in his head under circumstances which the court held might indicate that death was either accidental or suicidal. Among other conflicts in the evidence were the existence, extent and location of powder burns, the distance the revolver must have been from the head when the shot was fired, the presence or absence of a bruise on the hand and, curiously, the location of the entrance wound itself. The coroner, a pathologist, said that it was above the right ear and that the path of the bullet was straight through the head. The court felt helpless to accept this evidence of a scientific, disinterested witness as conclusive, and said that it was for the jury to say whether such evidence should be rejected in favor of that given by friends of the deceased who variously located the entrance wound in the middle of the forehead, over the right eye and at the temple. A photograph will avoid conflicts resulting either from incompetence or dishonesty on the one side or the other. Photographs of corpses are admissible in evidence. *Note* (1945) 159 A. L. R. 1413.

26. *Webster v. New York Life Ins. Co.*, 160 La. 854, 107 So. 599 (1926); *Cookcroft v. Metropolitan Life Ins. Co.*, 133 Pa. Super. 598, 3 A. (2d) 184 (1938); *Metropolitan Life Ins. Co. v. Hedgepath*, 182 Tenn. 296, 185 S. W. (2d) 906 (1945); *Notes* (1933) 86 A. L. R. 157, (1934) 93 A. L. R. 426. Declarations a long time before the act are inadmissible. 6 COOLEY, BRIEFS ON THE LAW OF INSURANCE (2d ed. 1928) 5469. Statements made to a lawyer are admissible if not privileged. *Modern Woodmen of America v. Watkins*, 132 F. (2d) 352 (C. C. A. 5th, Fla., 1942). As for admissibility of statements made to a physician or in hospital records, the rule will vary from state to state, depending upon statutes relating to privilege, the keeping of hospital records and a determination of what is and what is not hearsay. See *N. Y. Life Ins. Co. v. Taylor*, 147 F. (2d) 297 (App. D. C. 1945) and cases cited; 8 COUCH, CYCLOPEDIA OF INSURANCE LAW (1931) 7119; *Notes* (1931) 75 A. L. R. 378, (1939) 120 A. L. R. 1124. Compare *Buckminster's Estate v. Comm. Int. Rev.*, 147 F. (2d) 331 (C. C. A. 2d, 1944), disagreeing with the Taylor opinion in its interpretation of the Federal Shop Book Rule, 28 U. S. C. A., § 695, as it applies to hospital records. In *Bolts v. Union Central Life Ins. Co.*, 20 N. Y. S. (2d) 675 (City Ct. 1940), the court held that the deceased's statement to a doctor that she did not care to live was not privileged since the doctor already knew that she had attempted her life and the statement was unnecessary to the treatment. The claimant, however, is entitled to draw attention to the absence of threats and suicide notes. *Schneider v. Metropolitan Life Ins. Co.*, 62 Ga. A. 148, 7 S. E. (2d) 772 (1940); *Farrar v. Locomotive Engineers' Mutual Life and Acc. Ins. Ass'n*, 143 Minn. 468, 173 N. W. 705 (1919); *Tully v. Prudential Ins. Co.*, 234 Wis. 549, 291 N. W. 804 (1940). However, the fact that the witness had never heard insured threaten his life "is entirely negative testimony and is of little, if any, probative value." *Metropolitan Life Ins. Co. v. Hedgepath*, 182 Tenn. 296, 299, 185 S. W. (2d), 906, 907 (1945). Evidence that deceased had made plans for the future is said to indicate accident. *Parfet v. Kansas City Life Ins. Co.*, 128 F. (2d) 361 (C. C. A. 10th, Colo., 1942) and cases cited.

27. *Deweese v. Sovereign Camp*, 110 Kan. 434, 204 Pac. 523 (1922); *Mutual Life Ins. Co. of N. Y. v. Hayward*, 12 Tex. Civ. A. 392, 34 S. W. 801 (1896); *Ziebell v. Fraternal Re-*

thereafter.²⁸ More generally, however, the intention of the deceased must be gleaned from an inquiry into the incentives or deterrents which might make the individual's suicide either plausible or improbable.²⁹ Both litigants join in this search and much of the evidence at trial revolves about that issue.

It is not necessary to the theory of suicide that a motive be found.³⁰ The springs of human action are often hidden and are of such obscure

serve Ass'n, 159 Wis. 612, 149 N. W. 475 (1914). An ambiguous note is not conclusive. *Aydelotte v. Metropolitan Life Ins. Co.*, 124 N. J. L. 266, 11 A. (2d) 122 (1940); *Wellisch v. John Hancock Mut. Life Ins. Co.*, 293 N. Y. 178, 56 N. E. (2d) 540 (1944); *Cox v. Royal Tribe of Joseph*, 42 Ore. 365, 71 Pac. 73 (1903). Nor is a note conclusive which was written at some previous time in connection with a contemplated suicide never executed. See *Equitable Life Assur. Soc. v. Ireland*, 123 F. (2d) 462 (C. C. A. 9th, Mont., 1941).

28. Sometimes the mortally wounded suicide will readily admit what he has done. *Sutcliffe v. Iowa State Traveling Men's Ass'n*, 119 Iowa 220, 93 N. W. 90 (1903). Others refuse to talk. Still others may claim that it was accidental, and friends and relatives will so testify. *Rast v. Mutual Life Ins. Co. of N. Y.*, 112 F. (2d) 769 (C. C. A. 4th, S. C., 1940) (holding that it was an error to exclude such parts of the *res gestae*); *accord*, *Walker v. Prudential Ins. Co.*, 127 F. (2d) 938 (C. C. A. 5th, Fla., 1942); *N. Y. Life Ins. Co. v. Mason*, 272 Fed. 28 (C. C. A. 9th, Mont., 1921); *Tabor v. Mutual Life Ins. Co.*, 13 F. (2d) 765 (C. C. A. 4th, W. Va., 1926).

29. It is as important for the beneficiary to prove absence of motive and presence of natural deterrents as it is for the insurer to prove the opposite. "To the absence of adequate motive the courts have always attached the highest importance in this class of cases." *Kornig v. Western Life Indemnity Co.*, 102 Minn. 31, 38, 112 N. W. 1039, 1042 (1907). *Allison v. Bankers Life Co.*, 230 Iowa 995, 299 N. W. 889 (1941); *Webster v. N. Y. Life Ins. Co.*, 160 La. 854, 107 So. 599 (1926); *Domanowski v. Prudential Ins. Co.*, 116 N. J. L. 247, 182 Atl. 906 (1936). The beneficiary will attempt to show any one or more of the following facts which have been said to indicate that the death may be accidental: youth, good health, good habits and sobriety, industriousness, religious inclinations, a merry, cheerful disposition, "slept and ate well," good spirits, happy home life, kindness and affection to children, enjoyment of friends and genial companions, freedom from debt, satisfactory employment, etc. The insurer will look for evidence to the contrary: evidence of the health, habits, disposition, temperament, mood, domestic and social relations and pecuniary circumstances indicating a motive for or inclination to suicide. Note (1910) 17 AMER. & ENG. ANNO. CAS. 38-9. After a study of 1,000 consecutive cases of attempted suicide admitted to Brixton prison in England, it was found that the major causes and motives were: alcoholic impulse with amnesia (141), alcoholic impulse-memory retained (171), post-alcoholic depression (31), lack of employment (112), business worries (27), destitution (64), domestic troubles (120), arrest or fear of future imprisonment (41), depression from various causes (20), morbid mental states (18), weak-mindedness (46), neurasthenia (8), epilepsy (10), insanity (123), ulterior purposes (61), other causes, such as shame, mistake under alcohol, etc. (7). EAST, MEDICAL ASPECTS OF CRIME (1936), 141-92.

30. A motive helps to decide the case, but is not necessary to a finding of suicide. See *N. Y. Life Ins. Co. v. Sparkman*, 101 F. (2d) 484 (C. C. A. 5th, Fla., 1939); *N. Y. Life Ins. Co. v. Trimble*, 69 F. (2d) 849 (C. C. A. 5th, La., 1934); *Burkett v. N. Y. Life Ins. Co.*, 56 F. (2d) 105 (C. C. A. 5th, Miss., 1932); *Aetna Life Ins. Co. v. Tooley*, 16 F. (2d) 243 (C. C. A. 5th, Tex., 1926); *Franklin Life Ins. Co. v. Heitchew*, 146 F. (2d) 71 (C. C. A. 5th, Tex., 1944). "Motive was not an essential element requiring either proof on the part of the plaintiff or disproof on the part of the defendant." *Leahy v. Travelers Ins. Co.*, 42 F. Supp. 26, 27 (S. D. Ohio 1941).

origin that not even a psychiatrist with the full and voluntary cooperation of his patient can find them.³¹ Some suicides are committed for ulterior purposes never discovered, and some occur not for any deep-lying or long-existing reason, but as a result of sudden impulse or post-alcoholic or disease states unknown before death and seldom discovered after.³²

It is also important to ascertain, if possible, whether the deceased knew that the deadly agency which caused his death was actually capable of that effect. Proof of a previous attempt to commit suicide is a valuable aid to an insurer's defense.³³ In so far as the individual's contract or the local law leaves the question open, insanity or lesser mental disorders of the deceased may become important to establish or negate intent.³⁴ Physical states, abilities and disabilities may furnish a clue to what took place at the time of death.³⁵ A study of the pre-

31. See *N. Y. Life Ins. Co. v. Taylor*, 147 F. (2d) 297 (App. D. C. 1945), passing on the admissibility of hearsay evidence and opinions of psychiatrists contained in hospital records.

