The propaganda for reform in proprietary medicines / [Council on Pharmacy and Chemistry of the American Medical Assoication].

THE PROPAGANDA FOR REFORM

—IN—

PROPRIETARY MEDICINES

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Proprietary Medicines

SIXTH EDITION

REPRINTED FROM THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

PREFACE

In February, 1905, the Council on Pharmacy and Chemistry of the American Medical Association was organized to investigate the proprietary medicine question and to pass on those which should be up to the standard required of ethical proprietary medicines. From time to time reports of this Council have appeared in the columns of THE JOURNAL of the American Medical Association, and THE JOURNAL has also contained other matter relating to the question of nostrums and proprietary medicines not directly connected with the work of the Council. Requests have been received repeatedly for this or that number of THE JOURNAL containing an article on the subject, and, as it has been impossible to furnish many of the copies asked for, it has been thought best to collect some of the matter and issue it in this reprint form. The matter is reprinted from THE JOURNAL, either in full or in abstract, and the date on which the original article appeared is given.

THE PROPAGANDA FOR REFORM IN PROPRIETARY MEDICINES

PART 1
COUNCIL REPORTS

ACETANILID MIXTURES

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., June 3, 1905)

To the Council on Pharmacy and Chemistry of the American Medical Association:

The following report has been approved by the council:

In response to the request of your chairman we have investigated the below-mentioned preparations and report as follows:

Specimens of the articles were bought in different cities in the open market, and in original sealed packages, and were analyzed by some of us or under our direction. Each article was examined by at least two chemists, and some were subjected to several analyses. While certain of the preparations are represented as being chemical compounds, the specimens examined were all found to be mixtures; the principal ingredient being acetanilid. The percentage proportions of acetanilid given below are the minimum obtained by any of the analysts.

Soda and ammonia, combined with carbonic acid, are calculated and reported as sodium bicarbonate and as ammonium carbonate (U. S. P.) respectively. Salicylic acid is calculated and reported as sodium salicylate. Diluents and other constituents than those reported were not determined.

AMMONOL

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid.	Sodium Bicarb.	Ammonium Carb.
50.	25.	20.

ANTIKAMNIA

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture,

and to contain the following ingredients approximately in the proportions given:

Acetanilid	Caffein	Citric Acid	Sodium Bicarb.
68.	5.	5.	20.

KOEHLER'S HEADACHE POWDERS

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Caffein
76.	22

ORANGEINE

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Caffein
43.	18.	10.

Other constituents said to be present were not determined.

PHENALGIN

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Ammonium Carb.
57.	29.	10.

Certain packages of phenalgin were purchased which on analysis did not show ammonium carbonate.

SALACETIN

According to the analyses of the contents of the original sealed packages as purchased, this was found to be a mixture, and to contain the following ingredients approximately in the proportions given:

Acetanilid	Sodium Bicarb.	Ammonium Carb.
43.	21.	20.

We recommend that this report be printed in THE JOURNAL of the American Medical Association.

Respectfully submitted.

J. H. LONG, M.S., Sc.D.,
W. A. PUCKNER, PH.G.
S. P. SADTLER, PH.D.,
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ANASARCIN AND ANEDEMIN

Reports of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., May 1 and 11, 1907.)

ANASARCIN

Anasarcin is offered in two forms: "Anasarcin Tablets," a pretended combination of the active principles of oxydendron arboreum, sambucus canadensis, and urginea scilla; and "Anasarcin Elixir," said to contain the active principles of oxydendron, sambucus, hepatica and potassium nitrate. The advertisements of these articles conflict with the rules of the Council as follows: With Rules 1 and 2: The composition of these articles is kept secret, in that the proportion of the ingredients is not furnished. The statement that they contain the "active principles" is misleading, since these are for the most part unknown. With Rule 6: The description of the pharmacologic action of Anasarcin agrees practically with that of squill. No material part of its effects can be attributed to the other ingredients. Nevertheless, the advertisement studiously cultivates the impression that Anasarcin has no relation whatever to the digitalis group in which scilla is commonly placed. The claims are therefore misleading. The claim of its infinite superiority to digitalis, the claims that it cures neurasthenia, eliminates uric acid in rheumatism, and is useful in obesity, cystitis, lumbago and eclampsia, dyspepsia and asthma, and that it works wonders in exophthalmic goiter, appear exaggerated or false. The recommendation of its indiscriminate use in nephritis, for lowering the blood pressure and the statement (contradicted in the firm's own literature) that it is not depressing are actually dangerous.

ANEDEMIN

"Anedemin is an evident imitation of Anasarcin. It is marketed as tablets, said to contain the isolated active principles of strophanthus, apocynum, squill and sambucus—chemically combined. The quantities are not stated. The therapeutic claims are copied almost literally from the Anasarcin circulars and are equally false. Anedemin, therefore, conflicts with Rules 1, 5, 6 and 7."

In the comments on the reports it is stated that oxydendron and sambucus, two innocuous plants, have never had any active principles isolated as far as is known to chemists, and are evidently put in the formula to obscure the fact that anasarcin is compounded principally of squill, as is shown by the claimed pharmacologic action of anasarcin. Anedemin dis-

cards the oxydendron and reinforces the squill with strophanthus and apocynum, but in spite of this change the action, as described, is practically the same as that of anasarcin. The therapeutic claims of superiority condemn themselves to any sensible practitioner and if accepted would lead to serious consequences.

Some interesting items in regard to the originators and manufacture of these products are given. They both hail from Winchester, Tenn., a place of about 1,500 inhabitants, where about half the physicians and a fair proportion of the lawyers seem to have an interest in their manufacture. There appear to be no licensed pharmacists or graduate chemists connected with their dropsical cure manufacturing concerns. The laboratory and warehouse of the Anedemin Company is said to consist of two rooms over a law office.

CAMPHO-PHENIQUE

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., April 20, 1907, 1365)

This much-advertised remedy instead of containing 49 per cent. of phenol, was shown by analysis to contain not more than 20 per cent., and that instead of 51 per cent. camphor, the amount contained was not over 38 per cent. A third substance found was liquid petrolatum, which was present to the extent of 38 per cent. or more. In the case of the dry preparation, campho-phenique powder, made by the same firm, over 90 per cent. of it is inert, absorbent, talcum-like material. There is enough camphor and phenol to give the powder an odor, and this misleads physicians who are in the habit of crediting the statements of nostrum makers. It may be a fairly good dressing for wounds, but its name is deceptive. The principal, if not the sole owner, of the Campho-Phenique Company appears to be interested in the manufacture of a number of other products, which are simply nostrums that are in no sense "ethical," but simply patent medicines.

CELLASIN

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., Oct. 30, 1909)

This product, sent out by Mead Johnson & Co., was reported on by the Council on Pharmacy and Chemistry of the American Medical Association in THE JOURNAL, Sept. 12, 1908.

In this report its rejection was voted, on account of the exaggerated chemical and therapeutic claims made. The manufacturers taking issue with this report, the subject was again taken up and referred to the original investigator (A) and also to another (B) not a member of the Council, and the reports of both submitted to a third Referee (C). All the reports, together with letters from Mr. John E. Teeple, chemist for Mead Johnson & Co., and Prof. Orndorff of Cornell University, have been published by the Council in pamphlet form, and the report by Referee C was published in THE JOURNAL of October 30, 1909. The claim that the sugar-splitting action of cellasin is due to an enzyme and not to bacteria is refuted by Referee C, who has repeated Prof. Orndorff's experiments adduced to support the claim, and found that the antiseptics employed by Prof. Orndorff do not inhibit the bacterial growth in the strengths used by the latter. In fact, Prof. Orndorff admits that an increase in the amounts of the antiseptic (phenol) retards the reaction, adding that "this retardation of enzyme reaction in the presence of antiseptics has been frequently observed." As his account contains no mention of the bacteriologic controls and the amount of antiseptic used by him was not found in Referee C's experiments to inhibit bacterial growths, his experiments cannot be claimed to prove the agency of an enzyme as a sugar-splitting factor. The conclusions as to this point of Referee C are as follows: "The number of bacteria contained in cellasin is significant. The standard dilution of 0.8 gm. cellasin in 400 c.c. of sugar solution gave counts which averaged about 3,000 bacteria per, c.c. or a total of 1,500,000 per gm. of cellasin. At no time did the samples contain less than 150,000 bacteria per gm. of product. Of still further significance is the fact that the one bacterial species predominated in all three samples of cellasin examined. Moreover, this form was present largely in the spore condition, a fact established by heating experiments, as well as by the behavior of the preparation in the presence of phenol and hydrochloric acid. It should be stated further, that in plating out the various solutions of cellasin, referred to in the preceding tests, invariably one and the same organism was found. Isolated in pure cultures it was found to be a rapid spore producer. Control experiments made with the pure spores gave essentially the same result as with cellasin. The organism in pure culture splits up cane sugar into acid products, and there can be no question as to the part it plays in the so-called action of cellasin.

That the action of cellasin depends on the presence and growth of this organism is evident also from filtration experiments. When a solution of cellasin is filtered through a Berkefeld candle into a sterile sugar solution no change whatever results. The solution, after incubation for weeks, remains clear, no acid is produced, and no bacteria can be detected. Were a "true enzyme" present, such would hardly be the case. The evidence on hand goes to show that cellasin is a mixture of an acid-producing organism and a protein substance, presumably casein. Referee C can, therefore, only confirm the separate findings of Referees A and B, and recommend the rejection of the preparation. In a letter dated Aug. 13, 1909, Mr. Teeple admits that there are in the product certain bacteria which are evidently spore-bearers and "which resist any means of sterilizing so far tried, excepting means which would actually destroy enzyme," and says that he is at present endeavoring to isolate the organisms and determine whether they have the same action on sugar that cellasin seems to have.

COLLARGOL

A Report on the Advertised Claims for the Product

(Abstracted from The Journal A. M. A., March 13, 1909)

A majority and minority report were made by the committee appointed to consider the question whether exaggerated claims are made in the pamphlets sent out by the agents of this preparation.

The Majority Report: After noticing the importance of the subject, the majority of members of the committee (Drs. J. T. Bottomley, C. W. Edmunds and D. L. Edsall) say that they have confined their investigations mainly to a critical study of the literature referred to in Schering & Glatz's pamphlets and to a few references obtained directly from these articles. Some experiments were also made for them to test one question, viz., the influence of the preparation on the actual toxicity of bacterial toxins. The points at issue are the statements sent out (quoted by the committee) that collargol is a powerful and harmless antiseptic in the most varied medical and surgical affections; that its prophylactic use usually arrests incipient and surgical infections or renders their course briefer and milder and even when used as a last resort it sometimes achieves brilliant recoveries in desperate, apparently hopeless cases; that its prophylactic use is especially advantageous in puerperal cases. Taking up first the experi-

mental evidence claimed to support the above statements, the majority of the committee find it very insufficient so far as proving the circulation of collargol in the blood as colloidal silver, or that it is absorbed when given as enema, or that it is excreted in the urine, all of which are claimed to occur. They criticise the explanation offered in the pamphlets of the experimental work of Cohn, whose results were unfavorable to the claims made for collargol, and which they think have not been discredited by the findings of any other experimenter. Cohn's work, they say, is the most extensive and the most careful work that has been done on this part of the subject, and the majority of the committee charge misleading misstatements of his work by the writers of the pamphlet. Other criticisms are made of the statements regarding its prophylactic value, etc., and they show that, according to Hamburger's figures, it would require at least 140 c.c. of the 5 per cent. solution to produce the effects claimed of oxidizing bacterial toxins, and lesser concentrations would, according to the same authority, do harm by increasing hemolysis. So far as they have learned a dose of over 20 c.c. has not been reported. Taking up next the clinical evidence, the majority of the committee hold that the mere number of favorable testimonies is by no means conclusive, and confining themselves to the articles referred to in the collargol pamphlets, they find no overwhelming evidence that the substance is "a powerful and harmless systemic antiseptic in the most varied medical and surgical infections." "When," they say, "we consult the articles of men of recognized ability and judgment, we find that a very large proportion of them are extremely guarded in their conclusions." Many of the references given are not quoted, being directly unfavorable, and sometimes the writer's views are partially suppressed to make a favorable showing. All these points are developed in detail. The majority of the committee hold that the advertising pamphlets on collargol illustrate two lamentable facts: First, that much of the advertising matter concerning drugs is made up on the assumption that physicians are too busy or too impressionable to take the trouble to verify any statements made, and, second, that it is very dangerous at present for physicians to put their opinions regarding drugs in print, as they may be used as they would not wish them to be used by advertisers.

