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# Evidence -- Use of Chemical Tests to Determine Intoxication -- Self-incrimination

John R. Montgomery Jr.

**Evidence—Use of Chemical Tests to Determine Intoxication—Self-incrimination**

The need for chemical analyses of body substances to determine intoxication in drunken driving[1] cases is well recognized.[2] Body substances which may be used for such analyses include blood,[3] urine,[4]

decided since this note was written, recovery was allowed for mental anguish suffered as a result of desecration of plaintiff's wife's grave by defendant's removal of the floral designs therefrom the day after the burial. In noting that "the tenderest feeling of the human heart centers around the remains of the dead," the court said: "In recognition of this reality, we hold that compensatory damages may be awarded a plaintiff for mental suffering actually endured by him as the natural and probable consequence of a trespass to his burial lot. . . ." It would seem that the right to recovery should rest upon the reality of mental anguish actually endured, even had the burial lot been a "potters field," and not solely upon the technicality of a trespass to the plaintiff's land.

[1] Terms describing the degree to which a person must be affected by alcohol in order to render unlawful his act of operating a motor vehicle vary among the states and are variously interpreted by the courts. No effort will be made in this note to distinguish between "intoxicated," "under the influence," and other terms. The term "drunken driving," is inclusive and for purposes of this note indicates that degree of intoxication under which one operates a motor vehicle unlawfully. For a discussion of various terms and groupings by states, see Newman, *Proof of Alcoholic Intoxication,* 34 KY. L. J. 250, 250-252 (1946).

[2] The customary method of determining intoxication is by noting: (1) ability to stand and walk, (2) speech, (3) odor of breath, (4) color of face, (5) steadiness of hands, (6) condition of eyes, and (7) "unusual" acts deviating from normal conduct. Harger points out the inadequacy of these methods in *Some Practical Aspects of Chemical Tests for Intoxication,* 35 CRIM. L. & CRIMINOLOGY 202, 203 (1944). "Every public prosecutor knows the difficulty in trying this kind of case [drunken driving]. The defense interposed always has some plausible excuse, either that the accused had liquor on his breath but had not imbibed excessively, or that the stupor and other objective manifestations of drunkenness were produced by shock, by the injury which the accused himself may have suffered, or from some other cause than intoxication. In some instances it is undoubtedly true that these are the causes and that an innocent person because of his conduct and appearance is facing prosecution. To determine the truth or falsity of the defense and the correctness of the charges against the accused, chemical fluid tests can accurately solve the issue in many cases. . . . When the alcoholic content in body fluid is sufficiently high, this scientific test is unquestionably the most reliable method of determining intoxication. When properly used in the trial it should be most effective in bringing out just results." Ladd and Gibson, *Legal-Medical Aspects of Blood Test to Determine Intoxication,* 29 VA. L. REV. 749 (1943). See also, Ladd and Gibson, *The Medico-Legal Aspects of the Blood Test to Determine Intoxication,* 24 IOWA L. REV. 191 (1939).

"A chemical examination of body fluids or tissues definitely demonstrates whether or not alcohol is present and in what concentration. The replacement of guesswork and superficial opinions, and even personal prejudices, by positive scientific evidence seems very desirable, not only to strengthen the enforcement of the law against the drinking driver, but also to protect the innocent who may be charged with a criminal offense because of some pre-existing pathological condition." Kozelka, *Scientific Tests for Alcohol Intoxication,* 24 WIS. L. BULL. (No. 4) 19 (1951). See Note, 4 WYO. L. J. 103 (1949); Leonard, *Tests for Intoxication,* 38 J. CRIM. L. & CRIMINOLOGY 533 (1948).

[3] When alcohol is absorbed it is transported to all parts of the body, where it is stored in proportion to the water content of each body material. The concentration in the body material remains the same as the alcohol content decreases. Harger, Lamb, and Hulpieu, *A Rapid Chemical Test for Intoxication Employing the Breath,* 110 J. AM. MED. ASS'N 779 (1938). The alcoholic content of the brain is the ultimate information desired. Since the brain and the blood have about the same water content, the amount of alcohol in the blood is approximately the same

spinal fluid,[5] saliva[6] and breath.[7] Utilization of the breath analysis is facilitated by practical advantages,[8] and a number of recent cases[9] indicate that the popularity of this test is increasing.