32. "In many cases suicide results from a sudden impulse. What motivates persons to commit suicide is often a mystery." *Waldron v. Metropolitan Life Ins. Co.*, 347 Pa. 257, 261, 31 A. (2d) 902, 904 (1943). *Bryan v. Aetna Life Ins. Co.*, 25 Tenn. A. 496, 160 S. W. (2d) 423 (1941), s.c. 174 Tenn. 602, 130 S. W. (2d) 85 (1939). "[T]he doctor should not be misled by the previous normal behavior of the individual, or the statement by relatives that the deceased was not the person to do such a thing. . . . The most unlikely people sometimes take their own lives, and their behavior immediately before the act frequently gives no indication of their intentions. . . ." *KERR, op. cit. supra* note 23, at 92.

33. *Metropolitan Life Ins. Co. v. Smith*, 65 F. (2d) 967 (C. C. A. 7th, Ind., 1933); *Aubuchon v. Metropolitan Life Ins. Co.*, 142 F. (2d) 20 (C. C. A. 8th, Mo., 1944); *Equitable Life Assur. Soc. v. Irelan*, 123 F. (2d) 462 (C. C. A. 9th, Mont., 1941); *Hamilton v. Metropolitan Life Ins. Co.*, 71 Ga. A. 784, 32 S. E. (2d) 540 (1944); *Lindblom v. Metropolitan Life Ins. Co.*, 210 App. Div. 177, 205 N. Y. S. 505 (1924).

34. Although most policies contain a clause excluding death from suicide, sane or insane, it has been held in some states that since suicide involves an intentional act, the insured must have had intelligence enough to know that he was taking his own life. *Note* (1944) 153 A. L. R. 801. A self-inflicted injury may be accidental when received in a delirium or during intoxication or while in some other mental condition where suicide was not intended. Therefore, it is important to determine the deceased's state of mind when the act was committed. 1 *APPELMAN, INSURANCE LAW AND PRACTICE* (1941) 438, and examples there cited. The use of drugs may so confuse the mind as to preclude any intention of suicide and even cause accidents. *Feldmann v. Connecticut Mut. Life Ins. Co.*, 142 F. (2d) 628 (C. C. A. 8th, Mo., 1944); *Wellisch v. John Hancock Mut. Life Ins. Co.*, 293 N. Y. 178, 56 N. E. (2d) 540 (1944). Compare *Reliance Life Ins. Co. v. Burgess*, 112 F. (2d) 234 (C. C. A. 8th, Mo., 1940); *Aubuchon v. Metropolitan Life Ins. Co.*, 142 F. (2d) 20 (C. C. A. 8th, Mo., 1944); *Hill v. N. Y. Life Ins. Co.*, 307 Ill. A. 381, 30 N. E. (2d) 183 (1940), s.c., 322 Ill. A. 690, 54 N. E. (2d) 88 (1944) (abstract only, see 9 C. C. H. Life Cases 950 for opinion). See also majority and dissenting opinions in *Lincoln Petroleum Co. v. N. Y. Life Ins. Co.*, 115 F. (2d) 73 (C. C. A. 7th, Ill., 1940).

35. Eye removed at hospital explaining fall there from window. *Smith v. Durham Life Ins. Co.*, 202 S. C. 392, 25 S. E. (2d) 247 (1943). Subject to "fainting spells" (not enough, though other evidence of accident was present). *Brotherhood of Maintenance of Way Employees v. Page*, 197 Ark. 498, 123 S. W. (2d) 536 (1939). Physical impairment of hand ac-

death activities and movements of the deceased,³⁶ his occasion, if any, to use the lethal agency, and the time and place of the act may demonstrate his intent or motive or absence thereof. The decedent's attitude, after he is mortally wounded, indicated by remarks, attempts to prevent resuscitation or, on the contrary, efforts at self-help, may be indicative of his purposes.³⁷ The conduct and statements, oral and written, of witnesses and relatives after the injury may, under some circumstances, be shown in evidence.³⁸

counting for unintended discharge or abnormal manner of handling gun. *Union Central Life Ins. Co. v. Cooper*, 115 F. (2d) 222 (C. C. A. 5th, Ala., 1940); *Kansas City Life Ins. Co. v. Bowman*, 102 F. (2d) 510 (C. C. A. 9th, Idaho, 1939). Under opiates and ill in bed, death from burning. *Brooks v. Metropolitan Life Ins. Co.*, 163 P. (2d) 689 (Cal. Sup. Ct. 1945), *rev'd* 159 P. (2d) 424 (Cal. A. 1945). Sleepy and fell off bridge. *Hall v. Progressive Life Ins. Co.*, 61 Ga. A. 792, 7 S. E. (2d) 606 (1940). The length of the deceased's arms may prove or disprove suicide by a shotgun wound. *Pythias Knights' Supreme Lodge v. Beck*, 181 U. S. 49 (1901), is illustrative of many such cases. The deceased may have been epileptic or otherwise afflicted with diseases causing syncope, convulsive or psychomotor action. *Lennox, Amnesia, Real and Feigned* (1943) 99 AM. J. PSYCHIAT. 732; *Smith, Scientific Proof and Relations of Law and Medicine* (1943) 18 ANN. INT. MED. 450. "Automatism," a favorite defense of criminal lawyers, has been borrowed from an obscure medical source to excuse an attempted suicide by barbiturates. The source: *Richards, A Symptom of Poisoning by Hypnotics of the Barbituric Acid Group* (1934) 1 BRIT. M. J. 331. The use: *Feldmann v. Connecticut Mut. Life Ins. Co.*, 142 F. (2d) 628 (C. C. A. 8th, 1944).

36. *Tully v. Prudential Ins. Co.*, 234 Wis. 549, 291 N. W. 804 (1940) (dissenting opinion). See also *Knapczyk v. Metropolitan Life Ins. Co.*, 321 Ill. A. 611, 53 N. E. (2d) 484 (1944). Taking out of insurance shortly before a violent death may raise a suspicion of suicide. *Hoholik v. Metropolitan Life Ins. Co.*, 289 Mich. 242, 286 N. W. 228 (1939). So, also, one will inquire whether policies were about to lapse. *National Union v. Fitzpatrick*, 133 Fed. 694 (C. C. A. 5th, Ala., 1905); *Rast v. Mutual Life Ins. Co. of N. Y.*, 112 F. (2d) 769 (C. C. A. 4th, S. C., 1940).

37. *Hamilton v. Metropolitan Life Ins. Co.*, 71 Ga. A. 784, 32 S. E. (2d) 540 (1944); *Lindblom v. Metropolitan Life Ins. Co.*, 210 App. Div. 177, 205 N. Y. S. 505 (1924); *Mutual Life Ins. Co. v. Tillman*, 84 Tex. 31, 19 S. W. 294 (1892). On the other hand, the deceased may have sought assistance and then have been cooperative and hopeful of recovery, indicating accident. *Union Central Life Ins. Co. v. Cooper*, 115 F. (2d) 222 (C. C. A. 5th, Ala., 1940); *Walker v. Prudential Ins. Co.*, 127 F. (2d) 938 (C. C. A. 5th, Fla., 1942); *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942); *Kirschbaum v. Metropolitan Life Ins. Co.*, 133 N. J. L. 5, 42 A. (2d) 257 (1945).

38. Statements to police, newspaper reporters, friends, the undertaker and coroner may be checked for this type of evidence. *Gordon v. Mutual Life Ins. Co. of N. Y.*, 37 F. Supp. 873 (E. D. La. 1941); *Supreme Forest Woodmen Circle v. Newsome*, 63 Ga. A. 550, 11 S. E. (2d) 480 (1940); *Dimmer v. Mutual Life Ins. Co. of N. Y.*, 287 Mich. 168, 283 N. W. 16 (1938); *Bock v. N. Y. Life Ins. Co.* (unreported, Tenn. Sup. Ct.), 1 C. C. H. Life Cases 21 (1938). But statements of the daughter of the deceased or any other than the beneficiary would be hearsay and not admissible. *Texas State Life Ins. Co. v. Fress*, 138 S. W. (2d) 198 (Tex. Civ. A. 1940). A doctor or other witness, expert or lay, cannot testify that in his opinion the death was accidental or suicidal because that would invade the province of the jury on an ultimate issue. 6 COOLEY, BRIEFS ON THE LAW OF INSURANCE (2d ed. 1928) 5472; *N. Y. Life Ins. Co. v. Ittner*, 62 Ga. A. 31, 8 S. E. (2d) 582 (1940), ruling, however, that any witness in a position to know may testify that in his opinion the wound could or could not have been self-inflicted; *Furbush v. Maryland Casualty Co.*, 131 Mich. 234, 91 N. W. 135

These general categories of probative facts may best be spelled out in terms of methods of suicide. Before turning to them it maybe stated as a general rule that except in the case of suicide by firearms the medical jurist is of little practical assistance in determining whether any one death was accidental or suicidal.³⁹ Beyond proving the physical cause of death, the testimony of the medical witness has been crucial to proof of suicide, accident or homicide in no more than one-third of all cases of violent death.

SHOOTING

Where the deceased has died of a gunshot wound, a suspicion of suicide might be pursued first to a determination of the occasion of the deceased's use of the firearm.⁴⁰ Considerable investigation is required

(1902) (opinion that deceased was murdered). Proofs submitted to an insurance company are admissible against the beneficiary, but not in her favor. *Gordon v. Mutual Life Ins. Co. of N. Y.*, 37 F. Supp. 873 (E. D. La. 1941); *Texas State Life Ins. Co. v. Fress*, *supra*; 6 COOLEY, *supra* at 5468. Proofs made to other companies are also admissible. This source of information is frequently of great value, but is often neglected by investigators. *Fleetwood v. Pacific Mut. Life Ins. Co.*, 246 Ala. 571, 21 So. (2d) 696 (1945). Death certificates, or at least parts of them are prima facie evidence of the facts therein stated. Notes (1922) 17 A. L. R. 359, (1926) 42 A. L. R. 1454, (1935) 96 A. L. R. 324; 8 COUCH, CYCLOPEDIA OF INSURANCE LAW (1931) 7232 *et seq.*; 6 COOLEY, *supra*, at 5466 *et seq.* This may or may not permit the introduction of the death certificate to show the signer's belief that the death was "probably" accidental or suicidal, or, if suicidal, "due to a temporary mental aberration." Coroners' verdicts are, of course, hearsay, and must be excluded unless voluntarily made a part of proof of death submitted by the beneficiary to the insurer. *Ibid.* As to conclusiveness of proofs submitted to an insurer, see Note (1934) 93 A. L. R. 1342. As to whether the presumption against suicide is overcome by a death certificate, coroner's verdict or similar documentary evidence, see Note (1945) 159 A. L. R. 181.

