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ANTE-MORTEM CONJECTURES AND POST-MORTEM FINDINGS.

THAT ancient humorism of the physician who was asked what ailed his patient and rather absently replied, "We don't know yet, but we expect to find out at the autopsy," is rather forcibly recalled by an instructive paper read by Dr. Richard C. Cabot at the last meeting of the American Medical Association, on "Diagnostic Pitfalls Identified During a Study of Three Thousand Autopsies."*

In his paper Dr. Cabot not only gives the ratio of diagnostic hits to misses, as determined by the three thousand subsequent autopsies, but discourses upon the causes of failure in a manner that should be highly interesting to the medical practitioner, but would probably be as unedifying to the average pharmacist reader of this journal as it is to the editor.

While Dr. Cabot frankly admits that in numerous instances the mistake in diagnosis was due to overlooking visible evidences of the disease, and therefore justly chargeable to incompetence or carelessness on the part of the physician, yet it seems clear that in the majority of cases the failures can be attributed only to imperfection of method—which is only another name for imperfection of diagnostic science—and not to lack of capacity or care on the part of the diagnostician.

He says: "As one looks at the accompanying chart of diagnoses one naturally asks: Whose success or failure does this represent? Where Smith and Jones have failed, could you and I have done better? I doubt it. The study of the details in these cases before and after death convinces me that, for the present and under the present limitations of diagnostic method, few of the mistakes tabu-

*Journ. A. M. A., December 28, 1912, 2295.

lated above could have been avoided. The table represents the success-and-failure ratio of certain methods rather than of certain men. Admitting that the man behind the gun (or the method) makes a vast difference, I do not believe that these figures depend to any considerable degree on the possession or lack of special virtuosity in diagnosis. They mirror the methods of an average up-to-date American hospital."

The chart of diagnoses referred to is as follows:

PERCENTAGES OF DIAGNOSTIC SUCCESS.

TABLE SHOWING GRAPHICALLY THE PERCENTAGE OF CORRECT DIAGNOSES IN VARIOUS DISEASES.

DIABETES MELLITUS, 95%
TYPHOID, 92%
AORTIC REGURGITATION, 84%
CANCER OF COLON, 74%
LOBAR PNEUMONIA, 74%
CHRONIC GLOMERULONEPHRITIS, 74%
CEREBRAL TUMOR, 72.8%
TUBERCULOUS MENINGITIS, 72%
GASTRIC CANCER, 72%
MITRAL STENOSIS, 69%
BRAIN HEMORRHAGE, 67%
SEPTIC MENINGITIS, 64%
AORTIC STENOSIS, 61%
PHTHISIS, ACTIVE, 59%
MILIARY TUBERCULOSIS, 52%
CHRONIC INTERSTITIAL NEPHRITIS, 50%
THORACIC ANEURYSM, 50%
HEPATIC CIRRHOSIS, 39%
ACUTE ENDOCARDITIS, 39%
PEPTIC ULCER, 36%
SUPPURATIVE NEPHRITIS, 35%
RENAL TUBERCULOSIS, 33.3%
BRONCHOPNEUMONIA, 33%
VERTEBRAL TUBERCULOSIS, 23%
CHRONIC MYOCARDITIS, 22%
HEPATIC ABSCESS, 20%
ACUTE PERICARDITIS, 20%
ACUTE NEPHRITIS, 16%

For obvious reasons, the diagnoses of diabetes mellitus and typhoid are nearly always correct, but from this point onward the percentage of successful guesses slumps rapidly, until only one guess in two is correct in interstitial nephritis and

thoracic aneurysm, while in acute nephritis only a pitiful sixteen in a hundred cases were correctly identified before death.

Truly there seems to be an atom of truth in the witty definition of a physician as one who puts drugs about which he knows little into bodies about which he knows still less.

In addition to the cases tabulated, the author gives some further very interesting information, as for example:

In Pott's disease only four out of seventeen cases were recognized in life; of eighty cases of cirrhosis of the liver, forty-nine were not recognized; in hepatic abscess, eighty percent of the diagnoses were mistaken; in cancer of the colon over twenty-five percent of the cases were not recognized, and in cancer of the esophagus twenty-five percent of the diagnoses were failures. In thirty-nine cases of diabetes the autopsies showed "nine cases of active tuberculosis, and not one of them was recognized in life. In one other case, tuberculosis was diagnosed, but pneumonia (not tuberculosis) was found."