The device commonly used to test breath for alcoholic content is known as the Harger Drunkometer.[10] Its operation is relatively simple. A sample of breath is obtained by having the subject inflate a small balloon. The sample is released into the Drunkometer apparatus, where it is forced through a solution that reacts to the presence of alcohol by a change in color.[11] By weighing the carbon dioxide content of the

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as the amount in the brain. Aside from an analysis of the alcohol content of the brain itself, obviously impractical in the case of a living person, an analysis of the blood is considered to be the most accurate index of intoxication. "It appears that the blood alcohol concentration furnishes the most reliable chemical criterion of intoxication." Muehlberger, *Comments on Medicolegal Aspects of Chemical Test of Alcoholic Intoxication by Dr. I. M. Rabinowitch,* 39 J. CRIM. L. & CRIMINOLOGY 411, 415 (1948).

[4] The alcoholic content of the urine is determined by urinalysis. This figure is converted to a figure for the alcoholic content of the blood by a prescribed ratio. There is, however, some dispute as to the accuracy of the ratio. For a discussion of this dispute with citations to various medical writers see Note, 2 SYRACUSE L. REV. 94 (1950).

[5] Spinal fluid tests are said to provide a highly accurate index to the degree of intoxication. Harger, Lamb and Hulpieu, *A Rapid Chemical Test for Intoxication. Employing the Breath,* 110 J. AM. MED. ASS'N 779 [1938]. But these tests are delicately performed and therefore impractical in cases of arrests for drunken driving.

[6] Tests using saliva are apparently rare. For discussions as to the practicability and accuracy of the saliva test, see Letourneau, *Chemical Tests in Alcoholic Intoxication,* 28 CAN. B. REV. 858, 868 (1950) and Rabinowitch, *Medicolegal Aspects of Chemical Tests of Alcoholic Intoxication,* 39 J. CRIM. L. & CRIMINOLOGY 225, 244 (1948).

[7] The amount of alcohol present in the breath of the subject is determined. This figure is converted by a certain ratio to show the alcoholic content of the blood. It is important to remember that the urine, saliva, and breath test results are transposed in order to determine the alcoholic content of the blood, which is significant of the alcoholic content of the brain. Thus the result of all these tests are more remote from the ultimate information desired than the result of a blood test.

[8] Some advantages accruing to simplicity of the breath analysis are: (1) breath in probably the easiest of the test materials to obtain. (2) the test may be completed in a short period of time, (3) the accused person is more likely to acquiesce to a breath test than to a blood test and (4) a sample of breath may be obtained immediately upon arrest.

[9] People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951); Willenar v. State, 228 Ind. 248, 91 N. E. 2d 178 (1950); People v. Morse, 325 Mich. 270, 38 N. W. 2d 322 (1950); State v. Hunter, 4 N. J. Super. 531, 68 A. 2d 274 (1949); McKay v. State, 235 S. W. 2d 173 (Tex. Crim. App. 1951); Guenther v. State, 153 Tex. Crim. Rep. 519, 221 S. W. 2d 780 (1950).

[10] Invented by Dr. D. N. Harger in 1938. Other breath tests are used such as the "Intoximeter" of Jetter and the "Alcoholometer" of Greenberg and Keator but these are not as well known as the Harger apparatus. See Letourneau, *Chemical Tests in Alcoholic Intoxication,* 28 CAN. B. REV. 858 (1950). All of these tests are basically the same in principle.