39. Almost all medical jurists agree. EWELL at 17, 80; GLAISTER at 381, 389; GONZALES, VANCE and HELPERN at 108; HERZOG §§ 280-6; KERR at 93; SMITH at 124; all *supra* note 23. But *cf.* WEBSTER, *op. cit.* *supra* note 23, at 157.

40. It is often shown that the insured was hunting. *Mutual Life Ins. Co. of New York v. Bell*, 147 Fla. 734, 3 So. (2d) 487 (1941); *Kentucky Home Mut. Life Ins. Co. v. Watts*, 298 Ky. 471, 183 S. W. (2d) 499 (1944). Or intended to go hunting. *Gamer v. N. Y. Life Ins. Co.*, 76 F. (2d) 543 (C. C. A. 9th, Mont., 1935). Or usually carried a gun with him. *Aetna Life Ins. Co. v. Tooley*, 16 F. (2d) 243 (C. C. A. 5th, Tex., 1926). Or was cleaning, repairing or wrapping a gun. *Walker v. Prudential Ins. Co.*, 127 F. (2d) 938 (C. C. A. 5th, Fla., 1942); *Mutual Life Ins. Co. of N. Y. v. Graves*, 25 F. (2d) 705 (C. C. A. 3d, Pa., 1928); *Lewis v. N. Y. Life Ins. Co.*, 113 Mont. 151, 124 P. (2d) 579 (1942). Or said that he intended to do so. *McLane v. Reliance Life Ins. Co. of Pittsburgh*, 192 S. C. 245, 6 S. E. (2d) 13 (1939) (evidence held admissible as tending to show a state of mind). Or was twirling the gun. *N. Y. Life Ins. Co. v. Sparkman*, 101 F. (2d) 484 (C. C. A. 5th, Fla., 1939). Or was "pranking" with it. *Metropolitan Life Ins. Co. v. Graves*, 201 Ark. 189, 143 S. W. (2d) 1102 (1940). Or (a lawyer) demonstrating how another man had committed suicide. *Aetna Life Ins. Co. v. Kent*, 73 F. (2d) 685 (C. C. A. 6th, Mich., 1934). Or was playing "Russian roulette." *Pacific Mut. Life Ins. Co. v. Fagan*, 292 Ky. 533, 166 S. W. (2d) 1007 (1942). Or was celebrating the Fourth of July (in the afternoon in his locked bath-room and in his pajamas with an Iver-Johnson "safety" revolver, under indictment for embezzlement, dis-

to solve the equally important puzzle of what force fired the weapon.⁴¹ The presence or absence of marks on the weapon or surrounding ob-

graced in the small town where he had formerly been mayor, suffering pain and under opiates, half-blind, deaf and dumb because of cancer of his throat and the roof of his mouth). *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942).

The absence of any such evidence will be stressed by the insurer. *Burkett v. N. Y. Life Ins. Co.*, 56 F. (2d) 105 (C. C. A. 5th, Miss., 1932); *Mitchell v. New Eng. Mut. Life Ins. Co.*, 123 F. (2d) 246 (C. C. A. 4th, Va., 1941); *Dimmer v. Mutual Life Ins. Co. of N. Y.*, 287 Mich. 168, 283 N. W. 16 (1938); *Bryan v. Aetna Life Ins. Co.*, 25 Tenn. A. 496, 160 S. W. (2d) 423 (1941); *Tully v. Prudential Ins. Co.*, 234 Wis. 549, 291 N. W. 804 (1940).

41. The following cases are illustrative of the type of evidence adduced to show that the gun was accidentally discharged. The gun was old, rusty, "tricky" or "easy on the trigger." *Equitable Life Assur. Soc. v. First Nat. Bank*, 40 F. (2d) 817 (C. C. A. 5th, Ala., 1930); *Mutual Life Ins. Co. of N. Y. v. Hatton*, 17 F. (2d) 889 (C. C. A. 8th, Iowa, 1927); *Mutual Life Ins. Co. of N. Y. v. Graves*, 25 F. (2d) 705 (C. C. A. 3d, Pa., 1928); *Lambert v. Metropolitan Life Ins. Co.*, 123 W. Va. 547, 17 S. E. (2d) 628 (1941). It could be (by tests) or had been (from experience) discharged without pulling the trigger. *Scales v. Prudential Ins. Co.*, 109 F. (2d) 119 (C. C. A. 5th, Fla., 1940); *Love v. N. Y. Life Ins. Co.*, 64 F. (2d) 829 (C. C. A. 5th, Miss., 1933); *Lewis v. N. Y. Life Ins. Co.*, 113 Mont. 151, 124 P. (2d) 579 (1942). For admissibility of tests, see Note (1920) 8 A. L. R. 18. It might have caught on a bush or clothes in a closet. *Gamer v. N. Y. Life Ins. Co.*, 76 F. (2d) 543 (C. C. A. 9th, Mont., 1935); *Brown v. Metropolitan Life Ins. Co.*, 233 Iowa 5, 7 N. W. (2d) 21 (1942). Or a beagle pup playing around the deceased might have discharged the shotgun. *Tower v. Equitable Life Assur. Soc.*, 125 W. Va. 563, 26 S. E. (2d) 512 (1943). It might have been discharged while the insured was in an awkward position near a fence. *Fidelity & Cas. Co. of New York v. Driver*, 79 F. (2d) 713 (C. C. A. 5th, Ga., 1935); *Keels v. Mutual Reserve Fund Life Ass'n*, 29 Fed. 198 (C. C. S. C. 1886); *Downing v. Metropolitan Life Ins. Co.*, 314 Ill. A. 222, 41 N. E. (2d) 297 (1941). Or it might have fired when it fell from an automobile glove compartment or while carelessly left on a shelf or seat of a car. *Scott v. Prudential Ins. Co. of America*, 203 Minn. 547, 282 N. W. 467 (1938). Compare *Gilpin v. Aetna Life Ins. Co.*, 234 Mo. A. 566, 132 S. W. (2d) 686 (1939) with *Fox v. Mutual Ben. H. & A. Ass'n*, 61 Ga. A. 835, 7 S. E. (2d) 403 (1940); *Domanowski v. Prudential Ins. Co.*, 116 N. J. L. 247, 182 Atl. 906 (1936).

In favor of the theory of suicide the following facts have been shown: the gun was in good condition. *Wyckoff v. Mutual Life Ins. Co. of N. Y.* 173 Ore. 592, 147 P. (2d) 227 (1944); *Tully v. Prudential Ins. Co.*, 234 Wis. 549, 291 N. W. 804 (1940). It required a heavy pull on the trigger. *Mitchell v. New Eng. Mutual Life Ins. Co.*, 123 F. (2d) 246 (C. C. A. 4th, Va., 1941). It was equipped with a "safety" or well-guarded trigger. *N. Y. Life Ins. Co. v. Dutton*, 70 Ga. A. 783, 29 S. E. (2d) 638 (1944); *Mitchell v. New Eng. Mut. Life Ins. Co.*, 123 F. (2d) 246 (C. C. A. 4th, Va., 1941). *N. Y. Life Ins. Co. v. Sparkman*, 101 F. (2d) 485 (C. C. A. 5th, Fla., 1939); *Davis v. Reliance Life Ins. Co.*, 12 F. (2d) 248 (C. C. A. 5th, Miss., 1926). It could not be (by tests) and had not (from experience) accidentally discharged without pulling the trigger. *Scales v. Prudential Ins. Co. of America*, 109 F. (2d) 119 (C. C. A. 5th, Fla., 1940); *Kansas City Life Ins. Co. v. Bowman*, 102 F. (2d) 510 (C. C. A. 9th, Colo., 1939); *Burkett v. N. Y. Life Ins. Co.*, 56 F. (2d) 105 (C. C. A. 5th, Miss., 1932); *Frankel v. N. Y. Life Ins. Co.*, 51 F. (2d) 933 (C. C. A. 10th, Okla., 1931); *Gordon v. Mutual Life Ins. Co. of N. Y.*, 37 F. Supp. 873 (E. D. La. 1941). The handle must be grasped to release a "safety" or the hammer had to be cocked and the trigger pulled to fire the gun. *Walker v. Prudential Ins. Co.*, 127 F. (2d) 938 (C. C. A. 5th, Fla., 1942); *Travelers Ins. Co. v. Wilkes*, 76 F. (2d) 701 (C. C. A. 5th, Fla., 1935); *N. Y. Life Ins. Co. v. Bradshaw*, 2 F. (2d) 457 (C. C. A. 5th, Ga., 1924); *Davis v. Reliance Life Ins. Co.*, 12 F. (2d) 248 (C. C. A. 5th, Miss., 1926).

jects,⁴² the length of the deceased's arm compared with the length of the gun barrel⁴³ are all clues to the deceased's inclination and ability for self-destruction. Much evidence will be introduced to show whether the deceased was familiar with the gun or knew that it was loaded.⁴⁴

Medical and scientific proof are eminently adapted to determine the relative position of the body of the deceased and the gun when it fired.⁴⁵ A factual inference of suicide may sometimes be drawn from proof that the gun was either within or beyond an arm's length at that time.⁴⁶ Indication of this may be found from an examination of the entrance wound, which must, of course, be distinguished by medical proof from

42. *Reliance Life Ins. Co. v. Burgess*, 112 F. (2d) 234 (C. C. A. 8th, Mo., 1940); *Travelers Ins. Co. v. Wilkes*, 76 F. (2d) 701 (C. C. A. 5th, Fla., 1935); *Cohen v. Travelers Ins. Co.*, 134 F. (2d) 378 (C. C. A. 7th, Ill., 1943); *Mitchell v. New Eng. Mut. Life Ins. Co.*, 123 F. (2d) 246 (C. C. A. 4th, Va., 1941); *Anderson v. N. Y. Life Ins. Co.*, 140 Fla. 198, 191 So. 307 (1939); *Knapczyk v. Metropolitan Life Ins. Co.*, 321 Ill. A. 611, 53 N. E. (2d) 484 (1944); *Wyckoff v. Mutual Life Ins. Co. of N. Y.*, 173 Ore., 592, 147 P. (2d) 227 (1944).