Concerning acute uremia he says: "I have never found a correct diagnosis of acute uremia, yet the diagnosis is a frequent one," from which we infer that of the asserted cases none has been found to be true to label when the final analysis (i. e., autopsy) was made.

It would be vastly comforting if the facts would permit us to go on and show how much better the pharmacist succeeds in his special line of compounding and dispensing, but a mental review of his shortcomings in other directions suggests that it would be well not to invite invidious comparisons.

J. H. BEAL.



PROPOSED FEDERAL ANTINARCOTIC LEGISLATION.

THE average citizen is rarely inclined—small wonder perhaps—to study carefully and analytically the language, (or verbiage?) of proposed legislative enactments, especially when they relate to complex and technical subjects like pharmacy and medicine. Usually he is content to take his opinions at second hand, and approves or disapproves such measures accordingly as they are praised or condemned by his favorite newspaper or professional journal.

Possibly it is this general indifference to laws in the process of making that explains why so many acts apparently adopted in obedience to popular demand are so unpopular after they have been placed upon the statute books, and it is possibly for the same reason also that courts and executives are so frequently assailed when laws do not work out in the way their sponsors thought they would.

Probably no legislation since the Food and Drugs Act of 1906 has such importance for all branches of the drug trade, or is so deserving of dispassionate study and critical analysis as the so-called Harrison Bill, now in Congress, relating to the traffic in opium and cocoa leaves, their derivatives and preparations.

This bill has been before Congress in several forms, but is now known as H. R. 28277, though it is possible that it may have some other form and title by the time this reaches the reader.

In form the bill is a revenue measure, though admittedly its real purpose is to

give a certain degree of Federal control over the traffic in the above named drugs within the limits of the several states, and is not expected to produce more revenue than will fairly cover the cost of its administration.

The purpose of making it a revenue measure is, of course, clear, viz., to make it applicable within state limits, since without the revenue feature it could operate only in interstate commerce, and could not regulate traffic in the articles after they had crossed state lines and their original packages had been broken up.

The bill does not propose to control or regulate the distribution of these habit-forming drugs to the actual consumers, this function belonging exclusively to the province of the states themselves.

It follows, therefore, that the deterrent effect of the law will arise out of the fact that it will confine the distribution of these drugs within well defined, and presumably legitimate, commercial channels, and that it provides a method for tracing them in all of their forms from the time they reach the ports of entry until they reach the hand of the last distributor, the retailer. As a consequence the retailer will no longer be able to obtain these drugs surreptitiously. His registration with the Internal Revenue Collector as a licensed dealer, his order on file with the jobber or manufacturer, and the reports which he must make will furnish indisputable evidence of the quantity of these drugs which pass through his hands.

Here the operation of the Federal law very properly ceases; the state law must provide for and control the distribution to the ultimate consumer.

The main provisions of the bill are in brief as follows:

(1) It applies to opium and cocoa leaves, their salts, (i. e., salts of their alkaloids) derivatives and preparations.

(2) Those who manufacture or deal in these drugs are defined, and are classified as importers, exporters, wholesale manufacturers or manufacturing pharmacists, wholesale dealers, and retail dealers.

(3) Each member of the above classes must register annually with the Collector of Internal Revenue in his district, and pay an annual tax, which is set at \$1.00 for the retailer and \$25.00 for each of the other classes.

(4) None of these, except the retailer, may dispense any of the drugs named except to other dealers registered with the Collector of Internal Revenue.

(5) It levies a tax of five cents per pound on opium, and one quarter of a cent per pound on cocoa leaves, to be paid by affixing and cancelling stamps of appropriate denominations, under such rules and regulations as the Commissioner of Internal Revenue may prescribe.

(6) It provides for the use of duplicate order blanks obtained from the Collector of Internal Revenue, upon which all orders for the named drugs must be made out, and no dealer may sell or ship on any order not written on such blanks, except sales by the retailer direct to the consumer.

(7) One of these duplicates is to be retained by the purchasing dealer and the other by the seller for a period of two years, thus automatically furnishing a

complete record of every transaction, and such records shall be open to inspection by the duly authorized Federal or State authorities.