[11] This solution is composed of potassium permanganate in the presence of sulphuric acid. Harger, Lamb, and Hulpieu, *A Rapid Chemical Test for Intoxication Employing the Breath,* 110 J. AM. MED. ASS'N 779 (1938), say that alcohol causes a striking change in the color of the solution. This has a psychic effect on the subject and may enable the securing of truthful statements from him where he at first denied drinking.

breath required to discolor the solution, the amount of alcohol in the breath may be computed.[12] This figure is then transposed to indicate the alcoholic content of the blood.[13]

Where law enforcement agencies utilize chemical tests such as the Drunkometer, and attempt to introduce the results in evidence, questions of admissibility are usually raised. A recent Illinois case[14] is illustrative of the type of problems that may appear when the interpretive results of the Drunkometer test are offered as evidence. Defendant was charged with drunken driving. At trial, testimony for the state tended to show that after defendant's arrest, he voluntarily submitted to the Harger Drunkometer breath test. Over objection, the operator of the Drunkometer testified that the alcoholic content of defendant's blood was .30 per cent, and that in his opinion this indicated that the defendant was under the influence of alcohol at the time of his arrest.[15] Defendant was

[12] The volume of breath required to effect the color change is passed through a tube containing a carbon dioxide absorbent. This tube is weighed before and after the test, the difference in weight corresponding to the weight of carbon dioxide in the breath that caused the solution to change color. This process is based on the observation that aveolar air (the last portion of a deep expiration) contains approximately 5.5 per cent carbon dioxide. Thus the weight of the carbon dioxide as determined above, is 5.5 per cent of the weight of the breath required to effect the change of color. From this the weight of alcohol in one cubic centimeter of breath may be computed. For a full explanation and description, see Harger, Lamb, and Hulpieu, *A Rapid Chemical Test for Intoxication Employing the Breath,* 110 J. AM. MED. ASS'N 779 [1938].

[13] The weight of alcohol in one cubic centimeter of blood is approximately 2000 times the weight of alcohol in one cubic centimeter of breath. Harger, Lamb, and Hulpieu, *supra* note 12.

[14] People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951).

[15] "Settled medical opinion apparently is that any person is unfit to drive when his blood alcohol concentration is at or in excess of fifteen-hundredths of one per cent. When the concentration is less than this, a person may or may not be unfit to drive depending upon individual characteristics and reaction to alcohol." State v. Hunter, 4 N. J. Super. 531, 533, 68 A. 2d 274, 275 (1949).

The Committee on Tests for Intoxication of the National Safety Council recommended the following guide to significant alcohol levels:

(1) If the blood contains .05% alcoholic content, it is presumed that the subject was not under the influence of liquor.

(2) If the blood contains more than .05% but less than .15% alcoholic content there is no presumption that the subject was or was not under the influence of liquor.

(3) If the blood contains .15% or more alcoholic content it is prima facie evidence that subject was under the influence of liquor. See C. W. Muehlberger, *Medicolegal Aspects of Chemical Tests of Alcoholic Intoxication,* 39 J. CRIM. L. & CRIMINOLOGY 411 (1948).

These standards are generally allowed in evidence in most state courts. Some states have statutes that establish a similar criteria. *E.g.* "Upon the trial of any action or proceeding arising out of acts alleged to have been committed by any person arrested for operating a motor vehicle . . . while in an intoxicated condition, the court may admit evidence of the amount of alcohol in the defendant's blood. . . . For the purposes of this section (a) . . . five hundredths of one per centum, or less . . . alcohol . . . prima facie evidence that the defendant was not in an intoxicated condition; (b) . . . more than five hundredths of one per centum and less than fifteen-hundredths of one per centum . . . alcohol . . . relevant evidence, but . . . not to be given prima facie effect in indicating . . . intoxicated condition; (c) . . . fifteen-hundredths of one per centum, or more . . . alcohol . . . prima facie evidence . . . defendant was in an intoxicated condition." N. Y. VEHICLE AND TRAFFIC LAWS §70(5)

found guilty as charged. On appeal, the Appellate Court of Illinois held that there was no error in permitting the introduction of testimony showing the results of the Drunkometer test. In answer to the objection that there is lack of unanimity in the medical profession as to whether intoxication can be determined by an analysis of the breath, the Court held this to go only to the credibility of the testimony.[16] Defendant's objection was based on a Michigan decision,[17] rendered a year earlier, in which the admission of the results of the test over such an objection was held to be reversible error.[18] Both cases were actually decided on the same objection: The Drunkometer has not been accorded general scientific recognition as an accurate index of the alcoholic content of the blood. Authorities are in conflict on the point,[19] as are the cases.[20] However, the principal case appears to represent the prevailing view.[21]

The introduction of the results of chemical tests frequently encounters objections based upon constitutional issues: Unreasonable search and seizure[22] and violation of the privilege against self-incrimination.[23]

[16] People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951).