43. *Compare Love v. N. Y. Life Ins. Co.*, 64 F. (2d) 829 (C. C. A. 5th, Miss., 1933), with *Knights Templar & Masons' Life Indemnity Co. v. Crayton*, 209 Ill. 550, 70 N. E. 1066 (1904) (presence or absence of sticks nearby); *Reliance Life Ins. Co. v. Burgess*, 112 F. (2d) 234 (C. C. A. 8th, Mo., 1940); *Mutual Life Ins. Co. of New York v. Bell*, 147 Fla. 734, 3 So. (2d) 487 (1941); *Downing v. Metropolitan Life Ins. Co.*, 314 Ill. A. 222, 41 N. E. (2d) 287 (1941); *Brown v. Metropolitan Life Ins. Co.*, 233 Iowa 5, 7 N. W. (2d) 21 (1942); *Tower v. Equitable Life Assur. Soc.*, 127 W. Va. 563, 26 S. E. (2d) 512 (1943).

44. *Aetna Life Ins. Co. v. Kent*, 73 F. (2d) 685 (C. C. A. 6th, Mich., 1934); *Burkett v. N. Y. Life Ins. Co.*, 56 F. (2d) 105 (C. C. A. 5th, Miss., 1932); *Moss v. Equitable Life Ins. Co. of Iowa*, 71 F. (2d) 795 (C. C. A. 8th, Mo., 1934); *Pacific Mut. Life Ins. Co. v. Fagan*, 292 Ky. 533, 166 S. W. (2d) 1007 (1942); *Lewis v. N. Y. Life Ins. Co.*, 113 Mont. 151, 124 P. (2d) 579 (1942); *McLane v. Reliance Life Ins. Co.*, 192 S. C. 245, 6 S. E. (2d) 13 (1939); *Tully v. Prudential Ins. Co.*, 234 Wis. 549, 291 N. W. 804 (1940). Multiple gunshot wounds indicate either suicide or homicide. *Central States Life Ins. Co. v. McElwee*, 199 Ark. 410, 415, 133 S. W. (2d) 881, 883 (1939), where the insured fired five shots, three of them entering his left chest in a three-inch circle. The court said: "No reasonable mind could conclude that McElwee shot himself accidentally five times, at intervals of a minute or more." And see: *Domanowski v. Prudential Ins. Co. of America*, 116 N. J. L. 247, 182 Atl. 906 (1936); *Cruse v. Union Central Life Ins. Co.*, 59 F. Supp. 504 (E. D. Tex. 1945). In the last case cited the medical testimony was in conflict whether it was physically possible for a man to shoot himself in or near the heart five or six times.

45. The discussion in the text is supported by several recent and reliable authorities. *HATCHER, TEXTBOOK OF FIREARMS INVESTIGATION, IDENTIFICATION AND EVIDENCE* (1935) 200-28; *MORITZ, THE PATHOLOGY OF TRAUMA* (1942) 43-66; *Moritz and Dutra, Scientific Evidence in Cases of Injury by Gunfire* (1944) 37 ARCH. PATH. 340; *SNYDER, HOMICIDE INVESTIGATION* (1944) 55-123; *Vandegrift, Suicide and Homicide by Violence* (1941) 25 M. CLIN. NORTH AMERICA 423; *Walker, Bullet Holes and Chemical Residues in Shooting Cases* (1940) 31 J. CRIM. L. 497. Additional references will be footnoted.

46. *Bryan v. Aetna Life Ins. Co.*, 174 Tenn. 602, 130 S. W. (2d) 85 (1939), s.c. 25 Tenn. A. 496, 160 S. W. (2d) 423 (1941). A self-inflicted wound over or near a vital spot raises a strong suspicion of suicide and the path of the bullet is usually straight through. "The nature of the wound itself bars any reasonable hypothesis of accident." *Mitchell v. New Eng. Mut. Life Ins. Co.*, 123 F. (2d) 246, 248 (C. C. A. 4th, Va., 1941). But such a finding is not controlling or conclusive. *Scott v. Prudential Ins. Co.*, 203 Minn. 547, 282 N. W. 467 (1938).

the exit wound.⁴⁷ The entrance wound is generally, but with some important exceptions, identifiable by its relatively smaller size, the nature of lacerations, the presence of powder marks, and, in the event the weapon was held flush to the body, by the imprint of the muzzle, sight, ejector slide or retractor spring rod of the gun. Definitive investigations may resort to such scientific devices as microchemical and macrochemical tests, radio graphic and spectrographic examinations and infra-red photography in order to identify and evaluate an entrance wound, the powder charge used, metal, hair, fabric, etc. An autopsy to determine the direction of the tract may be useful in determining the relative proximity of the body to the gun when fired.⁴⁸ The tract considered in conjunction with other evidence may also give an indication of the angle of fire.⁴⁹ The range of fire may be demonstrated from a

47. The suicide will often draw his garments aside and place the weapon against his body. *N. Y. Life Ins. Co. v. Sparkman*, 101 F. (2d) 484 (C. C. A. 5th, Fla., 1939); *Mitchell v. New Eng. Mut. Life Ins. Co.*, 123 F. (2d) 246 (C. C. A. 4th, Va., 1941); *Tower v. Equitable Life Assur. Soc.*, 125 W. Va. 563, 26 S. E. (2d) 512 (1943); *N. Y. Life Ins. Co. v. Newport*, 1 Wash. (2d) 511, 96 P. (2d) 449 (1939). Compare: *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942). Clothes or hair may catch on fire or bear evidence of a burn or powder marks, thus locating the entrance wound and indicating a close range of fire. *Proctor v. Preferred Acc. Ins. Co.*, 51 F. (2d) 15 (C. C. A. 6th, Ky., 1931); *Knapczyk v. Metropolitan Life Ins. Co.*, 321 Ill. A. 611, 53 N. E. (2d) 484 (1944). But see *Missouri State Life Ins. Co. v. West*, 67 F. (2d) 468 (C. C. A. 10th, Okla., 1933) and *Tabor v. Mutual Life Ins. Co. of N. Y.*, 13 F. (2d) 765 (C. C. A. 4th, W. Va., 1926).

48. Where the gun is discharged away from the body there is less likelihood of a direction through the body perpendicular to the surface of entrance. *McDaniel v. Metropolitan Life Ins. Co.*, 119 W. Va. 650, 195 S. E. 597 (1938); *Bayles v. Jefferson Standard Life Ins. Co.*, 148 So. 465 (La. A. 1933); *N. Y. Life Ins. Co. v. King*, 28 Ga. A. 607, 112 S. E. 383 (1922); *Voelkel v. Supreme Tent, etc.*, 116 Wis. 202, 92 N. W. 1104 (1903). On the other hand the location of the entrance wound and the course of the bullet may indicate that the deceased could have fired the shot intentionally only with difficulty and uncertain aim. *Cochran v. Mutual Life Ins. Co.*, 79 Fed. 46 (C. C. Ore. 1897). A suicide by holding the gun any considerable distance from the body is said to be an unusual and uncertain way to shoot one's self. *Hunt v. Ancient Order of Pyramids*, 105 Mo. A. 41, 78 S. W. 649 (1904). It would be almost impossible to drop a gun and send a shot straight through the head from temple to temple. *New York Life Ins. Co. v. Watters*, 154 Ark. 569, 243 S. W. 831 (1922). Therefore, the event and position of the body as inferred from the path of the bullet in the body and after leaving the body may indicate suicide. *Travelers' Ins. Co. v. Wilkes*, 76 F. (2d) 701 (C. C. A. 5th, Fla., 1935); *Cohen v. Travelers' Ins. Co.* 134 F. (2d) 378 (C. C. A. 7th, Ill., 1943); *Jefferson Standard Life Ins. Co. v. Clemmer*, 79 F. (2d) 724 (C. C. A. 4th, Va., 1935). A shotgun wound downward in the chest suggests that the deceased was leaning over and on the muzzle with the butt on the ground. *Reliance Life Ins. Co. v. Burgess*, 112 F. (2d) 234 (C. C. A. 8th, Mo., 1940); *Tower v. Equitable Life Assur. Soc.*, 125 W. Va. 563, 26 S. E. (2d) 512 (1943).

