

Correspondence

What a Local Society Can Do

To the Editor:—One of our local papers recently carried a large advertisement of "English Hemorrhoidal Remedy," containing what purported to be a signed statement from forty local druggists, stating that they were much impressed with the value of this remedy, and unreservedly endorsed it. Our local medical society sent each one of these druggists a letter, asking them to let us know on what they had based this strong endorsement. They scrambled all over each other to send replies disclaiming any such endorsement, and sent back to the exploiters their stocks of the nostrum, which they had held on consignment. One establishment replied naively that it never had approved of this method of advertising, and, *as the goods had not sold well*, it had sent them back.

Our action will materially decrease that kind of advertising in the future, and was well worth the trouble it cost. It is reported as a tip to other local medical societies.

In return, perhaps you or some one else can tell us if there is real hope for a community in which the leading paper, one of the most conservative and influential in New England, and controlled by the president of the local antituberculosis society, who is also a member of the State Tuberculosis Commission, still publishes advertisements of Eckman's Alternative for Tuberculosis, and enlivens its columns with the answers of the sprightly Mae Martyn to her anxious inquirers, incidentally mentioning the virtues of those simple and inexpensive household remedies, Spurmax, Gogag, Puquik, Pemore and Ogoshi.

AUGUSTIN A. CRANE, M.D., Waterbury, Conn.

COMMENT.—The local society at Waterbury is to be commended. Yes, we believe "there is real hope for a community" that has the kind of local medical society that exists here. We would suggest that the editor, owner, publisher and advertising manager each be sent one of our pamphlets showing the fraudulence and worthlessness of "Eckman's Alternative" and that our exposé of the Mae Martyn "prescription fake" humbug, also be called to their attention.

Another Misstatement Concerning Phylacogen

To the Editor:—In the Special Phylacogen Number of *Therapeutic Notes*, published by Parke, Davis and Company, Phylacogens (Schafer's Modified Bacterial Derivatives) are said to have been discussed at the meeting of the Westmoreland County Medical Society, held at Greensburg, Pa., June 17, 1912.

This statement of Parke, Davis and Company is not true. We held no meeting on that date, and this product has never been discussed by our society.

M. W. HORNER, M.D., Mount Pleasant, Pa.
Secretary, the Westmoreland County Medical Society.

The Inadequacy of Bishop's Antitoxin Hypothesis to Explain Fully the Symptomatology in Morphin Addiction

To the Editor:—Dr. Bishop in his article on narcotic addiction in *THE JOURNAL* (Feb. 8, 1913, p. 431), does not, it seems to me, lay sufficient emphasis on the part played by the nervous system in the symptomatology of drug addiction. Whether or not we accept his hypothesis of antitoxin development in morphin users, it comes up to us in the end to deal with the addiction as manifesting itself in a disordered mental and nervous system. Therapeutically, we use narcotic drugs in order to produce some definite effect on or through the nervous system. In addiction the patient attempts to continue indefinitely a reaction which takes place physiologically in therapeutics.

Thus the nervous system deprived of opportunity for normal functioning through the inhibiting influence of a drug

necessarily becomes pathologic in its reactions. In the case of morphinism physiologic tolerance is quickly exceeded; toxic effects are noticed practically from the beginning. It is well known that any toxin introduced from without, or elaborated within the body, acts injuriously on the cortical and ganglionic cells and nerve fibers. Therefore, whether we consider the symptoms as due directly to the toxic effects of morphin, or to effects of an antitoxin induced by morphin, we face a disease syndrome which must be regarded and treated in the light of nervous and psychic deterioration. In thus regarding morphinism as a nervous and psychic disease picture, I do not for a moment lose sight of local organic disturbances, or belittle the therapeutic measures taken by Dr. Bishop and others for their correction. It is certainly essential that therapeutics shall be instituted for the direct correction of such disturbances. Yet the fact remains that back of all such disorders, whether secretory, trophic or cardiovascular, there exists a deranged nervous system, the great etiologic factor in their causation.

The sensations streaming into consciousness from the various organs of the body normally function without the individual being aware of the process. It is when this metabolic equilibrium is upset or disturbed that the individual becomes cognizant, through discomfort or pain, of his normally unconsciously performed bodily processes. By locking up the secretions and otherwise interfering with the normal metabolic action of the organs, including the nervous system and brain, morphin induces a disturbed or painful *cenesthesia*—a sense of general bodily discomfort—which may become unbearable. In order to maintain a sense of well-being against the cumulative toxic effects occasioning this bodily and mental discomfort, the dosage must be gradually increased. The time comes in the majority of cases when no dosage is sufficient to produce the desired effects. All the while the patient is losing resistance; he is becoming habituated to the shutting out of all painful sensations or impressions whether in the physical or psychic realm. Thus is brought about that character deterioration which is always seen in the drug addict and which varies according to the individual's original fiber. The higher mental qualities constituting character regain their former vigor only after a lengthy absence from the drug, and when complete organic rehabilitation has taken place. This delayed character (will-power, proper ethical valuations, etc.) reestablishment is to my mind the main factor in the causation of relapses.