The Minority Report: In his minority report Dr. Solomon Solis Cohen says that he agrees with the majority that the advertising matter "is misleading both through exaggeration

and through misquotation" and that "it modifies and perverts the opinions of some of the authors cited." On some other points, however, he feels obliged to dissent, one of which is the acceptance of certain conclusions in pathology, physiology and pharmacology which he considers to be by no means definitely established. He believes the pharmacologic action of collargol is yet unknown and that the experimental evidence is not sufficient to warrant any positive conclusion. As regards the clinical evidence, he admits with the majority that most of the reports lack the exactness required, but he would not on that account impugn the honesty of the observer or question his competence. He thinks there is sufficient trustworthy evidence to indicate for the drug a certain limited field of established usefulness, and beyond this the possibility of a larger field needing accurate survey. It would be desirable if manufacturers could arrange for the exact clinical and experimental research needed by observers of competence and scientific standing. So long as proprietary products are allowed by law it should, he thinks, be possible for manufacturers to employ experts to determine the worth of their preparations without loss of professional standing on their part. As regards collargol, he does not think the investigations so far made sufficient to decide, positively or negatively, as to its value. Until such investigation has been conducted and concluded the matter remains in doubt, and the manufacturers should be more discriminating than they are at present. He expresses his specific dissent from any imputation of improper motives in the inclusion alike to the references given in the manufacturer's pamphlets, of favorable and unfavorable reports, though the latter are not quoted. Their inclusion he considers rather commendable than otherwise.

DIASTASE FERMENTS

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., July 11, 1908)

Among medicinal agents which may be classed as legitimate pharmaceutical preparations few are more widely advertised than are the starch-digesting ferments, the diastases. Along with a number of very good preparations there are several for which grossly exaggerated claims are made, and which are advertised to the medical profession in such a manner

as to lead to distrust. Those which have merit have not always been marketed by methods which are wholly free from criticism. In several cases the claims made are more than can be substantiated by actual tests.

There has always been some obscurity in the method of reporting the digesting value of these diastases, and just what is meant by starch conversion or sugar formation is not always clear. In other words, the claims of the manufacturers are frequently stated in terms which are too general.

The different methods of examination used by the manufacturers make a fair comparison difficult. The Council, therefore, used a method of carrying each digestion to the colorless endpoint and the results of an examination by this method of a number of commercial products obtained from the manufacturers, and controlled with samples from the wholesale drug houses, were tabulated. The results showed in all a lower digestive value than that claimed if the comparison is based on the colorless endpoint reaction and any dross starch digestion. They were different, however, if the digestion was carried only to the loss of blue coloration and with starch containing an average of 15 per cent. water content. By such a test five of the preparations showed even more than the claimed values, but this method should not be tolerated for obvious reasons; the results should be calculated to anhydrous starch for reporting. The discrepancies between the values claimed and those found by the test were not very great in three preparations—holadin, diazyme essence and diazyme glycerole, and the last two seemed to be stable so far as practical requirements are concerned. The same seemed to be the case with holadin and panase, and the earlier product of this same firm, vera diastase. Taka diastase showed the greatest discrepancy. The ferment seemed to lose strength rapidly in solution. Sugar determinations were also made and the results were tabulated, showing a close agreement with the starch conversion test. The starch conversion to the colorless endpoint, which is more quickly and easily carried out, is to be preferred and was recommended for all routine examinations of the nature which have to be made in the testing of diastase ferments. The technic of this method was given in considerable detail. Other products that were tested, Maltine, Trommer's Extract, plain and with cod-liver oil, and Maltzyme all showed a low digestive value and were classed as medical foods rather than as agents of digestion.

GARDNER'S SYRUP OF HYDRIODIC ACID.

(From The Journal A. M. A., Nov. 14, 1908)

The following report on Gardner's Syrup of Hydriodic Acid was submitted to the Council by a subcommittee:

This product was first taken under consideration in February, 1906. Reference to several committees was necessary, on account of the peculiar claims for the pharmaceutical, and especially the therapeutic, superiority of this preparation. At this time, as the Council did not have the necessary facilities for investigating therapeutic claims, the product was approved by the Council.

Since this time, however, the manufacturers have laid especial stress in their advertisements on some highly improbable claims, stating, for instance, that this Syrup of Hydriodic Acid possesses "all the advantages, with none of the objectionable symptoms caused by potassium iodid, or other forms of iodin medication." To one with even an elementary knowledge of chemistry, the absurdity of this statement should be evident. The alkaline reaction of the tissues makes it impossible that hydriodic acid should persist as such in the body. In fact, the iodin must circulate in precisely the same form, whether administered originally as potassium iodid or as hydrogen iodid. The qualitative identity of the therapeutic actions is further proof of this fact, were such needed.

Since the most important objectionable symptoms of iodid medication arise after the absorption of the drugs, and since hydrogen iodid is conceded to be readily absorbed, it is evident that these symptoms must be equally liable to occur with hydrogen iodid as with potassium iodid, provided that equivalent doses of iodin are administered. An apparent difference in clinical results would arise if the one drug is habitually given in smaller doses than the other. Since, however, the iodin is present in the body in precisely the same form, whether it is administered as a hydrogen iodid or potassium iodid, it is evident that a given degree of therapeutic effect would correspond to an identical tendency to iodism, whichever drug was used. If, as appears to be the case, the use of hydriodic acid is commonly restricted to those cases in which only minimal doses of iodin are required, the relative infrequency, or even absence of symptoms with such doses would not prove that the drug itself is less apt to cause them than is the potassium salt.

These facts are in reality self-evident; but since the Council now has the proper facilities for obtaining the

views and experiences of clinicians, it voted to submit the statement in question to its staff of clinical consultants, and to be guided by their advice.

OPINIONS OF THE CLINICAL STAFF.

The following is an epitome of the replies of the eleven members of this staff who had used the article or who expressed an opinion to the questions sent out by the Council:

1. QUERY: "Do you think it possible that such a preparation could be devoid of the usual effects of iodin preparations?"

Eight reply that they consider this, *a priori*, impossible; three stamp the statement as highly improbable, but do not care to say that it would be impossible. One of the correspondents remarks: "While distinctly taking the position that under many conditions we must accept clinical results which we find not explainable by our theoretical knowledge, where the conditions are so simple as in this case and where we know that the iodin, whether administered as hydrogen iodid or potassium iodid, must behave in the same way, after absorption, I believe that no properly educated and correct thinking physician can or will, after due consideration, fail to reject the claims of superiority made by the proprietors of this preparation."

2. QUERY: "Would you consider it necessary to make clinical experiments to settle this question?"

Seven of the correspondents consider this superfluous; four of these have had some experience with the article. Four, who have not used this product, consider a clinical test advisable. Under Query 3 we discuss the results of such tests.

3. QUERY: "When using Gardner's Syrup of Hydriodic Acid, have you ever noticed from it any of the objectionable effects of iodin preparations?"

Six of the correspondents have not used it, or are uncertain whether or not they used the product made by Gardner. One correspondent remarks: "Never used it. Repelled by claims of superiority which exaggerate disadvantages of potassium iodid and overlook the small amount of iodin used in the preparation advertised." The five clinicians who have prescribed the preparation report as follows: 1. Objectionable iodin effects in two cases, both patients being intolerant of all iodin preparations. 2. Has only prescribed it once or twice, but thinks he has seen iodism in one case, some years ago; does not recall clearly. 3. No; but has used this make very little, and then always in very small but continued

doses. 4. No, but always used it in small doses. 5. Yes, several cases in children; typical coryza, etc., with doses of three drams three times a day.

CONCLUSIONS: It appears that typical iodism occurred in several cases, after doses corresponding to 10 grains or less of potassium iodid per day, and this in a rather limited clinical material. Objectionable iodin effects are, therefore, not uncommon. Several correspondents remark that the relative infrequency of iodism is easily explainable by the fact that syrup is rarely employed in conditions which demand an active iodin medication and that it is, therefore, always taken in small doses. In fact, the main if not the only point of superiority of the syrup appears to be in its flavor.

These clinical opinions and experiences, therefore, are in complete agreement with the judgment of the committee, namely, that the therapeutic claims made by the manufacturers for this article are exaggerated and misleading.

OTHER MISSTATEMENTS.

The above is by no means the only misstatement in the printed matter issued by this manufacturer. In the publication, "The Applications of Iodin," issued in 1907, there occur the following misleading statements which, since they refer to plainly chemical facts, did not require submission to the clinical staff:

That the administration of potassium iodid after meals greatly impairs its physiologic action "by its chemical union with the various food products" (Page 19). So far as the committee knows, potassium iodid does not combine with the food products in the stomach.

"Iodid of potassium, having an alkaline reaction, neutralizes the hydrochloric acid in the gastric secretions, causing indigestion, loss of appetite and depression" (Page 19). The United States Pharmacopeia states, under Potassii Iodidum: "Its aqueous solution is neutral or has a slightly alkaline reaction on litmus paper." The slight occasional alkalinity would be physiologically insignificant, and it is absurd to claim that this alkalinity causes "indigestion, loss of appetite and depression."

"The dose of iodid of iron is so small that the amount of iodin contained therein is of little advantage" (Page 19). As a matter of fact, the pharmacopeial average dose (1 c.c.) of the Syrup of Iodid of Iron contains as much iodin (0.85 grains) as a teaspoonful of Gardner's Syrup of Hydriodic Acid (0.83 grains).

"In hydriodic acid the iodin is in combination with hydrogen, one of the elements of the natural secretions

of the body, and is, therefore, in physiologic harmony" (Page 21). No comment is needed.

It is implied elsewhere (Page 29) that potassium iodid decomposes more readily, with the liberation of iodin, than does hydrogen iodid. This is contrary to the prevailing opinion, and would require definite evidence before it could be accepted. It is also stated the large doses of potassium iodid in syphilis are necessary, because the gastric decomposition prevents complete absorption. This is certainly untrue, for potassium iodid is absorbed almost quantitatively.