49. Angular shots produce linear or ovoid wounds with the near side abraded in proportion to the angle of incidence and heavier deposits of gases and powder residue, best reproduced by infra-red photography. However, a false impression of the angle of fire may be received through a superficial inspection, since gun recoil may deflect the gases discharged and leave eccentric deposits of powder, smoke or metal. Test shots and a tracing of the tract through the body will usually avoid error.

comparison of the pattern of powder residue, metallic deposits, smoke and burning in test shots with the pattern found in and around the entrance wound,⁵⁰ and by an analysis of the burning and deposits around the wound, giving consideration to the type and amount of ammunition used, the type and construction of the gun, and the type and relative proximity of the target.⁵¹

The location of the entrance wound in a spot likely to produce quick, painless death may also be proved by these devices with a view to es-

50. Burning, bruising and abrading of the entrance wound and deposits of gaseous combustion products, metallic particles, powder residues, etc., within and about the entrance wound generally indicate a shot at close range. Although there is much evidence about "powder burns" introduced in almost every case, there is a complete disagreement upon their presence and interpretation. Illustrative cases: *Jefferson Standard Life Ins. Co. v. Clemmer*, 79 F. (2d) 724 (C. C. A. 4th, Va., 1935); *Brotherhood of Maintenance of Way Employees v. Page*, 197 Ark. 498, 123 S. W. (2d) 536 (1939); *Brown v. Metropolitan Life Ins. Co.*, 233 Iowa 5, 7 N. W. (2d) 21 (1942); *Waddell v. Prudential Ins. Co.*, 227 Iowa 604, 288 N. W. 643 (1939); *Gilpin v. Aetna Life Ins. Co.*, 234 Mo. A. 566, 132 S. W. (2d) 686 (1939); *Lewis v. N. Y. Life Ins. Co.*, 113 Mont. 151, 124 P. (2d) 579 (1942); *McMillan v. General Amer. Life Ins. Co.*, 194 S. C. 146, 9 S. E. (2d) 562 (1940). Only occasionally will the opinion reveal clear thinking or scientific consideration by the witnesses. *Pythias Knights' Supreme Lodge v. Beck*, 181 U. S. 49 (1900); *Cohen v. Travelers Ins. Co.*, 134 F. (2d) 378 (C. C. A. 7th, Ill., 1943); *Gorham v. Mutual Ben. H. & A. Ass'n*, 114 F. (2d) 97 (C. C. A. 4th, N. C., 1940); *Aetna Life Ins. Co. v. Tooley*, 16 F. (2d) 243 (C. C. A. 5th, Tex., 1926). See also: *Cranford v. Guaranty Life Ins. Co.* (unreported, Tenn.), 2 C. C. H. Life Cases 418 (1939). In contact shots blood may be found in the barrel or on the muzzle of the gun. *Reliance Life Ins. Co. v. Burgess*, 112 F. (2d) 234 (C. C. A. 8th, Mo., 1940). Moreover, there is likely to be, in such cases, an *absence* of branding or burning of the skin around the wound, the presence of deposits of smoke, metal and unburnt powder within the body and an extensive disruption of the subsurface of the target caused by injection of gases at the time of the shot. *Travelers' Ins. Co. v. Wilkes*, 76 F. (2d) 701 (C. C. A. 5th, Fla., 1935); *Gorham v. Mutual Ben. H. & A. Ass'n*, 114 F. (2d) 97 (C. C. A. 4th, N. C., 1940); *Gordon v. Mutual Life Ins. Co.*, 37 F. Supp. 873 (E. D. La. 1941); *N. Y. Life Ins. Co. v. Newport*, 1 Wash. (2d) 511, 96 P. (2d) 449 (1939) (shotgun wad in the heart). One interesting and repeated result of contact bullet wounds to the skull is a suffusion of blood around and beneath the eyes and, in some cases, in other parts of the skin or scalp. In one case where such marks were not explained to the court and jury it was held that they might indicate an assault preceding homicide, an accident in other words. On a second trial, these discolorations were explained on a scientific basis so that the court reversed the case outright, denying recovery despite the testimony of a gun expert that it was impossible for the deceased to have fired the gun himself and to have left no "powder burns," as disclosed by his tests! *Bryan v. Aetna Life Ins. Co.*, 25 Tenn. A. 496, 160 S. W. (2d) 423 (1941), s.c. 174 Tenn. 602, 130 S. W. (2d) 85 (1939).

51. Yet, many courts, after reviewing conflicting, confused evidence of lay and expert witnesses, probably agree with Judge Fox in *McDaniel v. Metropolitan Life Ins. Co.*, 119 W. Va. 650, 657, 195 S. E. 597, 600 (1938): "The authorities on gunshot wounds do not lay down any inflexible or infallible rule as to the presence of powder burns in any case; whether they appear, and if so, to what extent, depends on the character of the gun used, the kind of powder, the distance from the body, and many other conditions and circumstances" *id.* at 657. See, also, cases collected in Note (1910) 17 AMER. & ENG. ANNO. CAS. 32, 36; and see HERZOG, MEDICAL JURISPRUDENCE (1931) 241.

tablishing at least an inference of suicide.⁵² Thus it has been statistically observed that 62% of all suicidal gunshot wounds have entered the mouth.⁵³ Some courts have held that such a wound is conclusive evidence of suicide, although it is possible, of course, for an accident to cause such a death.⁵⁴

52. Evidence of the location of the wound takes on added significance when it is considered that suicidal wounds of the head in left-handed persons are found in the left side of the head. *N. Y. Life Ins. Co. v. Bradshaw*, 2 F. (2d) 457 (C. C. A. 5th, Ga., 1924); *Mutual Life Ins. Co. of N. Y. v. Hatton*, 17 F. (2d) 889 (C. C. A. 8th, Iowa, 1927); *Frankel v. N. Y. Life Ins. Co.*, 51 F. (2d) 933 (C. C. A. 10th, Okla., 1931). But see *Jovich v. Benefit Ass'n of Ry. Employees*, 221 Iowa 945, 265 N. W. 632 (1936). A wound on the left side of the head in a right-handed person is said to indicate accident or homicide, not suicide. *Aetna Life Ins. Co. v. Milward*, 118 Ky. 716, 82 S. W. 364 (1904). But see *Inghram v. National Union*, 103 Iowa 395, 72 N. W. 559 (1897). In *Edwards v. Business Men's Assur. Co.*, 350 Mo. 666, 168 S. W. (2d) 82 (1942), the deceased shot himself just below the heart. The court, in holding that there was substantial evidence of accident asked, "If the insured intended to commit suicide because of the motives referred to by respondent, why was a wound inflicted that would not produce immediate death?" To which one might reply: "How does the court know that the insured knew the exact location of his heart?" Few laymen realize the high location of the heart and the fact that one-third of it is to the right of the midline.

53. *HATCHER, TEXTBOOK OF FIREARMS INVESTIGATION, IDENTIFICATION AND EVIDENCE* (1935) 209. Hatcher also states that 18 per cent of all suicidal gunshot wounds are in the temple. *SNYDER, op. cit. supra* note 23 at 80, says that the majority of such wounds are found in the right temple, with wounds in the mouth next most common. One coroner testified in a case for the beneficiary, whose husband was found with a pistol wound below his heart, that in three and a half years he had investigated 500 suicides. One-half of these died by gunshot wounds and all of those, except one, were in the head! *Sutcliffe v. Iowa State Trav. Men's Ass'n*, 119 Iowa 220, 93 N. W. 90 (1903). Such "statistical" evidence is not admissible because it does not prove the cause of death in the case on trial. The amazing thing is that while courts will stoutly adhere to this rule excluding statistical evidence, they will continue to manufacture their own evidence by "judicial notice" of the most unbelievable and scientifically untrue things. They will also indulge in presumptions to assist a party without evidence which the burden of proof requires him to produce. The criticism of Judge Felton, dissenting in *N. Y. Life Ins. Co. v. Ittner*, 64 Ga. A. 806, 826, 14 S. E. (2d) 203, 214 (1941) will ultimately be justified by historical, statistical, and other scientific proof. He said: "Upon consideration it will be seen that the presumption against suicide does not owe its existence to facts having evidential value. What most people do or do not do has no bearing whatever on whether one particular individual committed suicide or was killed accidentally. . . . That most people love life too well to destroy it is not a fact about the deceased from which the presumption springs."

54. *Mutual Life Ins. Co. of N. Y. v. Gregg*, 32 F. (2d) 567 (C. C. A. 6th, Ohio, 1929); *Fidelity Mut. Life Ins. Co. v. Wilson*, 175 Ark. 1094, 2 S. W. (2d) 80 (1928); *Aetna Life Ins. Co. v. Alsobrook*, 175 Ark. 523, 299 S. W. 743 (1927); *Hodnett v. Aetna Life Ins. Co.*, 17 Ga. A. 538, 87 S. E. 813 (1916); *DeGorza v. Knickerbocker Life Ins. Co.*, 65 N. Y. 232 (1875). But see *Gamer v. N. Y. Life Ins. Co.*, 76 F. (2d) 543 (C. C. A. 9th, Mont., 1935), *s.c.* 90 F. (2d) 817 (C. C. A. 9th, Mont., 1937), where an abrasion on the lip was, with other slight evidence, sufficient to permit the jury to guess that the rifle accidentally rammed into the deceased's mouth. It was also pointed out that his artificial upper plate would offer no resistance to such an accident.

