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Admissibility of Evidence: A Chemical Test for Intoxication-Accuracy and General Scientific Acceptance

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vessel was not sufficient to satisfy all of the recorded liens. But if the result were accomplished, would not the state court be providing an *in rem* remedy by another name, and hence, in fact be encroaching on the federal admiralty jurisdiction by "tenuous formalities"?

The second criticism is that the decision seems to violate the spirit of the original grant of admiralty jurisdiction; both by refusing to lay down a national partition rule, and by allowing the states concurrent jurisdiction. Diversity of decision is almost certain to appear, the very danger the grant was to avoid. As Mr. Justice Frankfurter says:

> "It is significant that the need for a body of maritime law, applicable throughout the nation and not left to the diversity of the several States, was the one basis for the creation of a system of inferior federal courts, authorized by the Constitution, which was recognized by every shade of opinion at the Philadelphia Convention."[22]

Much earlier the same thought was voiced:

> "It certainly could not have been the intention to place the rules and limits of maritime law under the disposal and regulation of the several states, as that would have defeated the uniformity and consistency at which the Constitution aimed on all subjects of a commercial character affecting the intercourse of the states with each other or with foreign states."[23]

This premise has often been reiterated in the Supreme Court decisions.[24] The Madruga case does not contradict the premise, but it does threaten it. The extent of harmful diversity lies in the future, as does a corrective decision, if one is needed, by the Supreme Court.

Herbert G. Hawkins

ADMISSIBILITY OF EVIDENCE: A CHEMICAL TEST FOR INTOXICATION-ACCURACY AND GENERAL SCIENTIFIC ACCEPTANCE.

In a recent New York case[1] it was held, in upholding a conviction for driving while under the influence of alcohol, that the Drunkometer was a scientifically reliable and accurate device for determining the alcoholic content of the defendant's blood. The defendant was arrested by police officers of New York City They carried him to the precinct station where he was given the chemical test by a graduate chemist employed by the police department.

The Drunkometer is a mechanical device whereby blood alcohol content is determined through the analysis of breath blown into a rubber balloon which has a tube leading to chemicals and a meter. The result showed the defendant to have a blood alcohol reading of 0.19 per cent, which, the New York Vehicle and Traffic Law[2] makes prima facie evidence of intoxication. The defendant objected to the

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[22] See note 10 *supra.*

[23] The Lottawanna, 88 U.S. 654 (1875).

[24] Southern Pacific Co. v. Jensen, 244 U.S. 205 (1917); Knickerbocker Ice Co. v. Stewart, 253 U.S. 149 (1920); Chelentis v. Luckenbach S. S., 247 U.S. 377 (1918).

[1] People v. Kovacik, 205 Misc. 275, 128 N.Y.S.2d 492 (1954).

[2] NEW YORK VEHICLE AND TRAFFIC LAW, § 70, Sub. 5. This section provides that a blood alcohol content of 0.05 or lower is prima facie evidence of sobriety, that a blood alcohol content of over 0.05 and less than 0.15 is relevant evidence only, that a blood alcohol content of 0.15 or more is prima facie evidence of intoxication.

introduction of the results by the prosecution through the testimony of the chemist who administered the test. The defendant also objected to testimony by Dr. R. N. Harger, inventor of the Drunkometer, who, as an expert witness, testified to the accuracy of the device. The objection was overruled by the trial judge. The defendant offered no expert witnesses in his own behalf. On appeal, the court based its opinion on the fact that the Drunkometer had been accepted in the courts of other states,[3] and quoted from *Toms v. State*,[4] an Oklahoma case which upheld the admission of the drunkometer test as evidence.

> "This court is of the opinion, that we should favor the adoption of scientific methods for crime detection, where the demonstrated accuracy and reliability has become established and recognized. Justice is truth in action, and any instrumentality, which aids in ascertainment of truth, should be embraced without delay. But this decision is not ours to make. We have no legislative powers or duties, but the legislature within its legislative powers and constitutional limitations may do so, possibly on the theory that it is within its police powers to regulate the highways for the protection of the public. We believe, in the light of the foregoing, chemical tests by experts of body fluids as blood, urine, breath, spinal fluid, saliva, etc., under varying conditions have been approved as having gained that scientific recognition of infallibility as to be admissible in evidence."