These, and numerous other misstatements, constitute violations of Rule 6; and it is, therefore, recommended that Gardner's Syrup of Hydriodic Acid be removed from the list of remedies approved by the Council; it is further recommended that this report be published.

The Council postponed final action on the report pending its submission to R. W. Gardner. This having been done, and the reply of Mr. Gardner submitted to the Council, the above report was adopted and ordered published.

W. A. PUCKNER, Secretary.

GLYCOZONE

Report of the Council on Pharmacy and Chemistry, with Comments

(From The Journal A. M. A., June 5, 1909)

A number of specimens of Glycozone purchased in the open market were examined by a sub-committee. The product was found to be a mixture of approximately 90 per cent. glycerin, 5 per cent. glyceric acid, a small amount of water and traces of undetermined matter. The absence of hydrogen peroxid or other peroxids was demonstrated.

In its report the sub-committee held that: (1) The name of the product is objectionable and misleading; (2) the statements made in regard to its composition also are misleading; (3) the claims for its therapeutic value are exaggerated and untrue. Since the objectionable statements have been given wide publicity among physicians as well as among the laity, the sub-committee recommended that attention should be called to the matter in THE JOURNAL.

The report of the sub-committee was adopted by the Council.

W. A. PUCKNER, Secretary.

COMMENT:—While the name gives the impression that ozone or some similar substance is an essential constituent of Glycozone, or else that the preparation is a compound or de-

rivative of ozone, and while the earlier advertisements stated that Glycozone was "glycerin combined with ozone," the examination made by the Council shows that there is no basis of fact for such inferences.

In the advertisements the "chemical formula" $C_3H_6O_4 + C_3H_8O_3$ appears under the word Glycozone. From the Council's report it is apparent that $C_3H_6O_4$ stands for glyceric acid and the $C_3H_8O_3$ for glycerin, and, therefore, indicate the chief constituents of Glycozone. Few, doubtless, would recognize the first formula as being that of glyceric acid, a product practically unknown in medicine, nor would many associate glycerin with the second. The evident intent is that physicians should accept the formula as a badge of respectability.

According to the label on a trade package, Glycozone is "prepared only by Charles Marchand, chemist," and is "an absolute cure for dyspepsia, catarrh of the stomach, ulcer of the stomach, heart-burn," etc. The label further reads: "This remedy is positively harmless. By destroying the microbian element in the stomach it prevents the fermentation of food and stimulates digestion." An examination of medical literature fails to reveal any basis for these claims. While glycerin possesses some antiseptic properties, it is evident that the glycerin which constitutes 90 per cent. of this remedy is not the agent that gives the glycozone such phenomenal virtues. General literature contains nothing that would indicate that glyceric acid in any quantity, with or without glycerin, possesses these miraculous properties. If by "microbian element" is meant microbic organisms, the statement is without foundation. There is nothing in this product which possesses these bactericidal powers.

The circular which accompanied a trade package, envelopes the preparation in an air of mystery. Derivation from, or close relation to, ozone and hydrogen peroxid is vaguely hinted at, without definite assertion. Thus, the chief therapeutic properties of glycozone and hydrozone are compared as follows:

> "Hydrozone instantly destroys the microbian element, leaving the tissues beneath in a healthy condition."
>
> "Glycozone acts more slowly, but not less certain as a stimulant to healthy granulations."

There is no similarity between the action of hydrozone, which is a hydrogen peroxid preparation, and glycozone, which consists of a mixture of glycerin and glyceric acid. The representation is false and misleading. The following statement, also, is an unwarranted exaggeration of the facts:

"As an internal medication in fermentation of food, catarrhal and inflammatory conditions of the stomach, and intestinal disorders, its action is prompt and effective, giving immediate relief to the patient."

The following is another illustration of the vague statements made: After asserting that glycozone is hygroscopic and that it will deteriorate by absorption of water unless securely corked, it is stated that "Its healing properties increase with age." Whatever mysterious ingredient there may be present in this mixture to justify the statement that the healing properties increase with age can only be conjectured. To humbug the patient further he is advised to use only a "silver, glass or hard rubber spoon."

MEAT AND BEEF JUICES

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., Nov. 20, 1909)

The following was submitted to the Council by a subcommittee:

To the Council: While meat extracts contain only traces of coagulable proteids and have little food value, meat juices are prepared by a process which ensures the presence in the finished product of considerable quantities of coagulable proteids and they therefore have considerable value as foods. Many preparations which are sold as beef juices or meat juices have no right to these designations. Since the public and physicians are likely to be misled by the names given to these products and by the false claims which are made for them as foods and depend on them in the nourishment of the sick, it is important that their composition and their value as foods should be known.

In the following report is presented the results of an examination of some of the commercial products found on the American market. The report shows that *Wyeth's Beef Juice* (John Wyeth & Bro., Philadelphia), *Bovinine* (The Bovinine Co., New York), *Carnine* (Carnine Co., Fougera & Co., New York), and *Valentine's Meat Juice* (M. J. Valentine, Richmond, Va.) are sold under names which are incorrect, that their composition is not correctly stated by the manufacturers and that false and misleading statements are made in regard to their value as food.

It is recommended that the products named be refused recognition for conflict with rules 1, 6 and 8. Since these

preparations are typical of many others on the market, and as their use is a menace to the public health it is recommended that the report be published.

This report was adopted by the Council.

W. A. PUCKNER, Secretary.

Beef or meat juices are clearly to be distinguished from beef or meat extracts. The word "juice" applies solely to the fluid portion remaining in fresh meat after proper cooling and storing and may be obtained by pressure or diffusion with or without a low degree of heat. Under heavy pressure freshly chopped meat will yield from 25 per cent. to 40 per cent. of a thick reddish juice and if the meat is previously frozen or heated to 60° C., as much as 50 per cent. may be obtained. This gives some idea as to the probable cost of preparing beef juice at home. The chief characteristics of meat juice are the presence of a considerable proportion of coagulable protein and a low content of meat bases. The above represents the nature of these commodities as usually understood by the medical profession as is clearly shown by this quotation:[1]

"One or two teaspoonfuls of this (meat juice) are added to a teacupful of cold or warm water, which, however, must not be boiling, or otherwise the albumin would be coagulated, but it may, however, be sufficiently warm to drink comfortably."

Beef juice is considered by some physicians of much dietetic service and believed to represent liquid food in concentrated form. W. O. Atwater,[2] relative to this product, says:

"Beef juice obtained from the best steak which has been merely warmed through over the coals and then entirely deprived of soluble substance by a screw press, is undoubtedly the most concentrated of the liquid foods."

The latter authority gives a number of analyses of beef juices prepared under known conditions.

DEFINITION OF MEAT JUICE

Meat juice is defined by the standards committee of the Association of Official Agricultural Chemists as the fluid portion of muscle fiber obtained by pressure or otherwise, and may be concentrated by evaporation at a temperature below the coagulating point of the soluble protein. The solids contain not more than 15 per cent. of ash, not more than 2.5 per cent. of sodium chlorid (calculated from the total chlorin

1. Brunton, Sir Lauder: "Disorders of Assimilation, Digestion, etc.," p. 183.
2. Bull. No. 21, U. S. Dept. Agricult., Office of Experiment Stations.

present), not more than 4 nor less than 2 per cent. of phosphoric acid (P_2O_5), and not less than 12 per cent. of nitrogen. The nitrogenous bodies contain not less than 35 per cent. of coagulable proteins and not more than 40 per cent. of meat bases.

Meat juices of commerce are supposed to be made by subjecting properly prepared meat to heavy pressure with subsequent concentration of the juice *in vacuo* at a low temperature. The latter is necessary because if the temperature is raised to any material extent the valuable coagulable, soluble proteins referred to above, are precipitated and lost. In order to establish a basis of comparison relative to the composition of natural raw beef juice a number of samples were prepared under known conditions and submitted to analysis. The results contained in the subjoined table clearly show that meat juices made under known conditions vary according to the mode of preparation, but it is evident that practically one-half of the nitrogen is present as coagulable protein.

FOOD VALUES

In order to arrive at the food value of any commodity it is necessary to consider its chemical composition, available potential energy, absorbability, etc. On referring to the analytical table it will be found that the amount of inorganic material in meat juices Nos. 7 and 10 is unduly high. It appears that sodium chlorid, *per se*, has been added to both Bovinine and Wyeth's Beef Juice probably as a preservative in the latter and for condimental purposes in the former. The relative and absolute proportions of phosphatic material in both products is excessive. The other constituents present in the ash are those usually found in meat products.

The amount of sugar and glycerin in Carnine is interesting. These agents may be added for preserving purposes but the resulting product, on account of its syrupy appearance, leads to the belief and is so represented, that it is a concentrated food. Glycerin is also present in Bovinine and Valentine's meat juice. Bovinine in addition contains about 8 per cent. alcohol.

The total nitrogen content of the trade products excepting Carnine, is greater than the amount of nitrogen present in meat juices proper, but the relative amount of nitrogen present as coagulable protein—the valuable part of meat juice—is much greater in the latter. In fact, the amount of coagulable protein present in Valentine's Meat Juice may be considered *nil*, which indicates that an unduly high temperature is used

in its preparation. In this connection it should also be noted that even a moderate elevation of temperature influences the chemical composition of meat juices. For example, the coagulable matter present in Nos. 3, 4 and 5, is approximately one-half that present in Nos. 1 and 2, which appears to indicate that the best product can be made without the use of any heat whatever. Several of the trade products, namely Nos. 7, 8 and 9, contain about as much coagulable material as meat juice made by heating beef to 60 C. According to the formula appearing in a circular of the Bovinine Company, a part of the coagulable matter is present in the form of egg albumin, but the company claims egg albumin is not used at present. In the case of Carnine, the coagulable matter appears to be introduced by the use of blood itself. The exact nature of the coagulable protein matter in Wyeth's Beef Juice has not been ascertained. It is well-known to manufacturers and physiologic chemists that it is practically impossible to manufacture a genuine meat juice possessing a reasonable amount of coagulable proteins, which is stable without a preservative.

Meat juices, in addition to the coagulable protein material, contain other protein bodies such as albumoses and peptones. These bodies are largely formed from the original protein bodies present in the meat juice during the process of manufacture. They are highly nutritious and largely and readily absorbed from the alimentary canal but the amount of these bodies present in the trade products is relatively small excepting in Bovinine, which is not a meat juice, particularly when the high prices are considered.

A considerable proportion of the nitrogenous matter contained in Valentine's and Wyeth's products is present in the form of amino bodies frequently included in the general term, "extractives." These bodies may be oxidized in the body and thus supply heat in a manner similar to alcohol, but it should be remembered that there still appears to be a wide difference of opinion among various observers on this point. Some appear to be of the opinion that the amino bodies are devoid of food value in that these bodies appear in the urine practically unchanged. It would, therefore, appear that the value of the amino bodies is largely of a stimulant character.