POISONING

Suicidal poisoning may be accomplished by the inhalation of gases, fumes or vapors or from taking liquid or solid poisons by mouth.⁵⁶

Asphyxiation by carbon monoxide accounts for about 25% of all suicides, and is the method of choice in urban centers.⁵⁶ Proof of death by carbon monoxide will usually stir the insurer to intensify a search for other extrinsic suicide evidence. Investigators should seek to establish not only the particular gas used, but should be especially alert to discover accessories or arrangements employed to increase the concentration.⁵⁷ Negation of suicide and proof of accident, on the other hand, would depend on evidence of the routine nature of the deceased's activities, such as repairing a car,⁵⁸ concomitant with other plausible circumstances of accident.⁵⁹

Death by liquid or solid poison must be initially established by a post-mortem examination more thorough than the usual hospital autopsy. Generally a suicide, not knowing what constitutes a lethal dose, will consume an obviously excessive one. Although death by poison absorbed into the tissues of the body may occur before all of it has been

55. A death from carbon monoxide inhalation may or may not be a death due to "poison" or "poisoning" within the meaning of an exclusion in an insurance policy, since death in such cases usually results from anemic anoxia. Much conflicting medical evidence was received in the case of *Cleaver v. Central States Life Ins. Co.*, 346 Mo. 548, 142 S. W. (2d) 474 (1940), and the court concluded that the question was one for the jury to decide. This decision should not be criticized until an attempt has been made to find a satisfactory definition of "poison" by reference to scientists or jurists. See Notes (1937) 110 A. L. R. 1276, (1941) 131 A. L. R. 1061. When is a drug a "medicine" and when is it a "poison"? Is alcohol a poison? How about the barbiturates which have a lethal dose quantitatively less than numerous well-recognized poisons? See *Aubuchon v. Metropolitan Life Ins. Co.*, 142 F. (2d) 20 (C. C. A. 8th, Mo., 1944) and *Feldmann v. Connecticut Mut. Life Ins. Co.*, 142 F. (2d) 628 (C. C. A. 8th, Mo., 1944).

56. Cullen, *War-time Prosperity Lowers Suicide Rate* (1943) 151 THE SPECTATOR 8; REPORT OF THE MARYLAND POST-MORTEM EXAMINERS COMMISSION, SUMMARY OF DEATHS (1942); ANNUAL REPORT ON VITAL STATISTICS OF MASS. (1942) 212; ANNUAL REPORT OF THE CHIEF MEDICAL EXAMINER OF THE COUNTY OF ESSEX, N. J. (1942); STATISTICAL REPORT OF THE CHIEF MEDICAL EXAMINER OF NEW YORK CITY (1941) 4-5.

57. *Allison v. Bankers Life Co.*, 230 Iowa 995, 299 N. W. 889 (1941); *Connecticut Mut. Life Ins. Co. v. Lanahan*, 113 F. (2d) 935 (C. C. A. 6th, Mich., 1940), amending 112 F. (2d) 375; *N. Y. Life Ins. Co. v. Anderson*, 66 F. (2d) 705 (C. C. A. 8th, Minn., 1933). See *Cockcroft v. Metropolitan Life Ins. Co.*, 133 Pa. Super. 598, 3 A. (2d) 184 (1938).

58. *Metropolitan Life Ins. Co. v. Broyer*, 20 F. (2d) 818 (C. C. A. 9th, Calif., 1927); *International Life Ins. Co. v. Mowbray*, 22 F. (2d) 952 (C. C. A. 7th, Ill., 1927); *Standard Acc. Ins. Co. v. Van Altena*, 67 F. (2d) 836 (C. C. A. 7th, Wis., 1933); see majority and dissenting opinions in *Tschudi v. Metropolitan Life Ins. Co.*, 72 F. (2d) 306 (C. C. A. 8th, Iowa, 1934).

59. The insured, falling due to disease or accident, might accidentally strike a gas cock, open it and then die of gas asphyxiation while unconscious from other causes. *HERZOG, op. cit. supra* note 23 at 229. An analysis of a blood clot (hematoma) in the tissues for carbon monoxide will disclose whether the injury was received before or after the inhalation of the gas. See note 22 *supra*.

emptied from the stomach, yet the most common fallacy to be encountered in the entire field of forensic medicine is the assumption that if a poison is found in the stomach, then the deceased died of that poison. To the contrary, unless the poison was corrosive, the quantity remaining in the stomach could not have caused death. Yet time and again the medical examiner will believe and certify that the cause of death has been established by an analysis of the stomach contents alone, without either a qualitative or quantitative analysis of the body fluids and tissues. Many qualified pathologists are not competent toxicologists, so that in any case of suspected death from poisoning, liberal quantities of all body fluids and tissues should be preserved for toxicological examination.⁶⁰

In addition to the medical factors, records should be preserved of whatever extrinsic evidence of intent and opportunity for suicide by poison can be collected.⁶¹ Particular attention should be given to possibilities of mistaking the poison for something harmless,⁶² and of the deceased's efforts at self-help after he consumed the poison.⁶³

60. For the pathologist unfamiliar with the specimens and amounts to be taken, there are several good standard authorities which may be consulted, and these references may also be read and used with profit by the trial lawyer. Gettler, *The Significance of Some Toxicologic Procedures in the Medicolegal Autopsy* (1943) 13 AM. J. CLIN. PATH. 169; Jetter and McLean, *Biochemical Changes in Body Fluids After Death* (1943) 13 AM. J. CLIN. PATH. 178; Maldeis, *Post Mortem Examination in Cases of Suspected Poisoning* (1943) 13 AM. J. CLIN. PATH. 165; McNALLY, *TOXICOLOGY* (1937); Walker, *Scientific Evidence in Poisoning Cases* (1943) 1 CLINICS 1520; *Report on The Autopsy*, an outline prepared by a Conference Group on Pathology of the National Research Council, JOUR. TECH. METH. AND BULL. OF INTERNAT. ASS'N OF MED. MUS. No. XXIII, 65-70 (1943).

61. Suicide may be indicated by dilution of the poison. *Zearfoss v. Switchmen's Union of North America*, 102 Minn. 56, 112 N. W. 1044 (1907). Or obtaining it under a pretext. *Bock v. New York Life Insurance Co.* (unreported, Tenn. Sup. Ct.) 1 C. C. H. Life Cases 21 (1938). Conflicting evidence invariably revolves around the question of the deceased's occasion to use and swallow the poison. *Modern Woodmen of America v. Watkins*, 132 F. (2d) 352 (C. C. A. 5th, Fla., 1942); *Feldmann v. Connecticut Mut. Life Ins. Co.*, 142 F. (2d) 628 (C. C. A. 8th, Mo., 1944); compare *Supreme Forest Woodmen Circle v. Newsome*, 63 Ga. A. 550, 11 S. E. (2d) 480 (1940) and *Carroll v. Prudential Ins. Co.*, 125 N. J. L. 397, 15 A. (2d) 810 (1940), with *Ingersoll v. Knights of Golden Rule*, 47 Fed. 272 (C. C. S. D. Ga. 1891) and *Gray v. Metropolitan Life Ins. Co.*, 303 Ill. A. 1, 31 N. E. (2d) 85 (1940).

62. The poison may be fairly easy to distinguish from harmless substances by size, shape, color, container, odor and taste. Some poisons should be easily recognized the moment they touch the lips and tongue, and if swallowed an inference of suicide will arise. *Muzenich v. Grand Carnialian Slovenian Cath. Union of the U. S. A.*, 154 Kan. 537, 119 P. (2d) 504 (1941); *Carroll v. Prudential Ins. Co.*, 125 N. J. L. 397, 15 A. (2d) 810 (1940); *Lindblom v. Metropolitan Life Ins. Co.*, 210 App. Div. 177, 205 N. Y. S. 505 (1924); *Raener v. Prudential Ins. Co. of America*, 140 Pa. Super. 124, 13 A. (2d) 118 (1940). Yet the deceased may have been "accidentally" poisoned by idiosyncrasy to a drug. See Note (1944) 152 A. L. R. 1286; *Bauder, Sulfa Drug Poisoning as an Accident* (1944) PROC. INS. LAW SEC. AMER. BAR ASS'N 152. Or he may have taken an "overdose" of "medicine" with lethal or poisonous effect. See Note (1937) 110 A. L. R. 1276, 1278. Or alcohol or some other sub-

MISCELLANEOUS CAUSES

Hanging. This is a common suicide device among males.⁶⁴ Accidental hangings are extremely rare.⁶⁵ On the other hand medical testimony may well reveal that the evidence of hanging is a red herring to conceal a homicide.⁶⁶ If a body is completely suspended, and yet there is no chair or other device nearby for self-suspension, the homicide theory becomes highly plausible.⁶⁷

Blunt impact. Of the thousands of deaths that occur each year as a result of motor vehicle and train collisions, there are comparatively few due to suicide,⁶⁸ for the reasons which commonly determine all choices of method: the result is not certain, and pain and disability may precede death. It is difficult to distinguish between suicide and accident in this class of cases, and the medical witness can be of no assistance except in finding disease which may have caused an accident. However, eyewitnesses may be able sufficiently to show that the death was deliberate,⁶⁹ and other sources of circumstantial evidence mentioned elsewhere may make the finding conclusive.

Fall or jump. The "fall or jump" verdict of coroners' inquests became common in the depression of the early '30's. There is little medical evidence which can be adduced to distinguish between the accidental fall

stance may have created a synergistic or enhanced effect. Dille and Ahlquist, *Synergism of Ethyl Alcohol and Sodium Pentobarbital* (1937) 61 J. PHARM. & EXPER. THER. 385; Jetter and McLean, *Synergistic Effect of Phenobarbital and Ethyl Alcohol* (1943) 36 ARCH. PATH. 112; Walker, *op. cit. supra* note 60 at 1534.

63. Note 37 *supra*.

64. GLAISTER at 218; TAYLOR at 427; both *supra* note 23. Four-fifths of such suicides are males. TAYLOR, *id.* at 427, and see reports in note 56 *supra*.

65. See DRAPER at 288; KERR at 137; GONZALES, VANCE AND HELPERN at 261-2; MORITZ at 164; SMITH at 256; SNYDER at 141; TAYLOR at 422, 428; WEBSTER at 95; all *supra* note 23.

66. MORITZ at 166-7; SMITH at 257; SNYDER at 143; all *supra* note 23.

67. SMITH, *op. cit. supra* note 23 at 256. It may be noted that a person may hang himself in a sitting or even lying position. DRAPER at 288; SMITH at 256; SNYDER at 142; TAYLOR at 430; 2 WITTHAUS & BECKER, 281; all *supra* note 23.