In the *Toms* case, the expert witness for the prosecution was a physician, who was considered an expert on the subject of intoxication simply by reason of being a physician.[5] He testified that the instrument was accurate, and that it was indorsed by the American Medical Association, the Commissioner of National Safety, and the Federal Bureau of Investigation. The court ruled that the physician's testimony was sufficient to support the admission of the drunkometer evidence. The objection, the court further stated, that there is scientific disagreement as to its accuracy goes only to the weight of the evidence and not to its admissibility Proper instructions to the jury are that such evidence is not conclusive, but that it shall only be accorded such weight as the jury sees fit.[6]

On the other hand, Michigan[7] has refused to allow Drunkometer results in evidence. The Michigan Supreme Court reversed a conviction of negligent homicide, stating that there is "no testimony in the record" establishing that the medical profession generally accepts the Drunkometer as accurate. That court used the rule as applied to the lie detector. The reasons for the inadmissibility of lie detector evidence are two-fold: (1) The lie detector has not that general recognition of scientific accuracy by experts in the field to warrant judicial acceptance of its results.[8] (2) By reason of this disagreement between the men learned in the field, a trial of the lie detector and its underlying theories would result, rather than a trial of the real issues before the court.[9]

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[3] State v. Berg, 76 Ariz. 96, 259 P.2d 261 (1953), State v. Warren, 75 Ariz. 123, 252 P.2d 781 (1953), People v. Bobczyk, 343 Ill.App. 504, 99 N.E.2d 567 (1951), Willennar v. State, 228 Ind. 248, 91 N.E.2d 178 (1950), People on the Complaint of Mehan v. Spears, 201 Misc. 666, 114 N.Y.S. 869 (1952), Toms v. State, ...Okla. Cr. R. ....., 239 P.2d 812 (1952), Lombness v. State, ...Okl. Cr. R....., 243 P.2d 389 (1952), McKay v State, 155 Tex. Cr. 416, 235 S.W.2d 173 (1951), Guenther v. State, 153 Tex. Cr. 519, 221 S.W.2d 780 (1949), Omohundro v. County of Arlington, 194 Va. 773, 75 S.E.2d 496 (1953).

[4] See note 3 *supra*.

[5] 3 WIGMORE, EVIDENCE, § 687, 23 C.J.S., Criminal Law, § 866.

[6] Toms v. State, *supra* note 3.

[7] People v. Morse, 325 Mich. 270, 38 N.W.2d 322 (1949).

[8] Frye v. United States, 54 App.D.C. 46, 293 Fed. 1013 (1923), People v. Forte, 279 N.Y. 204, 18 N.E.2d 31 (1938), State v. Bohner, 210 Wis. 651, 246 N.W 314 (1933).

[9] State v. Bohner, *supra* note 8.

Testifying for the prosecution in the Michigan case were two policemen trained in chemistry and a physician. They gave complex explanations of the underlying theory in conjunction with the method of operation of the drunkometer. It was also testified to by the witnesses, that in *their* opinion, the drunkometer gave accurate results. There is no mention in the opnion as given by the Michigan Supreme Court that any of the prosecution witnesses expressed any views in regard to the general scientific recognition of the Drunkometer. On the other hand, five doctors for the defense testified that the Drunkometer is inaccurate. One of the doctors also stated that most of the medical profession do not accept the instrument as accurate, which was supported by an article appearing in a medical journal.[10] Therefore, it would seem that the Michigan case is distinguishable on the grounds that there was an insufficient foundation laid by the prosecution for the introduction of experimental evidence.[11]

It is a general rule that the admssibility in evidence of the results of experiments or tests is a matter peculiarly within the discretion of the trial judge.[12] Normally the trial judge's ruling will not be disturbed unless it is apparent that this discretion has been abused.[13] In *People v. Morse,* the Michigan case discussed above, it would seem that the trial judge had "abused" this discretion, because there was no basis upon which the experimental evidence was admissible. The appellate court held this to be reversible error. Similarly, the evidence was not admissible on the ground that the trial court could take judicial notice of the results of the Drunkometer as being generally accepted in the medical profession.[14]

Illinois[15] is another jurisdiction where the results of the Drunkometer have been admissible. The Appellate Court of Illinois held that an objection of lack of unanimity in the medical profession as to the test's accuracy went to the weight of the evidence, where the state properly introduced the experts and established they were eminently qualified in the field. The court reasoned that:

> "Medical science recognizes sixty pathological conditions which produce symptoms similar to those produced by alcohol, yet the law permits non-expert lay witnesses to testify to objective symptoms commonly associated with alcoholic intoxication on the theory that sobriety or intoxication are matters of common knowledge."[16]

The view that scientific disagreement should not prevent the admissibility of experimental evidence is upheld in *McKay v. State*[17] where the court, speaking regarding the Drunkometer said:

> "This court may recognize generally accepted scientific conclusions, even though there should be some who disagree with them. In all probability a scientist may be found who will disagree with practically every generally accepted scientific theory. We take judicial knowledge of the scientific fact that the earth is round. At the same time we know there are still individuals who claim to be scientists who have other theories, even to the extent of holding that instead of living on the outer surface of the globe, we live within a globe, and that there are within it sun, moon, stars, and all heavenly

[10] Haggard *et al, The Alcohol of the Lung Air as an Index of Alcohol in the Blood,* 26 J. OF LAB. AND CLIN. MED. 1527.

[11] Frye v. United States, *supra* note 8; 20 AM. JUR., Evidence, § 755.

[12] Wynes v. State, 182 Ga. 434, 185 S.E. 711 (1936); Spires v. State, 70 Fla. 121, 39 So. 181 (1905); 9 WIGMORE, EVIDENCE, § 2550; 20 AM. JUR., Evidence, § 755.

[13] See note 12 *supra.*

[14] 22 C.J.S., Criminal Law, § 538; 20 AM. JUR., Evidence, § 98.

[15] People v. Bobcyzk, *supra* note 3.

[16] People v. Bobcyzk, *supra* note 3.

[17] McKay v. State, *supra* note 3.

> bodies which we observe. We would have no trouble in disagreeing with such theory, but it does not destroy the fact that there are others who have a different view. The opinion of such others by no means bars the evidence of a scientific truth before a jury, nor would it preclude the courts from taking judicial knowledge of the truth of it."[18]

Other cases have not allowed convictions obtained with the help of Drunkometer evidence. But none of the reversals resulted from the existence of scientific debate as to the accuracy of the machine. In *State v. Hunter*,[19] a new trial was granted because it was discovered after conviction that a torsion balance scale was used instead of the more sensitive analytical balance scale. *Hill v. State*[20] was reversed because of the lack of a qualified expert witness to substantiate the introduction of the test evidence. The witness who testified did not have a sufficient technical background to understand the theory of the machine. As a result, he could not translate the instrument readings into per cent of blood alcohol. Instead, he had to translate by way of a chart which came with the Drunkometer. The court held this to be hearsay, and concluded that a proper foundation for the admission of such evidence was lacking. By way of *dicta*, the court held there were three requisites for the admissibility of the results of the Drunkometer into evidence: (1) proof that the chemicals used were compounded to the proper percentage; (2) proof that the operator and the machine were under the periodic supervision of one who has an understanding of the scientific theory; (3) proof by a witness who was qualified to calculate and translate the reading of the instrument scale into percentage of alcohol in the blood.

It was wisely observed in *Frye v. United States*[21] that:

> "Just when a scientific principle of discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in the twilight zone the evidential force of the principle must be recognized, and while courts will go a long way

It was wisely observed in *Frye v. United States*[21] that:

> in admitting expert testimony deduced from a well-recognized scientific principle of discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs."

Since 1952, the Drunkometer has been approved by the American Medical Association, the Commissioner of National Safety, the Federal Bureau of Investigation, and twelve states by statute.[22] It is submitted, then, that the Drunkometer has crossed "the line between the experimental and demonstrable" stage as propounded in *Frye v. United States, supra*. Therefore, objections by the defendant to the admissibility of the Drunkometer in evidence because of a lack of general scientific acceptance should not be sustained. But the defendant could object to the admissibility where that particular Drunkometer in issue at trial was inaccurate from some malfunction, or where there was a lack of qualified personnel administering the test, or where there was no proper foundation laid for the testimony of the expert witness interpreting and translating the results of the test.

Thus *People v. Kovacik*,[23] was correctly decided by the court. It upheld the admissibility of the results of the Drunkometer under the New York Vehicle and

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[18] McKay v. State, *supra* note 3.
[19] 4 N.J. Super. 531, 68 A.2d 274 (1949).
[20] ..... Tex. Cr. ....., 256 S.W.2d 93 (1953).
[21] See note 8 *supra*.
[22] Toms v. State, *supra* note 3.
[23] See note 1 *supra*.