The food value of meat juices, therefore, resides largely, if not solely, in the coagulable and other protein material present. Comparing the calorific value or potential energy available in meat juices proper on this basis with that present in the commercial products, excluding Bovinine, it will be seen

COMPOSITION OF MEAT JUICES

Number.		Name of Preparation.	Volatile matter 100 C.	Inorganic matter.	Sodium chlorid.	Phosphoric pentoxid (P_2O_5).	Ether extract, Glycerol and undetermined matter.	Total nitrogen.	Coagulable proteins (N x 6.25).	Other proteins (N x 6.25).	Amino bodies (N x 3.12).	Calories per 500 gm. obtained from protein factor 4.8.	Calories per 500 gm. obtained from amino bodies factor 0.56.
			Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.			
	Made in Laboratory.	Chuck beef, cold pressed..	86.85	1.86	.20	.31	1.32	1.74	6.13	2.94	.90	217.68	2.52
		Round beef, cold pressed..	85.76	1.53	.12	.37	.75	2.08	8.56	2.37	1.03	262.32	2.88
		Chuck beef pressed at 60 C.	91.90	1.29	.19	.29	.81	1.09	2.56	2.50	.84	121.44	2.35
		Chuck beef pressed at 60 C.	89.56	1.27	.16	.37	2.98	1.09	3.00	2.63	.56	135.12	1.57
		Round beef pressed at 60 C.	90.65	1.36	.16	.36	2.09	1.16	4.25	.31	1.34	109.44	3.75
		Chuck beef heated 6 hours before pressing 60-100 C.	98.11	.39	.05	.12	.25	.24	....	1.00	.25	24.00	.70
	Trade Products.	Beef Juice, John Wyeth & Bro., Philadelphia, Pa..	58.84	16.21	6.71	3.27	12.51	3.15[1]	2.88	3.56	6.00	154.56	16.8
		Bovinine, The Bovinine Co. 75 W. Houston St., New York City	80.40[3]	1.55	1.05	.09	3.64[5]	2.36	3.38	10.75	.28	339.12	.78
		Carnine Co., Lefranco, Paris, France; Imported by Fougera & Co., Agts., New York City.....	24.80[4]	.86	0.09	0.33	68.94[6]	.96	2.25	2.56	.59	115.44	1.65
		Meat Juice, M. J. Valentine, Richmond, Va	57.64	10.26	1.77	3.41	20.41[7]	3.06[2]	.19	5.44	6.06	135.12	16.97

1. Including .20 per cent. as NH_3; 2, including .22 per cent. NH_3; 3, 8.17 per cent alcohol found; 4, vacuum 70 C.; 5, 3.1 per cent. glycerol found; 6, 47.50 per cent. cane sugar—14.2 per cent glycerol found; 7, 8 per cent. of glycerol found.

The several samples of beef juice were prepared from practically fat free, finely comminuted, chuck and round beef, first by ressure at the ordinary temperature; second, by heating the prepared meat for several hours at 60 C., then submitting to pressure. ample No. 6 was made from chuck beef, prepared as above, by heating six hours at from 60 to 100 C., and expressing after cooling. t is not a beef juice proper but was prepared, analyzed and added to the list for information. Its composition resembles several ommercial articles closely. A number of products represented and sold as meat juice in the United States were analyzed and the esults recorded in the accompanying table.

that on the average the genuine meat juices—that is, those made by pressure, direct from the meat itself as wanted—are much superior to the commercial products, notwithstanding the marked concentration in some cases. The calories given in the accompanying table do not include sugar, alcohol or any other added material of this character.

WYETH'S BEEF JUICE

"Wyeth's Beef Juice" is not a true beef juice, but resembles rather a diluted meat extract. It contains much added inorganic matter, is low in coagulable proteins, and considering the degree of concentration, relatively deficient in nutritive value. Some of the claims contained in the circular accompanying this preparation, in view of its composition set forth above, may be of interest:

"Wyeth's Beef Juice . . . , containing two fluid ounces and representing three pounds of prime lean beef, . . ."

" . . . beef extracts made by the Liebig process are utterly devoid of the valuable and nutritious albuminous constituents of meat, . . ."

[Wyeth's Beef Juice] "should not be compared with ordinary beef extract, . . ."

BOVININE

Bovinine, advertised as a "condensed beef juice prepared by a cold process" is a mixture of alcohol, glycerin, added sodium chlorid, and apparently some form of defibrinated blood. According to the manufacturer's literature egg albumin was used formerly but this ingredient is said to be no longer employed. It is not a meat juice in any sense of the word. Numerous misrepresentations will be found on the label and in the literature of Bovinine, of which the following are typical:

"The blood of selected steers prepared by a cold process, furnishing a perfect food, free from insoluble elements."

"The rapidity with which Bovinine is absorbed and assimilated in the stomach . . ."

"It supplies complete nutrition to the patient."

"Bovinine contains all the elements of the animal, vegetable and mineral kingdoms for the production of new blood with great rapidity. Its principal constituents have been selected with a view to furnish the largest amount of nutriment in the most condensed form and all the resources of modern chemical analysis have been brought to bear on this important problem."

A series of experiments carried out with dogs under anesthesia, by injecting Bovinine into the stomach, the pyloric end of which was ligated, shows that Bovinine is not readily absorbed and assimilated by the stomach as claimed. The amount of protein material found in the stomach at the end of one-half hour to one hour and a quarter was practically equal to the amount introduced by the Bovinine.

It is also represented that Bovinine is of great service in case of an irritable stomach. This is not borne out by experiment. Bovinine fed to dogs by the mouth, either alone or mixed with food, induced vomiting, which was less marked when Bovinine was given with the regular diet. An examination of the urine of these animals showed a marked diminution of the amount of indican, while the ethereal sulphates were enormously increased, both absolutely and relatively, when Bovinine was given. Experiments on rabbits have shown that Bovinine injected into the peritoneal cavity was invariably followed by large quantities of albumin in the urine, which persisted for from 24 to 48 hours. Thirty to 50 c.c. per kilo given by mouth daily caused emaciation and weakness; in some cases, irritation of the gastrointestinal canal, with death of the animal in from 7 to 12 days.

CARNINE

Carnine is a French preparation imported into the United States by Fougera & Co., of New York City. In physical appearace it looks like highly concentrated food, but analysis shows that it consists of a small proportion of defibrinated blood dissolved in a mixture of syrup and glycerol, the whole agreeably flavored. It is represented as a "juice of rare meat, prepared by cold process. Each tablespoonful represents 100 gm. of raw meat, or 3½ ounces." It is clear that Carnine is not a meat juice in any sense of the word.

VALENTINE'S MEAT JUICE

Valentine's Meat Juice resembles in physical appearance taste, odor and by chemical analysis a diluted meat extract. The nutritive value of meat extracts is virtually *nil*, as is well-known by the medical profession. Notwithstanding the composition of Valentine's Meat Juice and the fact that beef extract represents little nutritive value, the manufacturer makes the following misleading representations:

"The two-ounce oval bottle, adopted for the Meat Juice contains the concentrated juice of four pounds of the best beef, exclusive of fat; or the condensed essence of one and a half pints of pure liquid juice which is obtained from the flesh of beef."

"The use of *hot water* with the Meat Juice *changes its character and impairs its value.*" [Italics in original.—Ed.]

The company must certainly be aware of the fact that its product contains little, if any, coagulable proteids.

CONCLUSIONS

In conclusion; neither Bovinine nor Carnine is a meat juice, the former is anything but palatable and the latter soon

cloys. "Valentine's Meat Juice" and "Wyeth's Beef Juice" are virtually diluted meat extracts which are known to possess little food value. A physician depending on any of the foregoing products to supply material nourishment, in case of serious illness, is deceiving himself, starving his patients, and may be lessening their chances for recovery. If a patient recovers while using these commodities, it is certainly not due to the food value contained in them.

INGLUVIN

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., July 11, 1908)

This report finds that ingluvin does not possess nearly as much proteolytic activity as ordinary saccharated pepsin recognized by the 1880 Pharmacopeia. Inasmuch as no glycocholic acid could be found in the preparation, it would seem that saccharated pepsin would be far more efficacious in treating the abnormal conditions for which ingluvin is recommended in the advertising circulars. Furthermore, the claims made for the preparation are grossly extravagant. The report closes with a quotation from a letter received from the manufacturers admitting that the therapeutic activity of the product must be due to the bitter property rather than to any proteolytic activity. This disposes of the claim made in their original advertisements. In its comments on the report THE JOURNAL says: "The repudiation by the manufacturers of the more absurd claims made for ingluvin shows the need of maintaining an attitude of healthy skepticism toward the advertised therapeutic virtues of proprietary preparations."

LABORDINE

Report of the Council on Pharmacy and Chemistry, with Comments

(Abstracted from The Journal A. M. A., March 30, 1907, 1121)

Labordine is advertised to physicians as having the following composition:

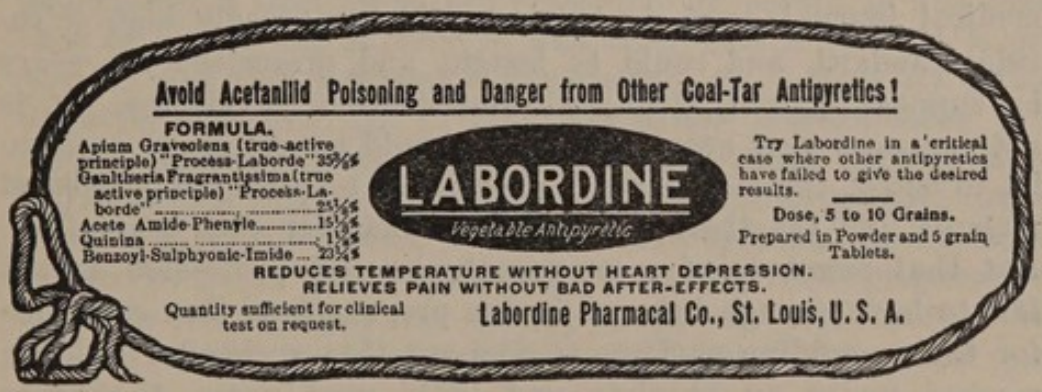
	Per cent.
Apium Graveolens (true active principle) "Process-Laborde"	35⅜
Gaultheria Fragrantissima (true active principle) "Process-Laborde"	25⅛
Acete Amide-Phenyle	15⅛
Quinina	1⅛
Benzoyl-Sulphyonic-Imide	23¼

It is stated to be a "vegetable antipyretic;" that it "reduces temperature without heart depression," and physicians are warned to "avoid acetanilid poisoning and danger from other coal-tar antipyretics."

While the "formula" and the statement just quoted are sufficient evidence of the fraudulent character of the product, yet an abstract of the reports of the chemists who analyzed it is given to further demonstrate its character.

Taking the average of the reports of analyses, Labordine contains:

	Per cent.
Acetanilid	37.9
Free salicylic acid	6.9
Quinin	present
Saccharin	not found
Corn starch	present
Milk sugar	34.7



The report of analysis only makes apparent that Labordine is not what it is claimed to be. While it is claimed to contain 23.25 per cent. saccharine, this substance was not present, or mere traces only. While, in a disguised way, it is stated to contain 15.125 per cent. acetanilid, it contained nearly 40 per cent.

The alleged constituents are explained in the comments substantially as follows: "Apium Graveolens (true active principle) 'Process-Laborde,'" is probably powdered celery seed. One chemist finds it has the characteristic odor of celery and microscopically the characteristic structure of seeds in general. If celery seed has an active principle it has never been isolated and nothing is known as regards its therapeutic value. "Gaultheria Fragrantissima (true active principle) 'Process-Laborde'" is probably ordinary salicylic acid. One analysis showed salicylic acid to be present to the amount of about 7 per cent. Whether salicylic acid could be considered

as the true active principle of the plant named is dubious. The third and most important ingredient in this "purely vegetable antipyretic" is announced as acete amide-phenyle, which is an attempt to Frenchify a scientific name for acetanilid, which is not usually regarded as a vegetable product. Analysis shows that this forms about 37.9 per cent. of the product, or 1.89 grs., in a five-grain tablet, and this approximately two grains of acetanilid is the only practical therapeutic agent. The important ingredient called benzoyl-sulphyonic-imide is simply saccharin, which could not be found on analysis.