68. In the City of New York in 1941, there were 1059 suicides of which only 23 resulted from a jump in front of an auto or train. In the same year there were 607 pedestrian highway and train deaths due to accident. See note 56 *supra*. Neither juries nor courts are very willing to find suicide in this class of cases, and a successful defense on that theory is rare.

69. *Cohen v. Mutual Life Ins. Co. of New York*, 71 Ga. A. 664, 31 S. E. (2d) 734 (1944). But see *Aetna Life Ins. Co. v. Newbern*, 127 F. (2d) 171 (C. C. A. 8th, Ark., 1942); *International Life Ins. Co. v. Carroll*, 17 F. (2d) 42 (C. C. A. 6th, Tenn., 1927); *Ayedelotte v. Metropolitan Life Ins. Co.*, 124 N. J. L. 266, 11 A. (2d) 122 (1940); *Hrybar v. Metropolitan Life Ins. Co.*, 140 Ohio St. 437, 45 N. E. (2d) 114 (1942); *Dixon v. Metropolitan Life Ins. Co.*, 136 Pa. Super. 573, 7 A. (2d) 549 (1939). In the Carroll case, *supra*, the insured, a federal judge, hopelessly in debt, involved in speculations which wrecked a bank and called upon to resign by the bar association pending grand jury investigation, which resulted in indictments, ran his car off the road and straight into a ditch. The court held that there was substantial evidence of an accident.

and the suicidal jump, beyond showing, perhaps, physical or mental disorders or impairments which could account for the injury.⁷⁰

However, much circumstantial evidence may be marshalled to show whether the deceased knew of the imminence of his danger,⁷¹ and the occasion for his being at the place from which he fell or jumped.⁷² A study of the scene may reveal the deceased's movements before death and the probability or improbability of an accidental fall.⁷³ Measurements and photographs should be made of the place from which the deceased fell and the relative location of all objects there. Measurement of the vertical and horizontal distances of the fall may give an indication of whether he fell or was self-propelled onto his fatal flight.⁷⁴ In so far as this type of suicide often occurs in public view, the presence of eye-witnesses may well obviate the necessity of such careful pursuit of circumstantial evidence as might otherwise be required.⁷⁵

70. A discouraging example of poor reasoning is that of *Smith v. Durham Life Ins. Co.*, 202 S. C. 392, 25 S. E. (2d) 247 (1943). The deceased fell or jumped from the fifth-floor window of a hospital. The back of his head was "bashed in" by the fall. This was part of the evidence from which it was inferred that he fell and did not jump!

71. In *Ryan v. Metropolitan Life Ins. Co.*, 206 Minn. 562, 289 N. W. 557 (1939), where the insured fell from a hospital window, it was shown that he was weak and mentally confused. In other cases it will be shown that the window was close to a bed or to where the deceased walked, etc.

72. The insured may have been looking down at his wife who had just fallen from the window. *Lincoln Petroleum Co. v. New York Life Ins. Co.*, 115 F. (2d) 73 (C. C. A. 7th, Ill., 1940). Or he may have been trying to get a better view of the harbor. *Connecticut General Life Ins. Co. v. Maher*, 70 F. (2d) 441 (C. C. A. 9th, Colo., 1934). Or he may have been just casually sitting in the window waiting to sign over his home, insurance and other property to escape a prosecution for embezzlement. *Oubre v. Mutual Life Ins. Co. of New York*, 21 So. (2d) 191 (La. A. 1945).

73. The condition of the shade, window or screen before and after the fall may show that they were deliberately raised and not accidentally pushed open. *Saecker v. Metropolitan Life Ins. Co.*, 51 Cal. A. (2d) 479, 125 P. (2d) 105 (1942); *Christensen v. New Eng. Mut. Life Ins. Co.*, 71 Ga. A. 393, 31 S. E. (2d) 214 (1944), s.c. 197 Ga. A. 807, 30 S. E. (2d) 471 (1944), s.c. (unreported, Ga. A.) 9 C. C. H. Life Cases 268; *Ryan v. Metropolitan Life Ins. Co.*, 206 Minn. 562, 289 N. W. 557 (1939). Marks on the ledge may show that deceased climbed into the window. *Franklin Life Ins. Co. v. Heitchew*, 146 F. (2d) 71 (C. C. A. 5th, Tex., 1944); *Waldron v. Metropolitan Life Ins. Co.*, 347 Pa. 257, 31 A. (2d) 902 (1943).

74. *Christensen v. New Eng. Mut. Life Ins. Co.*, 71 Ga. A. 393, 31 S. E. (2d) 214 (1944), s.c. 197 Ga. A. 807, 30 S. E. (2d) 471 (1944); s.c. (unreported, Ga. A.), 9 C. C. H. Life Cases 268; *Hill v. New York Life Insurance Co.*, 322 Ill. A. 690, 54 N. E. (2d) 88 (1944), s.c. 307 Ill. A. 381, 30 N. E. (2d) 183 (1940) (see 9 C. C. H. Life Cases 950 for opinion).

75. Even an eyewitness will not be able, in some cases, to make the distinction between accident and suicide. Compare majority and dissenting opinions in *Lincoln Petroleum Co. v. N. Y. Life Ins. Co.*, 115 F. (2d) 73 (C. C. A. 7th, Ill., 1940), and see *Young v. Travelers' Ins. Co.*, 68 F. (2d) 83 (C. C. A. 10th, Okla., 1933); *Equitable Life Assur. Society v. Halliburton*, 67 F. (2d) 854 (C. C. A. 10th, Okla., 1933); *United States Fidelity & Guaranty Co. v. Blum*, 270 Fed. 946 (C. C. A. 9th, Wash., 1921). Another recent case in which a verdict of accidental death was affirmed is *Lennig v. N. Y. Life Ins. Co.*, 130 F. (2d) 580 (C. C. A. 3d, Pa., 1942), s.c. 122 F. (2d) 871 (1941), (unreported D. C. Pa.), 5 C. C. H. Life Cases 746. Cases in which the finding affirmed was one of suicide are: *New Amsterdam Cas. Co. v.*

Drowning. It is usually impossible for the medical witness to determine whether a death by drowning was accidental, suicidal or homicidal in the absence of marks on the body indicating injury before immersion in water.⁷⁶ It is often difficult to be certain that death resulted from drowning, especially where the body is recovered days later and has deteriorated.⁷⁷ The medical examiner may be able to estimate how long the body was in the water, whether death occurred before or after immersion, and whether certain marks or physical changes occurred before or after entry into water.

Medical findings must be considered in the light of other factors such as the deceased's knowledge of the dangers of the waters⁷⁸ and his apparent ability and effort to preserve himself from drowning.⁷⁹ It is important to determine whether the bank was steep, the ledge slippery, the current swift.⁸⁰ Occasionally a suicide by drowning will be carefully planned to seem an accident.⁸¹

Strangulation, Suffocation, Smothering, Choking, and Asphyxia (other than by Hanging, Drowning and Poisoning). It is rare to find either accidental or suicidal deaths by any of these methods.⁸² Most strangu-

Breschini, 64 F. (2d) 887 (C. C. A. 9th, Calif., 1933); *Toups v. Penn. Mutual Life Ins. Co.*, 49 F. Supp. 348 (E. D. La. 1943); *Whigham v. Metropolitan Life Insurance Co.*, 343 Pa. 149, 22 A. (2d) 704 (1941).

76. *DRAPER* at 268-9; *GLAISTER* at 194; *GONZALES, VANCE and HELPERN* at 286; *KERR* at 130; *SMITH* at 274; *TAYLOR* at 414; *WEBSTER* at 101-2; 2 *WITTHAUS and BECKER* at 329; all *supra* note 23.

77. *DRAPER* at 261; *GONZALES* at 282-6; *MORITZ* at 170; *SMITH* at 269; *SNYDER* at 156; *TAYLOR* at 409-10; 2 *WITTHAUS & BECKER* at 326-32; all *supra* note 23.

78. *Eastern Commercial Travelers Acc. Ass'n v. Sanders*, 108 F. (2d) 643 (C. C. A. 1st, Mass., 1940); *Sczurek v. American National Co.*, 309 Ill. A. 260, 32 N. E. (2d) 1013 (1941) (disabled physically); *Bertschinger v. N. Y. Life Ins. Co.*, 166 Ore. 307, 111 P. (2d) 1016 (1941); *Heffron v. Prudential Ins. Co.*, 144 Pa. Super. 307, 19 A. (2d) 556 (1941), s.c. 137 Pa. Super. 69, 8 A. (2d) 491 (1939). Compare *Johns v. Northwestern Mutual Relief Ass'n*, 90 Wis. 332, 63 N. W. 276 (1895), with *Equitable Life Assur. Soc. v. Stinnett*, 13 F. (2d) 820 (C. C. A. 6th, Ky., 1926).

79. See *Hall v. Progressive Life Ins. Co.*, 61 Ga. A. 792, 7 S. E. (2d) 606 (1940).

80. *Eastern Commercial Travelers Acc. Ass'n v. Sanders*, 108 F. (2d) 643 (C. C. A. 1st, Mass., 1940); *Bertschinger v. N. Y. Life Ins. Co.*, 166 Ore. 307, 111 P. (2d) 1016 (1941); *Heffron v. Prudential Ins. Co.*, 144 Pa. Super. 307, 19 A. (2d) 556 (1941); *Headlee v. N. Y. Life Ins. Co.*, 12 N. W. (2d) 313 (S. D. 1943).