In dealing with the mechanism of relapse, the important bearing of the vicious mental processes which have been established during addiction must be taken into account. The patient is, as it were, under the yoke of his associative memory processes. His habitual reaction to pain or fatigue or mental stress has been resort to his drug. He has, in reality, established a sort of pain-morphin reaction, paralyzing, thereby, his natural resistive resources. From this associative process it is extremely difficult for the patient to release himself. Long after bodily health has apparently been reestablished, when physical stress (digestive, cardiovascular, conditions of fatigue, etc.) or mental strain arises, he is likely to react automatically, instinctively, as it were, with no volition whatever in the matter, in resort to his drug.

C. C. WHOLEY, M.D., Pittsburgh, Pa.

Restatement of the Position of Meigs on the Behavior of Muscle

To the Editor:—In my recent article on the colloid-chemical theory of water absorption in *THE JOURNAL*, Feb. 1, 1913, p. 348, I say that "Meigs has himself now given up his original osmotic notions regarding the behavior of muscle." This is only half true, for in a letter just received Dr. Meigs informs me that he does still believe that "striated muscle fibers are surrounded by semipermeable membranes," and that "smooth and striated muscle differs in this very point," the smooth muscle acting purely colloidally.

This correction is made in order to express the views of Meigs more accurately. It does not of course alter my own opinion in the matter, which, while it loses in part the support of Meigs, runs parallel to that of F. Hofmeister, N. R. Proctor, von Fürth and Lenk and Wolfgang Pauli.

MARTIN H. FISCHER, M.D., Cincinnati.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

DERIVATION OF FAT IN THE STOOLS FROM THE FOOD INTAKE

To the Editor:—In the *British Medical Journal* (Nov. 9, 1912, p. 1281), Williams reports the finding of saturated fat and fatty acid in intestinal concretions, intestinal sand and appendix concretions, and refers to the case of Mr. Paul in which brownish-red granules containing fat in large quantities were found in the biliary passages. He implies that the intestine excretes fat from the blood. Is there any scientific foundation for this opinion? S. L. B.

ANSWER.—The occurrence of true intestinal concretions consisting largely of fat or fatty material is so unusual or problematic that the current text-books have little or nothing to say on this subject. Many years ago Robiquet and Lassaigne reported analyses of concretions which indicated 60 and 74 per cent. of "fat," respectively (see Gorup-Besanez, E. F., *Lehrbuch der physiologischen Chemie*, 1867, p. 505). These data were obtained at a time when the expression "fat" represented the crude ether extract which might well have included numerous contaminating substances other than fat itself. The steatorrhea mentioned in our editorial column ("A New Inborn Error of Nutrition," *THE JOURNAL*, March 1, 1913, p. 668) and the lumps of soap sometimes passed after the ingestion of olive oil are not due to a true excretion of fat through the intestinal wall from the blood or tissue itself. We are not aware that any justification whatever exists for the type of excretion to which our correspondent refers, although Williams has lately described concretions rich in calcium soaps and found in the appendix and elsewhere which he suggests are due to the abnormal excretion of these soaps or allied compounds by the mucous membrane. His evidence for the origin of such concretions in the intestinal mucosa is, however, most indirect and far from convincing. From the investigations of Mendel and others it is known that calcium is excreted by the bowel; and this fact is sufficient to account for the precipitation (as calcium soaps) of any fatty acids with which the alkali earth may come in contact in the lumen of the intestine. The production of fatty masses in the degenerative changes in cells lining the intestine can scarcely be referred to as a secretion of fat into the bowel. Fat and its derivatives in the stools are derived, in ultimate analysis, from the food intake. Fat-like substances soluble in ether and represented by cholesterol, etc., may, however, be derived from the alimentary secretions and find their way into concretions.

EFFECT OF PASTEURIZATION ON BACTERIA IN MILK

To the Editor:—I enclose a copy of a recent report of the Milk Commission of the Chicago Medical Society in which occurs the statement that "the commercial pasteurization, while sufficient to destroy ordinary milk bacteria, does not kill the tubercle bacillus." Please inform one desirous of knowing the facts whether this statement is true. D. L. K.