[17] People v. Morse, 325 Mich. 270, 38 N. W. 2d 322 (1950).

[18] In People v. Morse, 325 Mich. 270, 38 N. W. 2d 322 (1950), two officers, one of whom had studied for a month with Dr. Harger, the inventor of the Drunkometer, and in turn instructed the other, testified that the test provided an accurate index of the alcoholic content of the blood. A doctor also testified to this effect, and the article by Harger, Lamb, and Hulpieu, *A Rapid Chemical Test for Intoxication Employing the Breath,* 110 J. AM. MED. ASS'N 779 [1938], was noticed by the court. But five doctors testified contra, one doctor testifying that " what is going on in this test is that you have got a continuous series of errors, some for and some against, so that the thing works like a slot machine." People v. Morse, *supra* at 272, 38 N. W. 2d at 323. In holding the evidence inadmissible, the court noted that, while the five doctors testified that most of the medical profession do not regard the Drunkometer as a reliable indicator of intoxication, there was no testimony in the record that there is general scientific recognition or acceptance of the test by medical profession. It is interesting to note that the court relied on several lie detector cases in reaching their decision.

In People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951), Dr. Harger himself testified that the test is reliable. His testimony and several articles claiming the test to be accurate apparently convinced the court, so that they rejected People v. Morse, *supra,* and followed McKay v. State, 235 S. W. 2d 173 (Tex. Crim. App. 1951) which had held the test evidence admissable over the accuracy objection.

[19] See Letourneau, *Chemical Tests in Alcoholic Intoxication,* 28 CAN. B. REV. 858 (1950), for a discussion of this conflict with citations to various medical authorities in which the accuracy and reliability of the breath test is examined.

[20] See cases cited note 9 *supra.*

[21] Of the cases cited in note 9 *supra,* only three have passed on the reliability and general scientific recognition of the Drunkometer test. People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951); People v. Morse, 325 Mich. 270, 38 N. W. 2d 322 (1950); McKay v. State, 235 S. W. 2d 173 (Tex. Crim. App. 1951). Apparently, People v. Morse, *supra,* is the only case holding the test evidence inadmissible on this ground.

[22] "The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures, shall not be violated . . ." U. S. CONST. AMEND. IV. Most state constitutions have similar provisions.

[23] "No person . . . shall be compelled in any criminal case to be a witness against himself . . ." U. S. CONST. AMEND. V. Iowa and New Jersey have a statu-

Both of these issues were raised in the instant case,[24] but were disposed of on a procedural point.[25] The issue of unreasonable search and seizure has been raised in several other "chemical test" cases, but it has met with little success.[26] However, a recent Supreme Court case[27] indicates a possible extension of the due process requirement of the Federal Constitution to situations where the right against unreasonable search and seizure is violated. The case concerned forcible "stomach pumping" and conceivably could be held applicable to cases involving compulsory chemical tests to determine intoxication.[28]

While the issue of self-incrimination is frequently raised as an objection to the admissibility of the results of the tests, there appears to be but one *Drunkometer* case[29] where this issue was effectively before the reviewing court. There, the court found that the self-incrimination privilege had been waived. However, the issue has often been raised in cases where results of blood tests[30] and urinalyses[31] were sought to be

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tory privilege against self-incrimination. All other states have adopted the privilege by constitution. For example: "In all criminal prosecutions every person charged with crime has the right . . . not [to] be compelled to give self incriminating evidence . . ." N. C. CONST. ART. I §11.