81. *Home Life Ins. Co. v. Moon*, 110 F. (2d) 184 (C. C. A. 4th, W. Va., 1940). Compare *Bertschinger v. N. Y. Life Ins. Co.*, 166 Ore. 307, 111 P. (2d) 1016 (1941), where a naturopathic physician guilty of one illegal abortion and on parole told his lawyer he would jump in the river before he would go through another case in court like that. Eight days later he killed a girl by the same method and was told it would be a coroner's case. Two days later he was drowned. A verdict for plaintiff was affirmed. Clearer thinking is found in *Koycheff v. Mutual Ben. H. & A. Ass'n*, 305 Mich. 660, 9 N. W. (2d) 883 (1943), and *Equitable Life Assur. Soc. v. Irelan*, 123 F. (2d) 462 (C. C. A. 9th, Mont., 1941), both being cases of drowning.

82. In New York City in 1941, out of a total of 5,555 violent deaths investigated, there were only 63 deaths from asphyxiation other than hanging, drowning or poisoning. STATIS-

lations are homicidal. Attendant circumstances, other than those furnished by the medical jurist, will be of greatest importance.⁸³ Infancy, alcoholism, drugs, imbecility, epilepsy, and various other diseases are factors in accidental deaths within this group.⁸⁴ Cases of the accidental lodgment of food or other articles in the throat, trachea, or lungs, causing death by obstructive asphyxia, are reported from time to time.⁸⁵ Strangulation by one's own hands or by ligature using a tourniquet device is possible, although medical experts may be found with a contrary opinion.⁸⁶ There are a few cases reporting death by the voluntary blockage of the air passages with all manner of missiles, with self-destructive intent, but such persons are usually mentally defective. Electrocutation may cause death by respiratory failure or ventricular fibrillation. Several suicides by this method have been reported, but accidents are much more common.⁸⁷

Cutting. It is not uncommon that a person will die of accidentally inflicted incised wounds of the neck or wrists, but in virtually all of such cases the surrounding circumstances will clearly point to the cause of the wounds.⁸⁸ The difficulty does not lie in reaching a choice between accident and suicide, but rather in determining whether the wound was suicidal or homicidal.

Suicidal wounds⁸⁹ are usually found on the neck above the thyroid cartilage on the left side in right-handed persons and on the right side

TICAL REPORT OF THE CHIEF MEDICAL EXAMINER OF NEW YORK CITY (1941) 14; SMITH, at 261; DRAPER at 306; GONZALES, VANCE and HELPERN at 276; TAYLOR at 440; 2 WITTHAUS and BECKER at 241; all *supra* note 23.

83. TAYLOR, *op. cit. supra* note 23 at 445, comments that "without circumstantial evidence the best medical opinion in these cases [of strangulation] will often amount to nothing."

84. GONZALES, VANCE and HELPERN at 274; MORITZ at 162; SMITH at 263; all *supra* note 23.

85. 21 of the 63 deaths resulting from obstructive asphyxiation in New York City in 1941 were from this means. Note 82, *supra*.

86. KERR, *op. cit. supra* note 23 at 138 states that "suicide by this means is out of the question." But see GONZALES, VANCE and HELPERN at 272; SMITH at 260; TAYLOR at 440; 2 WITTHAUS and BECKER at 241; all *supra* note 23.

87. GONZALES, VANCE and HELPERN at 296; SMITH at 241; SNYDER at 227; all *supra* note 23. An excellent illustration of the uncertainty of the evidence introduced in all cases where the problem of accident or suicide is involved is *American Nat. Bk. v. Continental Casualty Co.*, 70 F. (2d) 97 (C. C. A. 6th, Tenn., 1934) (issue of suicidal hanging or accidental electrocution by cord of heating pad).

88. DRAPER at 380; GLAISTER at 359; GONZALES, VANCE and HELPERN at 210; KERR at 94-6, 103-4; MORITZ at 38; SMITH at 124, 128-9; SNYDER at 123; TAYLOR at 267-9; WEBSTER at 151; 2 WITTHAUS and BECKER at 80; all *supra* note 23.

89. DRAPER at 380; GONZALES, VANCE and HELPERN at 211-2; KERR at 103-4; MORITZ at 38; SMITH at 128-9; SNYDER at 127; TAYLOR at 268; 2 WITTHAUS and BECKER at 78; all *supra* note 23. For a case in which "hesitation" cuts of the wrist were explained on the basis of accident, see *Kirschbaum v. Metropolitan Life Ins. Co.*, 133 N. J. L. 5, 42 A. (2d) 257 (1945).

in left-handed persons. They may be either deep or superficial, regular or irregular, but are usually deep, ragged and slanting diagonally with the deepest cut at the beginning of the stroke. Multiple strokes of the instrument may be found in one wound. Most characteristic of all are several superficial cuts at the beginning of the wound, the so-called "hesitation" marks of the suicide.

*Stabbing.*⁹⁰ Where a stab wound is made with a knife or other hand-wielded weapon in a suicide, it is usually found in or near the region over the heart, although it may rarely appear elsewhere, and is directed from right to left in a right-handed person and from above downward. Several stab wounds in a circumscribed area indicate suicide rather than homicide, and almost completely exclude accident. Since the *felo-de-se* may stab himself more than once through a single opening and since multiple stabbings indicate suicide, the examiner should carefully determine the course and number of all wounds inside the body. Rarely a butcher or cook may run a knife into the abdomen by accident while drawing it toward himself. Falls and other accidents may cause an impaling of the body on some object, or flying splinters or glass may cause fatal stab wounds. In such cases, and in homicide, the pattern, which is multiple and general, and the direction will usually show that there was no suicide. Surrounding circumstances are important.⁹¹

*Burning.*⁹² Suicide by this method is rare, and death by burning is almost always accidental. It may be used for homicide or for concealment of either homicide or suicide by other methods. Disease may be a direct or indirect cause of the fire and thus possibly affect a recovery for accidental death benefits, but the same rule applies to almost all other apparently violent deaths and is beyond the scope of this article. A careful consideration of all of the attendant circumstances together with such general inquiries suggested elsewhere will usually disclose whether the death was accidental or suicidal. Of chief importance will be a search for any marks of violence which may have indicated accident, suicide or homicide preceding the death by burning.⁹³

SUMMARY AND CONCLUSIONS

I. The problem of determining whether a death was accidental or suicidal frequently arises and is of great importance in coroners' investi-

90. DRAPER at 380; GONZALES, VANCE and HELPERN at 207; SMITH at 129; SNYDER at 126; 2 WITTHAUS and BECKER at 73, 75; all *supra*, note 23.

91. See *Missouri State Life Ins. Co. v. Pater*, 15 F. (2d) 737 (C. C. A. 7th, Ind., 1926) where the insured pretended that he was going to stab himself—and did.

92. GLAISTER at 257; GONZALES, VANCE and HELPERN at 292; KERR at 109; SMITH at 236-8; SNYDER at 170; TAYLOR at 394; WEBSTER at 116; all *supra*, note 23.

93. See *Brooks v. Metropolitan Life Ins. Co.*, 27 Cal. (2d) 305, 163 P. (2d) 689 (1945), s.c. 159 P. (2d) 424 (Cal. A. 1945) where it appeared that the insured, suffering with rectal cancer, may have poured inflammable rubbing alcohol over his body in bed and then set fire to himself.

gations, insurance claims, and workmen's compensation proceedings.

2. In cases arising in insurance law and under workmen's compensation statutes, procedural rules relating to the burden of proof, presumptions, and the admissibility and sufficiency of evidence substantially affect the final result and in many cases seem as important as real evidence. Strange and unjust decisions of juries and courts have been due to several misconceptions which should no longer be followed: (1) the continued recognition of the presumption against suicide without any effort to reexamine it from a scientific viewpoint to determine its present-day validity; (2) the application of this presumption in cases where it is obvious that the deceased did not love life or fear death enough to deter him from suicide; (3) the application of this presumption to various types of violent deaths which are statistically proven to be more commonly suicidal than accidental; (4) the adherence to obfuscated rules of evidence and the treatment of the presumption against suicide either as evidence or as a rule of law upon which the court may instruct the jury, or as a "fact of life" which the jury may consider along with other evidence in finding that a death was accidental; (5) the failure to distinguish between suits on life policies where the burden of proving suicide is on the defendant, and suits for accidental death benefits where the burden of proving accident is on the plaintiff and where no burden of proving suicide is on the insurer; (6) the departure of courts from rules of law universally applied in all other cases, notably those rules requiring the production of substantial evidence sufficient to remove an issue from the realm of mere guess and speculation.⁹⁴

3. Other factors contributing to unjust results where the accident-or-suicide problem arises are: (1) lack of proper medical, police, and other investigation at the scene and time of the injury; (2) failure to pursue all available avenues of investigation indicated at the time; (3) failure to obtain and preserve the evidence in a form in which it may be used without contradiction later on; (4) the free employment of unqualified "experts" to testify as witnesses; (5) incompetence of jurors to decide scientific controversies; (6) prejudice against insurance companies and employers and in favor of injured persons and widows.

4. Proof that a death was accidental or suicidal may be made by resort to either direct or circumstantial evidence, and in general this evidence may be described as External or Internal. External Evidence is directed to the physical facts and circumstances surrounding the death from which one may conclude whether the injury was self-

94. In *Gorham v. Mutual Ben. H. & A. Ass'n*, 114 F. (2d) 97, 100 (C. C. A. 4th, N. C., 1940), the court said: "A suicide case should be tried like any other case, and metaphysical reasoning about presumptions and burden of proof should not be permitted to obscure the real issue, as has been done in so many cases."

inflicted. Internal Evidence is designed to prove whether this self-inflicted injury was intentional, and may be drawn from facts and events preceding, attending or following the injury.

5. Specific problems related to various kinds of violent deaths have been examined. Except in the case of gunshot wounds, the medical witness will seldom be able to express an opinion, from an examination of the body alone, whether death was accidental or suicidal. In this one class of cases, the medical witness with a fundamental knowledge of firearms and reasonably accurate information concerning the weapon and cartridge used, can furnish invaluable evidence of the relative position of the deceased to the gun at the time it was fired.