ANSWER.—If the expression "commercial pasteurization" in the report referred to is intended to mean a method of heating which does not kill the tubercle bacillus—which is not real pasteurization at all—it simply prejudices the whole question and there is nothing more to be said. If, on the other hand, it has the meaning plainly attaching to the words and relates to pasteurization on a large scale under commercial conditions, the statement is not correct. Experiments have shown that the tubercle bacillus is killed by exposure at 71 C. (160 F.) for one minute; or if the holding type of pasteurizer be used, a temperature of 63 C. (145 F.) for from thirty to forty-five minutes will suffice. Well-known types of pasteurizing machines which will fulfil one or the other of these conditions are in practical daily use in large cities in this country. The report referred to is erroneous in another particular—namely, in its statement about the destruction of "ordinary milk bacteria." The well-known work of Ayers and Johnson showed

that commercially pasteurized milk always sours through the development of lactic acid bacilli, which survive the heating process. Some of these lactic acid bacteria, which we suppose to be meant by "ordinary milk bacteria," have a higher thermal death-point than the tubercle bacillus.

CORRECT MEDICATION

To the Editor:—After reading the article "Bad Medication" (*THE JOURNAL*, Jan. 25, 1913, p. 280), I would like to know where I can obtain a book which will give me, along with other things, the action and dosage of drugs, how often to repeat the dose and the length of time after administration it requires for each drug to begin to act. S. E. JONES, M.D., Lucerne, Ind.

ANSWER.—Unfortunately, there seems to be no book which will give these data for every drug. It depends on the object to be gained and the nature of the disease for which we are prescribing. Obviously, if we were giving strychnin as an ordinary tonic, we would give it not more than three times daily. If we wish to get its effect on the respiration, we might find it necessary to use doses once in three or four hours. The U. S. Pharmacopeia, the "Physicians' Manual of the U. S. Pharmacopeia," the National Formulary, the "Handbook of Therapy" and Osborne's "Materia Medica and Pharmacology," 1906, will give a great deal of information and many valuable hints on these matters. Of course, a modern work on pharmacology should be consulted, which will describe the action of drugs and their therapeutic uses.

TEST FOR UROCHROMOGEN IN URINE

To the Editor:—Please inform me how the test for urochromogen in urine is made. According to the abstract of the article by Welsz, *THE JOURNAL*, Feb. 8, 1913, p. 485, "the urochromogen test is applied to urine diluted to one-third and separated into two equal portions. To each half is added three drops of a 1 per thousand solution of permanganate, and the tint is compared with the untreated half. A pure distinct yellow is the positive reaction." I want to make this test, but cannot do so according to these directions. SAMUEL P. HAND, M.D., Demopolis, Ala.

ANSWER.—Instead of "to each half," the directions should read "To one-half are added three drops," etc. The directions in full are: "Fill a test-tube to one-third with the clear fresh urine; then dilute it three times (*hierauf wird dreimal verdünnt*) and separate into halves. Add to one half three drops of 1:1,000 solution of potassium permanganate; mix thoroughly and compare with the other half."

A REQUEST FOR HISTORY AND CASE-RECORD BLANKS OR CARDS

To the Editor:—I am endeavoring to get a history and case-record card. Please give me your idea of a good card of this kind. My idea is to have history, clinical record, diagnosis, treatment and all analyses on same card. F. G.

ANSWER.—Other correspondents occasionally ask similar questions. It will be appreciated if our readers will send us two specimens each of any cards and blanks of this sort which they are using. We also would be glad to know the source of the card, that is, whether a stock card from some firm, or a specially printed card by some local printer. It may be that from all these various cards we can arrange a card with the good features of all, which can be recommended to physicians interested.

SIGNIFICANCE OF THE STROKE ACROSS THE R AT THE HEAD OF A PRESCRIPTION

To the Editor:—Will you kindly tell a reader of *THE JOURNAL* the significance of the line across the tail of the R on our prescription blanks? I think that the R means recipe, but what means the line? C. E. RISTINE, M.D., Knoxville, Tenn.

ANSWER.—Bernard Fantus in his "Prescription Writing and Pharmacy" says that the upward stroke at the end of the R standing for recipe is believed to have originated in the astronomic sign of the planet Jupiter, which was formerly put at the head of prescriptions to symbolize a prayer to the deity for divine blessing on the remedy ordered.

TECHNIC OF MANUFACTURE OF ACETYSALICYLIC ACID

To the Editor:—Please give the technic of the manufacture of acetylsalicylic acid, or refer me to some book which will deal with this subject completely. FRANK H. BENT, M.D., Wallace, Neb.

ANSWER.—The process for the manufacture of acetylsalicylic acid (aspirin) is described on page 41 of *New and Nonofficial Remedies*, 1913.