"This is a fair sample of the nostrums and of the methods of exploiting them. The bitterly humiliating fact about the whole business is that a preparation, advertised under such palpably misleading claims, could actually be advertised in medical journals, even in journals of a supposedly high scientific standard, and could be bought and prescribed for years by supposedly intelligent and conscientious physicians. It is not supposed that every physician should be enough of a chemist to detect the ridiculous discrepancies between the published formula and the therapeutic claims made for such a mixture. But that members of a supposedly learned profession should fail to have enough interest in the preparations they prescribe for their confiding patients to find out that acetanilid is being masked under an obsolete and little used name, that only saccharin is hidden under an imposing polysyllable designation; that the so-called "active principles Process-Laborde" (whatever that may be), is only equivalent to ⅓ grain of salicylic acid in a 5-grain tablet, and that the advertising matter sent out for years by this company contained absolute falsehoods regarding the composition and therapeutic benefits of its preparation, is certainly just cause for shame and humiliation. If a physician, knowing the composition of Labordine, wishes to prescribe it and prescribes it intelligently, he has a perfect right to do so. If he wishes his patient to have 2 grains of acetanilid, 1/20 of a grain of quinin, and 1/3 of a grain of salicylic acid, and considers a mixture of ground celery seed, starch and milk sugar as a proper vehicle for this medication, no one will question his right to administer it. No physician, however, has any right, either moral or professional, to prescribe a preparation, concerning the ingredients of which he knows absolutely nothing."

LACTOPEPTINE

Report of the Council on Pharmacy and Chemistry, with Comments

(Abstracted from The Journal A. M. A., March 16, 1907, 959, and March 23, 1907, 1047)

This product is advertised as containing "the five active agents of digestion—pepsin, diastase (veg. ptyalin), pancreatin, lactic acid and hydrochloric acid—combined in the proper proportions to secure the best results." On examination it proved to be more than 90 per cent. milk sugar with a small amount of pepsin, somewhat less than 10 per cent., a mere trace of chlorid, and about 3 per cent. of lactic acid. A second specimen examined showed still less active constituents, as there was no appreciable amount of pepsin. The absence of diastase and pancreatin was to be expected, as it has been repeatedly demonstrated that these are destroyed by pepsin in the presence of acid. The failure to find hydrochloric acid in a dry powder was also a foregone conclusion. As regards its actual digestive efficiency, Dr. C. H. Miller of the Northwestern University Medical School reported that he could find no amylolytic action whatever, and that he found its proteolytic action is apparently equivalent to that of the Pepsinum Saccharatum of the U. S. P. 1890, which was a 10 per cent. preparation, and like it, lactopeptine is only active in acid media. No activity could be shown when water was the medium employed.

MIGRAININ

Report of the Council on Pharmacy and Chemistry Rescinding Acceptance of the Preparation

(From The Journal A. M. A., June 5, 1909)

The Council having voted to rescind the acceptance of Migrainin and to omit it from New and Nonofficial Remedies (Appendix), directed publication of the report given below.

W. A. PUCKNER, Secretary.

SUPPLEMENTAL REPORT ON MIGRAININ

To the Council:—Koechl & Co., American agents for Migrainin (Meister Lucius & Bruning) asserted that this preparation was a mixture of antipyrin 85 parts, caffein 9 parts and citric acid 6 parts. The experiments of F. Zernik (*Apoth.-Ztg.*, 1906, p. 686), however, showed that Migrainin consisted of antipyrin 90.88 parts, caffein 8.4 parts and citric acid 0.45

parts. When the attention of Koechl & Co. was called to this they informed the Council, on June 20, 1907, that the formula they gave was given them direct by the manufacturers abroad and that they, Koechl & Co., did not question its accuracy. They, however, offered to "write abroad and have the manufacturers confirm the formula as given." On July 23, 1907, Koechl & Co. wrote the secretary of the Council that the manufacturers had informed them that Migrainin contains 90 per cent. antipyrin and 9.1 per cent. caffein citrate. This being an acknowledgment that the former statement submitted was incorrect, the Council voted that the approval of Migrainin should be reconsidered. Examination of the product, therefore, was taken up in the Association's laboratory and an original specimen, purchased in Chicago, was found to contain moisture 0.7 per cent., antipyrin 90.93 per cent., and instead of caffein citrate 9.1 per cent., citric acid 0.51 per cent., caffein 8.53 per cent.[1] This analysis agreed essentially with the composition of Migrainin as found by Zernik.

While the discrepancies between the statement of the firm and the facts are perhaps not great, nevertheless they show that even the formula last given is incorrect, and that the statements of Koechl & Co., while no doubt made in good faith, were in this instance unreliable.

In recent advertising matter issued by Koechl & Co., "phenozon-caffein citrate" is given as a synonym for Migrainin, one circular stating that "Migrainin is phenozon-caffein citrate," etc. In the same circular the following also appears: "In the treatment of migraine with phenacetin or antipyrin, the attack is delayed, while with Migrainin it is usually permanently stayed." This will, no doubt, lead physicians to infer that Migrainin is not a mixture of antipyrin and caffein citrate, but that it is some new compound. While the firm disclaims any intention to mislead, it does not offer

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1. Caffein citrate is readily hydrolyzed by water, but in the dry form the existence of three caffein citrates is possible as follows:

(1). $C_8H_{10}N_4O_2.C_6H_8O_7$ contains 50.28 per cent. caffein.
(2). $(C_8H_{10}N_4O_2)_2C_6H_8O_7$ contains 66.91 per cent. caffein.
(3). $(C_8H_{10}N_4O_2)_3C_6H_8O_7$ contains 75.18 per cent. caffein.

If the "caffein citrate" in Migrainin is present as in (1) there should, according to the statement of the manufacturer, be present 4.57 per cent. caffein; if as in (2), 6.08 per cent. caffein; if as in (3), 6.84 per cent. caffein: the quantity found is 8.53 per cent. If the caffein citrate is present as in (1), the citric acid present should be 4.53 per cent.; if as in (2), 3.02 per cent., and if as in (3), 2.26 per cent.: the citric acid found equals 0.51 per cent. This shows that the most recent statement of the firm, viz., that Migrainin contains 9.1 per cent. caffein citrate, is incorrect, no matter what interpretation is given to the meaning of the term caffein citrate.

to withdraw or modify this circular. It is recommended, therefore, that the approval of Migrainin be rescinded and that it be omitted from New and Nonofficial Remedies.

OXYCHLORINE

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., July 6, 1907, 54)

The following report on Oxychlorine has been submitted to the Council by the subcommittee to which it was assigned:

To the Council on Pharmacy and Chemistry:—Your subcommittee submits the following report: The Oxychlorine Chemical Company, 1326 Wabash Avenue, Chicago, states in its advtertising literature that:

"Chemically, Oxychlorine is the tetraborate of sodium and potassium combined with oxychlorid of boron, thus: 6 $(NaKB_4O_7)BOCl_3$."

Analysis of Oxychlorine showed:

Potassium	12.26 per cent.
Sodium	8.20 per cent.
Chloric acid—CLO_3	25.32 per cent.
Nitric acid—NO_3	21.70 per cent.
Boric acid anhydrid—B_2O_3	18.63 per cent.
Water, calculated	13.29 per cent.

Thus, Oxychlorine is not a definite chemical substance of the composition claimed, but instead is a mixture of alkali chlorate and nitrate with boric acid. Assuming that the chlorate is present as potassium chlorate and the nitrate as sodium nitrate, the analysis above quoted corresponds to a mixture approximately as follows:

Potassium chlorate	37.19
Sodium nitrate	29.76
Sodium and potassium tertraborate	2.18
Boric acid	30.52
Undetermined	0.35
	100.00

Your committee recommends that Oxychlorine be not approved and that this report be published.

The report of the subcommittee was adopted by the Council, and in accordance with the recommendation is published herewith. W. A. PUCKNER, Secretary.

In commenting on the above report it is hardly necessary to call attention to the palpable untruthfulness of the furnished formula, or to its lack of correspondence with the real composition of the preparation, to the imposing claims made by

its pseudo-scientific exploiters, or to the absurdities, from a chemical standpoint, of the statements made in their literature. These features are more or less common to all nostrums. The physician who prescribes or uses Oxychlorine under the impression that he is getting a definite and unique chemical compound described as tetraborate of sodium and potassium combined with oxychlorid of boron is, according to our chemists, getting simply a mixture of potassium chlorate, sodium nitrate (or, perhaps, sodium chlorate and potassium nitrate), and boric acid in about equal amounts. More than one-third of this mixture is potassium (or sodium) chlorate, a drug by no means harmless.

In order that there may be no suspicion of unfairness to the promoters of the preparation, we quote from one of the advertising circulars sent out by the Oxychlorine Company:

> "Oxychlorine owes its recognition as a therapeutic agent to its six principal qualities:
>
> "1. It will oxygenate the blood at the seat of application, maintain nutrition and heal an uninfected solution of continuity of first intention without scar formation.
>
> "2. It will disorganize all pus and ferment-producing micro-organisms, their toxins, ferments and ptomains.
>
> "3. It will restore an inflamed mucous membrane to its normal condition, except where the membrane is sclerosed or atrophied.
>
> "4. It will destroy pathogenic micro-organisms and their toxins in the blood current.
>
> "5. It will stimulate the blood to absorb more oxygen in the lungs than it at the time carries. [We do not know what this means; perhaps the Oxychlorine Company does.]
>
> "6. It is absolutely harmless to the tissues and will not destroy a living cell."

Surely these people must have access to physiologic and chemical authorities not found in modern medical libraries, or else their esoteric reseaches into the mysteries of life must have carried them far beyond the ken of our most advanced workers along these lines. The scientific world would receive with great interest information as to how a mixture of po-potassium chlorate, sodium nitrate and boric acid oxygenates blood, maintains nutrition and causes healing without scar formation. A mixture which will destroy micro-organisms and yet will not destroy a living cell certainly shows a fine sense of selection and discrimination not heretofore expected of a combination of chemicals or of a chemical compound. How like the wonderful elixir of medieval times, which was to the Christian a tonic and to the heathen a poison!

Here is another claim made for this nostrum:

> "Two or three rectal injections of a one or two per cent. solution of Oxychlorine and ten grain doses given six to eight times per day is the best and most reliable treatment for typhoid fever."

If eighty grains of Oxychlorine contain thirty grains of potassium chlorate, three rectal injections each consisting of one pint of 2 per cent. solution, would contain approximately 160 grains of potassium chlorate. Such an injection might prove decidedly dangerous, especially when used by one ignorant of its true composition. However, the physician, not the promoters, bears the responsibility.

Oxychlorine sells at $3.50 a pound; the ingredients can be obtained for about 44 cents a pound. Perhaps the margin of profit is intended as a reward due the promoters for the profound physiologic discoveries announced in their reading matter.