[24] People v. Bobczyk, 343 Ill. App. 504, 99 N. E. 2d 567 (1951).

[25] In Illinois, by statute, all constitutional questions must be taken directly to the Supreme Court. If a case involving a constitutional question is taken to the Appellate Court, and the case also involves a nonconstitutional error, over which that court has jurisdiction, the right to bring the constitutional question to the Supreme Court is waived. People v. Terrill, 362 Ill. 61, 199 N. E. 97 (1935)

[26] Novak v. Dist. of Columbia, 49 A. 2d 88 (D. C. Munic. App. 1947). Apparently a valid arrest would suffice in most cases to make untenable any objection on the ground of unreasonable search and seizure. Also, in states that do not follow the federal exclusionary rule, evidence of the results of the tests might be admitted, even though illegally seized.

For an excellent discussion of the effect of unreasonable search and seizure on the use of chemical tests for intoxication, see INBAU, SELF-INCRIMINATION (1st Ed. 1950) at pp. 79-80.

[27] Rochin v. People of California, 72 S. Ct. 205 (1952). (As officers seized defendant, he swallowed two morphine capsules. He was taken to a doctor and by "stomach pumping" the two capsules were disgorged from his body).

[28] See the concurring opinion by Mr. Justice Douglas, Rochin v. People of California, 72 S. Ct. 205 (1952). "I think that words taken from his [defendant's] lips, capsules taken from his stomach, *blood taken from his veins* (italics added) are all inadmissible provided they are taken from him without his consent. They are inadmissible because of the command of the Fifth Amendment," 72 S. Ct. at 213.

[29] Spitler v. State, 221 Ind. 107, 46 N. E. 2d 591 (1943). This is apparently the first case in which Drunkometer evidence reached a court of last resort. Defendant raised the issue of self-incrimination, but the court found that he had consented to the test and thereby waived the constitutional privilege. No valid objection here to admissibility on the basis of the test results being unreliable, as they were admissible by statutory provision. ". . . [the] court may admit evidence of the amount of alcohol in the defendant's blood . . . as shown by a chemical analysis of his breath, urine or other bodily substance . . ." IND. ANN. STAT. §47-2003 (2) (1940). See also the N. Y. Statute cited note 18 *supra*.

[30] *E.g.;* People v. Tucker, 88 Cal. App. 2d 333, 198 P. 2d 941 (1948); State v. Ayres, 70 Idaho 18, 211 P. 2d 142 (1950); State v. Koenig, 240 Iowa 592, 36 N. W. 2d 765 (1949); State v. Sturtevant, 96 N. H. 99, 70 A. 2d 909 (1950); Brown v. State, 240 S. W. 2d 310 (Tex. Crim. App. 1952).

[31] *E.g.;* Ridgell v. United States, 54 A. 2d 679 (D. C. Munic. App. 1948); Novak

introduced in evidence. These tests are similar[32] to breath analyses in their impact on the question of self-incrimination and therefore the cases in which they are involved should indicate the outcome of Drunkometer cases where the question is effectively raised. Square holdings,[33] as well as *dicta*[34] in some of the blood test and urinalysis cases indicate that the privilege against self-incrimination does not extend to compulsory chemical tests. Most legal scholars agree.[35]

Most cases dispose of the issue of self-incrimination by finding consent to the tests on the part of the accused amounting to a waiver of the privilege.[36] For instance, where the accused submits to a test after being told that he has a constitutional right to refuse and that he would not be required to take it, consent is found.[37] Where he submits after being warned that the results of the test may be used against him, the test is deemed non-compulsory.[38] Even where such a warning is not given, a finding of consent is not precluded.[39] If accused submits to the test because he "thinks it is the law," he has consented.[40] Encourage-

v. Dist. of Columbia, 49 A. 2d 88 (D. C. Munic. App. 1947); Bovey v. State, 197 Misc. 302, 93 N. Y. S. 2d 560 (Ct. Cl. 1949); City of Columbus v. Van Meter, 89 N. E. 2d 703 (Ohio Ct. App. 1950); City of Columbus v. Thompson, 89 N. E. 2d 604 (Ohio Ct. App. 1950). See cases cited in Note 164 A. L. R. 967 (1946) for decisions on both blood tests and urinalyses prior to 1946.