(8) Each of the registered dealers is required to keep such books and render such returns of his purchase of such drugs as the Commissioner of Internal Revenue shall from time to time determine.

(9) Every applicant for registration under the act must file with his application a sworn report of the quantity of the named drugs and their preparations on hand at the time of his application, and to the containers of these must be affixed and cancelled the appropriate amount in stamps.

(10) The provisions of the act do not apply to the manufacture, sale, etc., of preparations that do not contain more than two grains of opium, $\frac{1}{4}$ grain of morphine, $\frac{1}{2}$ grain of heroin, or 1 grain of codeine, or their salts or derivatives, in one fluid or avoirdupois ounce, nor to liniments, ointments or other preparations for external use only, provided they are not dispensed for the purpose of evading the provisions of the act.

(11) The provisions of the section relating to interstate commerce do not apply to the delivery of prescriptions of duly registered physicians, dentists, and veterinarians, when compounded by persons registered under the act.

(12) Possession of the named drugs, their preparations, etc., shall be deemed as sufficient evidence of violation of the act unless the defendant shall explain such possession to the satisfaction of the jury.

(13) Collectors of Internal Revenue are required to furnish to state or municipal officers, on request, lists of the registered dealers in their respective districts, and certified copies of the records in their offices, upon payment of a fee of \$1.00 for each 100 names or 100 words.

(14) The penalty provided for violation of any of the provisions of the act is a fine of not more than \$2000.00 or imprisonment for not more than five years, or both, at the discretion of the court.

(15) Existing revenue laws, and the provisions of the Food and Drugs Act, and of the act prohibiting the importation and use of opium for other than medicinal purposes, so far as applicable, are to apply to the provisions and enforcement of this act.

The foregoing are the main provisions affecting the rights and liabilities of manufacturers and dealers, the remaining portions relating principally to the machinery and detail of administration.

All portions of the drug trade, or at least all portions entitled to consideration, are agreed that some Federal legislation is necessary to aid in controlling the traffic in habit-forming drugs, and the objections they have offered to the several Harrison Bills were addressed to details rather than to their substance, i. e., to the methods proposed for carrying the substantive provisions of the law into effect. Some of these provisions were so complex and burdensome that they would have compelled druggists to abandon the sale of preparations containing opium and cocoa or their derivatives in even the smallest amount—preparations which from their nature could not be used either to create a habit or to satisfy it where it already existed.

The principal modifications of the Harrison Bill secured by the National Drug Trade Conference held in Washington, Jan. 15-17, the proceedings of which are printed elsewhere in this issue, are as follows:

Reducing the wholesale license fee from \$100.00 to \$25.00, and the retail license fee from \$5.00 to \$1.00.

Modifying the definition of wholesalers so that the retail pharmacist can make the ordinary galenical preparations of opium, such as laudanum and paregoric, without being required to take out a wholesaler's license.

Changing the phraseology in certain particulars so as not to interfere with the supplying of the drugs to physicians, dentists and veterinarians for legitimate use, and so as not to interfere with the reasonable liberty of these in their administration of such drugs.

Substituting the use of an official order blank furnished by the Collector of Internal Revenue for the burdensome requirement of stamping all derivatives or preparations of opium and cocoa, and for the elaborate records and returns which the original bill required. No dealer can obtain supplies of the named drugs, except when the orders are written upon these official order blanks, while the preservation of their respective copies by the purchaser and seller for the period of two years, furnishes a complete record of the drugs until they reach the hands of the retailer.

It is difficult to imagine a simpler method of tracing the drugs, or one which would impose a lighter burden upon those who handle them legitimately, the only extra labor imposed upon the purchasing dealer being that he must make out two copies of his order instead of one, and that one of these copies must be retained on file for a period of two years.

It must not be imagined that any form of law can be devised that will be entirely free from objections, or that will not impose some burdens upon the pharmacist and physician, no matter how conscientious they may be in the handling of these drugs.

Since society began those who have been willing to deal justly with their fellow men have been compelled to bear the burden of laws intended to curb the actions of those who are not controlled by conscientious motives, and no one has yet been able to suggest a method that will relieve the honest and conscientious citizen from this hardship.

J. H. BEAL.