PAPAYANS BELL

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., Aug. 14, 1909)

The following report of a subcommittee was submitted to, and adopted by, the Council and its publication directed.

W. A. PUCKNER, Secretary.

Papayans (Bell) made by Bell & Co., Orangeburg, N. Y., is said to consist of the "digestive principle obtained by our own exclusive process from the fruit of *Carica papaya*, combined with willow charcoal, chemically pure sodium bicarbonate and aromatics." The following statement appears on the package: "For the treatment of dyspepsia, flatulence, nausea, vertigo, hyperacidity, palpitation and other symptoms of indigestion and the vomiting of pregnancy. Peritonitis, cholera morbus, alcoholism and seasickness." "Digests every variety of food, removes every symptom of indigestion, restores the entire digestive tract to a normal condition." The dosage is recommended as follows: "From one to three tablets before meals, or two hours after eating. In severe cases, three tablets dissolved in hot water and repeated as necessary."

A circular which accompanies the package details the therapeutic virtues of the preparation and contains what purports to be extracts from medical journals, in which Papayans is recommended.

Examination of specimens purchased in the open market showed them to contain the following ingredients: Charcoal, sodium bicarbonate, ginger, saccharin and oil of gaultheria. As the product is said to contain papain, the presence of en-

zymes was tested for, with the result that it was found to possess neither proteolytic nor amylolytic properties. The results of our examination are in accord with the results obtained by a member of the Council, who examined the product independently, and who writes:

"We have made some extended tests with Papayans Bell, and find that the tablets consist essentially of sodium bicarbonate and charcoal, with a little flavoring matter. We find no digesting power for starch or egg albumin. At any rate, no appreciable change follows in the albumin in three hours, and no conversion to sugar in the same time, or change of starch to a point where the iodin reaction is weakened. The product seems to be practically inert."

It is recommended that Papayans Bell be refused recognition, and that publication of this report be authorized.

COMMENT: It will be remembered that two other products of Messrs. Bell & Company have been discussed in this department: Salacetin (Bell)[1] and Sal-Codeia (Bell)[2]. Salacetin was examined with several "synthetics" which all turned out to be mere acetanilid mixtures. Salacetin, advertised as "a combination, with heat, of Salicylic and Glacial Acetic Acids and Phenylamine" when examined "was found to be a mixture and to contain the following ingredients approximately in the proportion given: Acetanilid, 43; sodium bicarbonate, 21; and ammonium carbonate, 20." Sal-Codeia (Salacetin-Codein) therefore, would be the same with codein added.

Papayans (Bell) seems to be consistently fulfilling the life-history of the average nostrum. Made of well-known drugs and invested by its manufacturers—or exploiters—with virtues absurdly disproportionate to the known properties of the alleged constituents of the nostrum, the preparation was introduced to the world *via* the medical profession. With the help of thoughtless physicians, aided by a skillful and aggressive advertising campaign and augmented by the "free sample" device, the business grew and prospered. The bottles with the name and address of the company blown in the glass and with the varied therapeutic indications for the nostrum printed both on the label and on a circular in which the bottle is wrapped, have carried the manufacturer's message to the drug-taking public.

Apropos of this point, the recent "literature" contains what purports to be endorsements of the nostrum by medical jour-

1. THE JOURNAL, June 3, 1905 and July 1, 1905; reprinted in the "Propaganda for Reform in Proprietary Medicines."
2. THE JOURNAL, Nov. 4, 1905; reprinted in the "Propaganda for Reform in Proprietary Medicines."

nals. Thus there is quoted from the *New York Medical Journal*, Jan. 2, 1909, in part, the following recommendation: ". . . we venture to suggest to our readers who have not tried this remedy that they prescribe one *original sealed package* of Papayans (Bell) and that they carefully note the results from its use." [Italics ours.—Ed.] Having seen an "original sealed package" we believe that we can predict the "results from its use." On any patient not mentally unbalanced, the result would be that the next dose of Papayans (Bell) he thought that he needed would be purchased from the druggist direct.

That such results are not hypothetical is evidenced by the statements of the exploiters of Papayans (Bell) that "the annual sale now exceeds four hundred million tablets." Assuming this statement to be true, it would be necessary for every physician in the United States to prescribe over three thousand of these tablets every year—if they reached patients only through the physician! The company's own figures indicate that the time is about ripe to take care of this vast army of self-drugging laymen and recent circular letters seem to recognize it. The physician is notified that druggists are now furnished with Papayans (Bell) "in sealed packages of thirty and one hundred tablets." The medical man is told that the firm has "not forgotten the days when physicians' orders made our success possible" and it says it is "sincerely grateful to the doctors who gave us orders in the days when we were struggling for recognition." This tacit admission of the value of the physician as an unpaid agent for nostrum houses should be given thought by those physicians who prescribe such preparations.

While, so far as we know, Bell & Co. have not yet advertised in the daily press, they are not averse to furnishing the laity with samples when requested. An Ohio physician sent us the following letter received by a young woman who had written asking for samples:

Miss X—— Y——,
Z——.

Dear Madam: As requested, we are mailing you sample of our Papayans (Bell) for Indigestion.

If a sufferer from Indigestion, we want you to give it a thorough trial as directed and note remarkable results that we believe you will get from its use.

Kindly write us if you are unable to obtain it from your local druggist, as it is stocked by nearly every good drugstore in the United States.

Yours truly,

Bell & Co.

Evidently Bell & Co., while admitting that their financial success is largely due to the kindly, though misguided, efforts of physicians, are not going to let a little thing like loyalty to the medical profession interfere with a possible sale of their tablets.

THE L. D. JOHNS COMPANY

A discussion of the methods of Bell & Company would not be complete without reference to a concern which seems to be closely connected with it: the L. D. Johns Company, whose "only product" is a sugar-coated laxative tablet. Regarding the "sugar coated" tablet, a visitor at the place of business of Bell & Company and the L. D. Johns Company, wrote: "These companies apparently are not in possession of any tablet coating machines and in questioning on this point stated that some of their tablets were sent out to be coated." There is a sameness regarding the claims for the laxative tablets of the two companies that might lead one to suspect that the same individual prepared both. For instance:

CASCARANS (BELL)	DR. JOHN'S TABLETS
"Taken as directed, it permanently removes the great majority of cases of habitual constipation."	"Taken as directed . . . permanently remove the great majority of cases of habitual constipation, torpid liver and sick headache."
" . . . a harmless vegetable preparation."	"A harmless vegetable remedy."
" . . . for the removal of pimples, yellowness and greasiness of the skin . . ."	" . . . removes pimples, blotches, sallowness and greasiness of the skin . . . "
" . . . one tablet at night, one night and morning, or, in severe cases, one three times a day, gradually decreasing the frequency of the dose as improvement permits."	"One at night, one night and morning, or, in severe cases, one three times a day. Gradually decrease the frequency of the dose as improvement permits."

According to a leaflet sent out with samples by the L. D. Johns Company, the company is capitalized for $500,000, divided into 50,000 shares at $10.00 each; these shares are sold to those physicians who will agree "to prescribe the tablets at every suitable opportunity, to introduce them to other physicians" and "to promote their sale in every ethical way"! If the list of physicians' names and addresses which the company sends out as comprising the eastern stockholders is to be relied on, it would seem that many medical men are promoting their sale. In prescribing it is, of course, "necessary to specify 'Dr. Johns'

Tablets No. XXX (*Original bottle*).'" As the name is on the bottle, it is not unbelievable that, as the company says in its prospectus, because of "our method of advertising, a large and very profitable business is being created." That the L. D. Johns Company expects to profit by the self-drugging which this method of prescribing fosters is evident:

"Physicians not stockholders in this company suffer from the continual refilling of their prescriptions and from the recommendation of the *preparation prescribed by patients* to others. [Italics ours.—ED.] Our stockholders *benefit* by the refilling of their prescriptions and by these recommendations."

Put baldly the case amounts to this: Physicians who prescribe "Dr. Johns' Tablets" not only are likely to foster self-drugging, but they will reap dividends therefrom. Truly a nice business to be in!

While Bell & Company and the L. D. Johns Company are said to be entirely distinct, they are to be found at the same address at Orangeburg, New York, and as will be seen, the officers of the two companies are more or less related.

BELL & CO.		L. D. JOHN CO.
PRESIDENT - -	JOHN L. DODGE -	PRESIDENT
SECRETARY - -	GEO. C. TENNANT	VICE-PRESIDENT
VICE-PRESIDENT -	CHAS. B. SMITH -	SEC'Y & TREASURER

EXPLOITING THE PROFESSION

Nostrum promoters have two simple ways of "working" the medical profession. The first—and the more profitable—is, by lavish distribution of free samples, to get physicians to prescribe the blown-in-the-glass "original package" with the inevitable result of large sales direct to the laity. By the second method, which is merely a modification of the first, the physician furnishes the capital for floating the nostrum and then takes his share of the resulting profits. There may not be quite as much money in the second method for the promoter, but then the risks are correspondingly less. If the firm fails, the stockholders are the losers; the promoter is not necessarily "out" anything. From a commercial standpoint, a combination of the two methods is, of course, ideal.

PEPSIN AND PANCREATIN

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., Feb. 2, 1907, 434)

In this report of the Council on Pharmacy and Chemistry attention was called to the incompatibility of pancreatin and pepsin. There are a large number of preparations claiming

to combine the virtues of these two substances as digestants which are absolutely worthless for this purpose. The two substances mutually destroy each other and when diastase is also present with pepsin they also mutually destroy each other. The subcommittee reporting recommended:

1. That the Council on Pharmacy and Chemistry refuse to approve liquid preparations that are claimed to contain both pepsin and pancreatin.
2. That the medical profession through THE JOURNAL of the American Medical Association be advised of the fallacy of employing such combinations.
3. That the attention of manufacturers be called to the worthlessness of such incompatible liquid preparations of pepsin and pancreatin, and that they be urged to cease offering such products to the profession.
4. That, since the National Formulary has recognized a preparation of this kind under the title "Elixir Digestivum Compositum," the American Pharmaceutical Association be requested to instruct its committee on the National Formulary to omit this preparation from the next edition.

A partial list of preparations on the market is appended, with quotations from text books showing the incompatibility.

PHENOL SODIQUE (Hance Bros. & White)

Report of Examination by Council on Pharmacy and Chemistry and Comments

(Abstracted from The Journal A. M. A., Nov. 9, 1907, 1617)

An examination of this article by a subcommittee of the Council on Pharmacy and Chemistry revealed unscrupulous claims which are a positive menace to public health. In view of this the Council has directed the publication of the following comments. W. A. PUCKNER, Secretary.

COMMENTS.

The preparation was not submitted to the Council by the manufacturers, but was taken up because it was extensively advertised and used. The advertisements show extravagant claims made for the preparation, and booklets advertising other of this firm's wares were found in the original package, as purchased in the open market. The booklets are entitled: "Dyspepsia," "Worm News," and "Catarrh," advertising "Dyspepsia Stop"—some form of dyspepsia tablets; a remedy for round worms, and "Catarrh Stop," apparently some mild antiseptic tablets. They are addressed frankly to the laity, although recourse to a physician is, generously, advised if the patient does not respond to treatment.