[32] Some distinction might be made in the case of blood tests. Note that they involve an *invasion of the body*, while urinalyses and breath tests involve only the taking of waste material. Nevertheless, the courts apparently make no distinction between blood, urine and breath tests.

[33] Cases holding compulsory tests not violative of privilege against self-incrimination are People v. Tucker, 88 Cal. App. 2d 333, 198 P. 2d 941 (1948). (Specimen of blood taken from defendant without his knowledge and while he was suffering from cerebral concussion); State v. Ayres, 70 Idaho 18, 211 P. 2d 142 (1950). (Blood test. Here, the results of the test were favorable to defendant, though they indicated he had been drinking); State v. Sturtevant, 91 N. H. 99, 70 A. 2d 909 (1950). (Blood test. The court assumed that defendant was incapable of consent); State v. Nutt, 78 Ohio App. 336, 65 N. E. 2d 675 (1946). (Comment on refusal to submit urine for test permitted); State v. Gatton, 60 Ohio App. 192, 20 N. E. 2d 265 (1938).

Apparently the one case holding directly that compulsory chemical tests are violative of the privilege is Apodaca v. State, 140 Tex. Crim. Rep. 593, 146 S. W. 2d 381 (1940). (Urinalysis. After breaking a "coke" bottle in which he had voided, defendant was compelled to void in a milk bottle.)

[34] "The whole history of the privilege against self-incrimination shows that it was designed to protect against testimonial compulsion" (Interpreting the Federal provision). Ridgell v. United States, 54 A. 2d 679, 683 (D. C. Munic. App. 1948).

"It is the rule in this jurisdiction that physical facts discovered by witnesses on information furnished by the defendant may be given in evidence, even where knowledge of such facts is obtained in a privileged manner, by force, by intimidation, duress, etc." State v. Cash, 219 N. C. 818, 821, 15 S. E. 2d 277, 278 (1941). See State v. Duguid, 50 Ariz. 276, 72 P. 2d 435 (1937).

[35] 8 WIGMORE, EVIDENCE §2265 (3d ed. 1940), and see authorities, *supra* note 2.

[36] The constitutional privilege may be waived, and where the accused submits voluntarily to the test, he has waived his privilege against self-incrimination. Willenar v. State, 228 Ind. 248, 91 N. E. 2d 178 (1950).

[37] Spitler v. State, 221 Ind. 107, 46 N. E. 2d 591 (1943). (Breath test).

[38] Ridgell v. United States, 54 A. 2d 679 (D. C. Munic. App. 1948). (Urinalysis).

[39] City of Columbus v. Van Meter, 89 N. E. 2d 703 (Ohio Ct. App. 1950).

[40] State v. Werling, 234 Iowa 1109, 13 N. W. 2d 318 (1944). (Blood test).

ment is permissible, as where the subject is informed that if the specimen is "right," it will be to his benefit,[41] or where a doctor tells accused that he intends to swear that accused is intoxicated, and that "the odds are against him" unless he submits to the test.[42] Most cases take a negative approach to the determination of whether or not the accused person consented.[43] Thus, where there is no evidence of duress,[44] compulsion,[45] or entrapment,[46] a voluntary submission is usually found. The same follows where accused *makes no objection.*[47] One court has even intimated that the taking of a specimen *from an unconscious person* might be deemed non-compulsory.[48] A writer aptly submits that, ". . . a deliberate effort seems to have been made . . . to attach a very broad meaning to the word 'voluntary' and thereby obviate a determination of the basic issue [self-incrimination] itself."[49]

Where the court relies on consent to dispose of the question of self-incrimination,[50] a problem might arise because of the nature of the evidence. Suppose that X is arrested for drunken driving, and apparently consents to the Drunkometer test. At trial Dr. Y testifies, over objection, that the results of the test show that the alcoholic content of X's blood at the time of the test was .40 per cent, and this in his opinion indicates intoxication. It could be contended that there was error in admitting the evidence on the theory that such a degree of intoxication would render X incapable of consent. The higher the degree of intoxication shown by the results of the test, the greater the proof of the subject's incapacity to consent. Thus it would seem that such evidence in certain cases would tend to exclude itself. Even under the broad concept of consent, *i.e.* failure to object, this would apparently be true, on the theory that the results of the test indicate lack of ability to object on the part of the defendant. Of course, the distinction between the degree of intoxication required to support a conviction for drunken driving and that required to vitiate consent is recognized,[51] so only where the results

[41] Novak v. Dist. of Columbia, 49 A. 2d 88 (D. C. Munic. App. 1947). (Urinalysis).

[42] State v. Small, 233 Iowa 1280, 11 N. W. 2d 377 (1943). (Blood test).

[43] This approach may be justified by the wording in most provisions that a person may not be *compelled* to testify against himself. See constitutional provisions cited *supra* note 26.

[44] State v. Werling, 234 Iowa 1109, 13 N. W. 2d 318 (1944); (Blood test). State v. Small, 233 Iowa 1280, 11 N. W. 2d 377 (1943). (Blood test).

[45] State v. Cash, 219 N. C. 818, 11 S. E. 2d 277 (1941). (Blood test and urinalysis).

[46] State v. Morkrid, 286 N. W. 412 (Iowa 1939). (Blood test and urinalysis).

[47] State v. Koenig, 240 Iowa 592, 36 N. W. 2d 765 (1949). (Blood test).

[48] State v. Cram, 176 Ore. 577, 160 P. 2d 283 (1945).

[49] INBAU, SELF-INCRIMINATION (1st ed. 1950) at pp. 73-74.

[50] That is, Courts that consider or will consider the compulsory taking of a specimen of blood, urine, breath, etc. to be a violation of the privilege against self-incrimination.

[51] Halloway v. State, 146 Tex. Crim. Rep. 353, 175 S. W. 2d 258 (1943). (Urinalysis).

of the test show a fairly high degree of intoxication would the above theory be applicable.[52]

From a practical standpoint, the individual defendant who attempts to have the results of chemical tests excluded on the theory described above is in an unenviable position. It would be essential in most cases to obtain a favorable ruling in the trial court. A preliminary hearing on admissibility is imperative as the nature of the objection to the evidence is such that the presence of a jury would be disastrous.[53] Suppose, in the hypothetical case, a motion for a preliminary hearing is made and granted, and X introduces testimony tending to show that the results of the Drunkometer test indicate a degree of intoxication that would render him incapable of voluntary submission. Several possibilities are presented. If the trial judge finds as a fact that the results of the test show that X was incapable of consent, and he thereby excludes the evidence, the theory has accomplished its purpose.[54] The trial judge may find that the results of the test indicate that X was capable of consent, and on the basis of this finding, admit the evidence. Chances are that a reviewing court would find no error on appeal, if the finding of fact were supported by evidence. However, if the trial judge finds that the results of the test indicate incapacity, but he admits the evidence, his action would undoubtedly be held erroneous. But in most cases there is evidence other than that furnished by the results of the Drunkometer[55] and if that evidence is sufficient to justify a conviction, the admission of the Drunkometer evidence would probably not be considered prejudicial and a reversal by the reviewing court could not be expected. Conceivably, if the only evidence of intoxication is that furnished by the results of the test, a finding of incapacity by the trial judge coupled with admission of the evidence would be reversible error.[56]

Thus, the objection outlined above might be ineffective in all but a few cases. Nevertheless, it is an objection that must eventually be decided by courts that rely on consent in order to hold the results of chemical tests admissible. In 1945, it was predicted that courts taking such

[52] *Cf.* Testimony of Dr. Taylor in State v. Creech, 229 N. C. 662, 51 S. E. 2d 348 (1948), to the effect that blood alcohol ratio of .25 to .30 per cent would render one incapable of forming a premeditated intent to kill and know the consequences of it.