The folly of prescribing "original packages" which contain popular literature has been so often emphasized that further comment seems superfluous, but the following from "Catarrh" throws an interesting sidelight on the scientific status of Hance Bros. & White: "Catarrh is due to a minute insect in the inner lining membrane of the nose. This insect multiplies rapidly, and, unless checked and destroyed, will produce the worst results." The folder of Phenol Sodique is also evidently intended for the lay public rather than for physicians; at least, if we are to credit Hance Bros. & White with any intelligence whatsoever. It is headed: "Montyon Prize of Encouragement, Awarded by the Institute of France, 1861." This is rather ancient, but what follows indicates that a little restraint would have been better than encouragement. The circular is a compact treatise on self-medication—apparently all that is necessary to retain or regain health is the use of phenol sodique, externally and internally. The following conditions are among those specifically named as amenable to this remedy: Smallpox, measles, scarlatina, erysipelas, puerperal fever, typhoid fever, cholera, diarrhea, cramps, burns and scalds, bites, cuts and wounds, excoriations, chilblains, chaps, sore throat, scratches, catarrh, tetter, sunburn, swollen veins, ulcers, hemorrhages, bruises, piles, gangrene, carbuncle, itching, insect stings, ivy poison, cold in the head, bunions, inflamed eyes, eczema, ringworm, rheumatism, pains, toothache, seat worms, etc.—besides numerous diseases of animals. No antiseptic, whatever its composition, could by any possibility accomplish anything like what is claimed for phenol sodique, so that the composition of the article is really of little importance. This is evidently appreciated by the manufacturers, for they have kept the composition a profound secret, except in so far as it is implied in the name. An inquiry adressed to Hance Bros. & White under date of April 27, 1901, six months ago, has remained unanswered. The Council, therefore, directed an analysis of phenol sodique. This was carried out at the chemical laboratory of the American Medical Association, and a check analysis was made by an independent firm of chemists.

The analyses show that phenol sodique contains something like 0.5 or 0.66 per cent. of phenols dissolved in about 0.75 per cent. of sodium hydroxid. In other words, it appears to be essentially a very dilute alkaline solution of some impure coal-tar product, presumably of crude carbolic acid. The analysis could not profitably be carried further because the amount of antiseptic agent is so very small. The consideration of this analysis, in connection with the claim made for phenol sodique, leaves little doubt as to one reason for the secrecy concerning its composition; although no educated physician could be deceived into believing for a moment that phenol sodique could fulfill the promises of its promoters,

even if it were "the best antiseptic, hemostatic and disinfectant on the market," as the manufacturers say in their advertisements. From its composition, it can only have the very moderate and ordinary antiseptic qualities of a dilute phenol or cresol solution, modified only to a very slight extent by the free alkali.

RESINOIDS AND CONCENTRATIONS

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., Nov. 13, 1909)

In view of the fact that there is much misunderstanding as to the character of the so-called resinoids and concentrations, and also as to the meaning of the suffix "in," as used in pharmacology, it has been recommended that the following report be published. The recommendation was adopted.

W. A. PUCKNER, Secretary.

MISUSE OF THE ENDING "IN" AS APPLIED TO SO-CALLED RESINOIDS AND CONCENTRATIONS

The endings "in" and "ine" are commonly used in connection with the names of definite chemical substances. In naming the vegetable principles (substances), the ending "ine" has commonly been used to indicate basic (alkaloidal) substances and the ending "in" to identify non-basic (glucosidal, neutral, bitter) substances, and this system of nomenclature is followed in the U. S. Pharmacopeia. While both endings have thus been used to indicate definite, chemical substances much confusion has been caused by using the ending "in" in connection with a class of pharmaceutical preparations (galenicals) known as "resinoids" or "concentrations." This class of preparations is obtained by preparing an alcoholic tincture of a drug, reducing the tincture to a soft extract and collecting the precipitate which is formed when the extract is poured into water. "Podophyllin" may be taken as the type of this class of preparations. "Podophyllin" is not a definite chemical substance, as the ending "in" would imply, but a somewhat variable mixture of the resinous constituents of the drug podophyllum (Mandrake). The name "resin of podophyllum" applied in the U. S. Pharmacopeia to an almost identical product, is more rational. While the term "podophyllin," therefore, is unscientific and incorrect, it has been established through usage by which the term "in" has come to be applied to non-alkaloidal mixtures known to contain the active constituents of the drug, and in a measure has ceased to be misleading.

There is no justification, however, for a considerable number of titles included with "resinoids" or "concentrations" by some manufacturing pharmacists. While such drugs as juglans (butternut bark), aletris, baptisia, etc., do not contain any appreciable amount of resinous material and do not, therefore, owe to their resin, to any extent, any medicinal activity they may possess, yet the title, "juglandin," "aletrin," "baptisin," etc., are given by the manufacturers to the "concentrations" or "resinoids" of these drugs. From the general descriptions of the "concentrations" or "resinoids" which appear in the catalogs of the manufacturers referred to it is evident that they realize the inconsistency of their position in the matter, for the attempt is made to assign a new meaning to the terms "resinoid" or "concentration." Thus the following description of these products is found in the price list of a well-known manufacturing firm and agrees in general with the descriptions found in the price lists of other manufacturers of this class of preparations: "While some of these (resinoids and concentrations) represent a pure resin and others an impure alkaloid, by far the greater number are a combination of the various active proximate principles contained in the drug which they represent."

When it is considered that the chemical nature of the active principle or principles of the drugs, from which these preparations are made, if they possess any, has not been determined, the reliance which is to be placed on the claims of the manufacturers is obvious. While it is not definitely so stated, it is to be inferred from the descriptions that these products are, in the main, extractive preparations of the drugs. It should be noted, however, that the drug strength (the amount of drug represented by a given amount of the preparation) is not stated; such preparations are thus secret in their composition and should be classed with other preparations of unknown composition, that is, as nostrums.

SALIT

Report of the Council on Pharmacy and Chemistry Rescinding Acceptance of the Preparation

(From The Journal A. M. A., June 5, 1909)

The Council was advised that Salit (Heyden Chemical Works), a preparation which previously had been approved, was being advertised to the public in Germany, and that it

therefore should be classed with "patent medicines" intended for popular use. The following report was presented by a subcommittee:

SUPPLEMENTAL REPORT ON SALIT

To the Council:—The secretary reported to the Council that Salit is advertised to the laity abroad, but that the manufacturer had agreed that these advertisements should not appear in those foreign papers which are shipped to this country. The Council decided that in accordance with precedent the advertising of products in foreign lay journals should be held a conflict with the rules, and it voted that the acceptance of Salit be reconsidered. It is now recommended that Salit be refused recognition, and that it be omitted from New and Nonofficial Remedies.

The report was adopted by the Council and its publication directed. W. A. PUCKNER, Secretary.

SUCCUS ALTERANS

Report of the Council on Pharmacy and Chemistry

(From The Journal A. M. A., June 26, 1909)

The following report was adopted by the Council:

It is believed that unwarranted and exaggerated therapeutic claims are made for Succus Alterans by its manufacturers, Eli Lilly & Co., Indianapolis. In view of the disastrous results which may follow, if, from the statements made, physicians should be led to rely on the product as a treatment for syphilis, it is recommended that Succus Alterans be refused recognition and that this fact be published with comments.

W. A. PUCKNER, Secretary.

COMMENT: Succus alterans is a preparation which has been put on the market for some years by Eli Lilly & Co., as a remedy for syphilis. The serious character of this disease and especially the deplorable results that ensue from its improper or insufficient treatment, should make a firm hesitate to advise any treatment for it which experience has not demonstrated to be at least as efficacious as that which is generally accepted and well proved. Succus alterans is the result of a combination of circumstances; no one person is responsible for it. It was probably the natural desire for a remedy free from the occasional injurious results of mercury that led Dr. J. Marion Sims to advocate the use of a collection of indigenous American plant drugs, sarsaparilla, stillingia, xanthoxylum, etc., which had a local reputation for the cure of syphilis. These drugs are supposed to be inert when the dried

plants were used, and this gave an opportunity for the development of a nostrum. The ingredients are well known, but as their virtues are supposed to be lost in drying, the physician can not have his druggist compound them, but must, perforce, prescribe the proprietary combination.

Those who consented to experiment with the new remedy soon found that the claims to curative properties were unfounded, but the strong commercial interests backing it have prolonged its life to the present time. Authorities on syphilis either say nothing about the preparation or mention it merely to condemn; but the proprietors of the nostrum continue to assert that it is not only practically a specific in syphilis, but now recommend it for various derangements of the blood and all sorts of skin diseases.

This being the case, what shall the wise physician do? Shall he blindly follow an authority of a past generation or shall he recognize that the claims of an interested manufacturer ought not to weigh against the consensus of his present-day confrères who have given the treatment of syphilis their special attention? The exploitation of such a preparation is deserving of strong censure. By such methods the firm places itself on the same plane as those nostrum venders, who advertise certain antiseptic sprays and gargles as cures for epidemic meningitis and diphtheria and thereby deprive credulous victims of the curative antitoxin treatment. Succus alterans is not a new remedy on trial for its possibilities of improvement in therapeutics; it is an old mixture which has been tried and found wanting.

SULPHO-LYTHIN

(Abstracted from The Journal A. M. A., Dec. 8, 1906, 1931)

Sulpho-Lythin is sold by the Laine Chemical Company, New York. In the literature sent to physicians it is said: "This product, the sulpho-phosphite of sodium and lithium (non-effervescent), is entirely new and is unique in its action."

Chemical analysis of a specimen of Sulpho-Lythin purchased in the open market indicated its composition to be:

Sodium sulphate, anhydrous	10.51
Disodium hydrogen phosphate, anhydrous	56.67
Sodium thiosulphate, anhydrous	20.78
Sodium chlorid	5.98
Lithium, as citrate	3.12
Sulphur, free	0.16
Moisture	1.53
Loss	1.25

The examination, therefore, shows that Sulpho-Lythin is a mixture consisting mainly of sodium sulphate and sodium phosphate and sodium thiosulphate. The statement that it is a "sulpho-phosphite of sodium and lithium," therefore, is not correct, and a statement that "it is entirely new and unique in its action" appears unwarranted and misleading. It is, therefore, recommended that the preparation be refused recognition. It is also recommended that an article be prepared for publication calling attention to the exaggerated claims made for Sulpho-Lythin.

The recommendations of the subcommittee were adopted by the Council and in accordance therewith the report is published, with comments, substantially as follows: The formula means that it is a solution of well-known salts, some of them under partially disguised names. Every one knows what Glauber's salts are good for. Disodium hydrogen phosphate is ordinary common sodium phosphate. Sodium thiosulphate is familar as sodium hyposulphite, the "hypo" of the photographers. Every one knows, of course, that sodium chlorid is common salt. Examination and analysis of various specimens of this product demonstrated that its composition is not always the same. As an indication of the ignorance of the promoters of this nostrum it is interesting to note that the label on one of the bottles purchased states that it is a "sulphophosphate" instead of a sulphophosphite. Extravagant claims are made for this simple mixture of laxative salts, and these with the methods of using it are printed on the labels, and while it is claimed to be only advertised to the profession, the physician is repeatedly advised in the advertisements to "order always an original (six ounce) bottle to prevent substitution." The natural result of this would be, of course, to put the patient in the way of prescribing it for himself and to spread the advertisement of the drug among the public. Difficulty has been experienced in finding out who the promoters of this nostrum are and the correspondence in regard to it is published. They seem to prefer to be known by their corporate title of Laine Chemical Company only. It is a sample of many other so-called ethical proprietary drugs, most of which are simple mixtures of well-known drugs which physicians are using every day and which require no skill in their compounding. Their proprietors not only presume to sell and advertise medicines but also to tell the physicians how to treat their patients.