[53] For an example of a preliminary hearing on admissibility granted to decide the incapacity objection, see State v. Sturtevant, 96 N. H. 99, 70 A. 2d 909 (1950).

[54] In some cases, however, the state might appeal. For example, see N. C. GEN. STAT. §15-179 (1943), as amended §15-179 (1951 Supp.)

[55] See, *e.g.*, City of Columbus v. Van Meter, 89 N. E. 2d 703 (Ohio Ct. App. 1950).

[56] This could hardly occur. Perhaps where the accused were unconscious, there would be a lack of evidence based on the customary observational methods, but in such a case, the accused could not consent anyway, not because the test results show incapacity, but because he was unconscious. State v. Cram, 176 Or. 577, 160 P. 2d 283 (1945) *semble.*

a position were destined to face difficulties.[57] Appearance in the cases[58] of the type of technical argument as that described indicates the accuracy of that prediction. The trend will undoubtedly continue. As the advantages of accurate chemical tests are apparent,[59] admissibility of their results in evidence should not depend on voluntary submission to the test by the accused. Where admissibility is dependent upon consent, statutory provision for "consent" as a condition to the use of the public highway should be considered.[60]

JOHN R. MONTGOMERY, JR.

**Mortgages—Action for Dower in the Equity of Redemption**

In a case of first impression the North Carolina Supreme Court has held that a wife's dower in the equity of redemption of real property, which had been mortgaged by her husband prior to coverture, was not barred in spite of the fact that the husband and wife had surrendered possession to the mortgagee eighteen years prior to the date of the action and the mortgagee had been in continuous possession since that time.[1]

[57] "Moreover, if the test is voluntary, and consent is necessary, how and to whom must this permission be given? Who will determine this, the judge or jury? Can an intoxicated person consent? Although as yet the queries have not been raised in any case, there is no doubt that as the tests become used more widely, the issue of 'consent' will appear as a valuable defense mechanism. Therefore, if chemical tests for alcoholic intoxication are to be employed to maximum advantage, their use should not be dependent upon the arrested driver's consent." Comment, 40 ILL. L. REV. 245, 249 (1945).

[58] State v. Sturtevant, 96 N. H. 99, 70 A. 2d 909 (1950) (Here, consent was held unnecessary so that no determination was made as to whether the test results could be excluded on the incapacity to consent because of intoxication theory. However, the court seemed to recognize that such a contention might be successful). Halloway v. State, 146 Tex. Crim. Rep. 353, 175 S. W. 2d 258 (1943) (Court held that defendant's own testimony to the effect that he was not intoxicated caused the rejection of his contention that he was incapable of consenting to the taking of a specimen of his urine). Guenther v. State, 153 Tex. Crim. App. 519, 721 S. W. 2d 780 (1949). (Defendant had raised the theory of incapacity to consent, but waived the objection, and consequently, it was not before the court). "While the test . . . shows a drunken condition which might have been sufficient to relieve appellant from any waiver of his rights to object to the evidence giving the result of the test, yet it will be seen that no such objection has come to this Court." Guenther v. State, *supra* at p. 520, 221 S. W. 2d at p. 781. Note that the Texas court requires voluntary submission by the accused in order to render results of chemical tests admissable. Apodaca v. State, 140 Tex. Crim. Rep. 593, 146 S. W. 2d 381 (1940).

[59] See note 2, *supra*.

[60] Apparently there is dispute as to whether the use of the public highway is a privilege or a right. *See* Johnston, *The Administrative Hearing for the Suspension of a Driver's License*, 30 N. C. L. REV. 27 (1951) at pp. 27-35. Statutory provision for compulsory chemical tests would be valid in either event. As a condition to the exercise of the privilege in the former, and as a reasonable exercise of police power in the latter. For a penetrating analysis of the validity of such statutory enactments, see Comment, 40 ILL. L. REV. 245 (1945).

[1] Gay v. Exum, 234 N. C. 378, 67 S. E. 2d 290 (1951).