TYREE'S ANTISEPTIC POWDER

Report of the Council on Pharmacy and Chemistry with Comments

(Abstracted from The Journal A. M. A., Oct. 20, 1906, and May 18, 1907)

Tyree's antiseptic powder was assigned for examination to a subcommittee of the Council, which made the following report:

To the Council on Pharmacy and Chemistry:—Your subcommittee, to whom was assigned Tyree's Pulv. Antiseptic Comp., marketed by J. S. Tyree, Washington, D. C., reports as follows: The label on the package states: "This preparation is a scientific combination of borate of sodium, alumen, carbolic acid, glycerin and the crystallized principles of thyme, eucalyptus, gaultheria and mentha, in the form of a powder," etc.

The statement that the powder contains the crystalline principles of thyme, eucalyptus, gaultheria and mentha is vague and misleading, since the chief medical constituents of eucalyptus and gaultheria are liquids, but it tends to convey the impression that the powder contains the essential constituents of these drugs, namely, thymol, oil of eucalyptus or eucalyptol, oil of wintergreen, or methyl salicylate, and menthol.

The literature supplied to physicians *claims* its composition to be: "Parts, sod. bor., 50; alumien, 50; ac. carbol., 5; glycerin, 5; the cryst. principles of thyme, 5; eucalyptus, 5; gaultheria, 5, and mentha, 5."

The composition, therefore, might be expressed as follows:

Sodium borate (borax)	50 parts, or	38.46 per cent.
Alum	50 parts, or	38.46 per cent.
Phenol (carbolic acid)	5 parts, or	3.85 per cent.
Glycerin	5 parts, or	3.85 per cent.
Thymol	5 parts, or	3.85 per cent.
Oil of eucalyptus or eucalyptol	5 parts, or	3.85 per cent.
Oil of gaultheria (or methyl salicylate)	5 parts, or	3.85 per cent.
Menthol	5 parts, or	3.85 per cent.

Analysis of specimens purchased from different sources in the open market were made under our direction. The reports of the chemists show that Tyree's antiseptic powder contains no borax, or mere traces only, and that it contains no alum, or mere traces only. Instead, the analyses show that boric acid and zinc sulphate are the essential constituents. The amounts of carbolic acid, thymol, menthol, etc., contained in the powder, if present, were far below the quantities indicated by the formula. The presence of glycerin could not be demonstrated, and, if present, the amount must be very small.

One chemist reports: The result of analysis shows that different samples differ slightly in composition, but that the following indicates the average composition of the product:

	Per cent.
Zinc sulphate, anhydrous	15.56
Boric acid	81.26
Volatile matter at 100° C. for four hours	0.45

The undetermined portion consists of salicylic acid, carbolic acid, menthol and eucalyptol; possibly other antiseptic agents may be present in very minute quantities.

From the above findings we conclude that Tyree's antiseptic powder is a mixture of boric acid and dried zinc sulphate and antiseptic bodies, such as menthol, salicylic acid and carbolic acid, eucalyptol, etc. From this it can be readily seen that the label which is supposed to set forth the composition of Tyree's antiseptic powder is not in accord with the facts. The powder does not contain either borate of sodium or alum, and the presence of glycerin could not be established. The antiseptic agents, exclusive of the boric acid, are present only in small amounts.

The report of another analysis concludes as follows:

It evidently contains less than the amount stated of the principles of thyme, eucalyptus, wintergreen and mint. It also contains a very small amount indeed of carbolic acid, much less than that stated. We have been unable to identify certainly the presence of glycerin, and it is doubtful if it be present.

From the result of the analysis we feel confident that the preparation is to all intents and purposes a mixture of boric acid and sulphate of zinc.

The carbolic acid, thyme, eucalyptus, wintergreen, etc., if present, are present only in sufficient amount to give the compound a satisfactory odor.

In view of the fact that J. S. Tyree has given wide publicity to a formula which the preceding report has shown to be a deliberate misrepresentation of facts, it is recommended that the article be refused recognition by the Council on Pharmacy and Chemistry, and that this report be published in THE JOURNAL of the American Medical Association.

The recommendation of the subcommittee was adopted by the Council in accordance with which the report is published.

W. A. PUCKNER, Secretary.

Mr. Tyree, in a letter, says that it has been his intention to inform the medical profession of his reasons for changing the formula of Tyree's Antiseptic Powder from an alum and borax base to a boracic and zinc base. This change he says was made at the suggestion of prominent physicians connected with hospital clinics on nose and throat, venereal and other

conditions, and that he has had in contemplation the omission from the label of the various conditions to which the preparation is applicable. Apropos of Mr. Tyree's claim of having (it would appear recently) changed the composition of his preparation and intending to publish the fact, there was obtained from a Chicago druggist a sample which had been in his store at least since July, 1902, none having been bought since. This particular powder was analyzed by a chemist who found the composition practically the same as that given in the Council's report. Hence it would appear that Tyree's powder has been the same for at least four years and ten months. In a note it is remarked that the national Food and Drugs Act went into operation in January, 1907. One of its provisions is that the label must not lie. Instead of repeating the old formula the new label of Tyree's antiseptic powder contains nothing about the composition. The question is asked, why it is omitted?

URON AND THIALION

Report of the Council on Pharmacy and Chemistry

(Abstracted from The Journal A. M. A., Nov. 3, 1906, 1500)

The report on these drugs made by a subcommittee to the Council on Pharmacy and Chemistry follows:

To the Council on Pharmacy and Chemistry:—The following report on Uron is herewith submitted:

Uron is sold by the "Uron Chemical Co., Box A, St. Louis, Mo." In the literature distributed to physicians and in advertisements appearing in current medical journals $LiC_{13}H_7N_4O_2$ is given as the chemical formula of Uron. According to analyses, this article is not a chemical compound, but is a mixture of lithium benzoate and hexamethylenamin in approximately the following proportions:

Lithium benzoate	58 per cent.
Hexamethylenamin	42 per cent.

It is recommended that Uron be refused recognition and that this report be published.

To the Council on Pharmacy and Chemistry:—We beg leave to report on Thialion as follows:

Thialion is sold by the Vass Chemical Co., Danbury, Conn. In the literature supplied to physicians and in the advertise-

ments in medical journals, Thialion is stated to be "a laxative salt of lithia" with the chemical formula "$3Li_2O.NaO.SO_3.7HO$." "Sodio-trilithic anhydrosulphate" is given as a synonym. An elaborate graphic or structural formula is also given. According to analyses, this preparation is a mixture consisting chiefly of sodium sulphate and sodium citrate with very small amounts of lithium, the average of several estimations indicating the following composition:

Sodium citrate	58.6
Sodium sulphate, anhydrous	26.6
Sodium chlorid	3.3
Lithium citrate, anhydrous	1.8
Water	9.7

Thus, the advertising literature is a deliberate misrepresentation of the facts. It is, therefore, recommended that the preparation be refused recognition, and that this report be published.

The recommendations of the subcommittees were adopted by the Council and in accordance therewith the above reports are published.

W. A. PUCKNER, Secretary.

The chemical formula given for uron, $LiC_{18}H_7N_4O_2$, looks dignified and scientific but signifies nothing to a chemist, and it is surmised that it is the result of an attempt to combine the formulas of the two ingredients, i. e., $LiC_7H_5O_2$ and $C_6H_{12}N_4$, the addition being faulty. The graphic formula furnished by the Thialion concern is even worse. To a chemist it looks absurd though it may be impressive to one not versed in the science.

VIN MARIANI

Report of the Council on Pharmacy and Chemistry

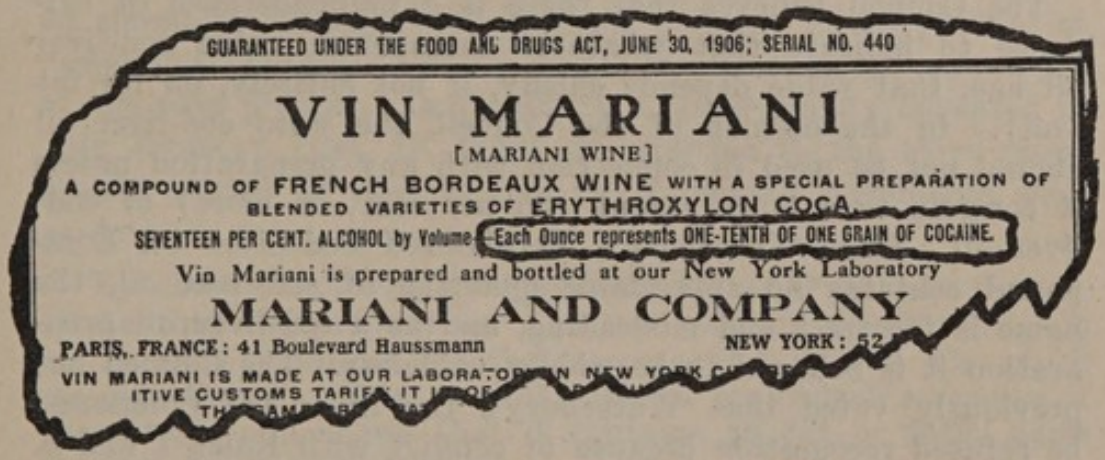
(Abstracted from The Journal A. M. A., Nov. 26, 1906, 1751)

Samples of Vin Mariani and of the literature distributed by the manufacturers were examined. It appears that the beverage or medicine known as "Vin Mariani" is a preparation of red wine, apparently imported from Bordeaux, and fortified, in this country, by an alcoholic preparation of coca leaves or other parts of the coca plant. The committee considered first, the character of the red wine as imported. A sample received from the port of New York, March 10, 1905, from Henry Clausel & Co., Bordeaux, and consigned to Mariani & Co., on analysis was found to have the following composition:

Specific gravity		0.9959
Alcohol by volume	per cent.	10.00
Extract	per cent.	2.279
Volatile acids	per cent.	0.0914
Ash	per cent.	0.2801
Reducing sugar		trace.
Pol. direct	degrees	—0.8
Pol. invert.	degrees	—0.7
K_2SO_4	Mg. per liter	0.092

A sample of Vin Mariani, as bought in the open market in an original package, has also been analyzed and found to have the following composition:

Specific gravity		1.0125
Alcohol by volume	per cent.	16.15
Extract	per cent.	8.602
Ash	per cent.	0.277
Glycerin	per cent.	0.444
Volatile acids	per cent.	0.0747
Tartaric acid	per cent.	0.2400
Alkaloids (coca bases)	per cent.	0.0250
Cane sugar	per cent.	2.35
Reducing sugar	per cent.	3.38


GUARANTEED UNDER THE FOOD AND DRUGS ACT, JUNE 30, 1906; SERIAL NO. 440

VIN MARIANI

[MARIANI WINE]

A COMPOUND OF FRENCH BORDEAUX WINE WITH A SPECIAL PREPARATION OF BLENDED VARIETIES OF ERYTHROXYLON COCA.

SEVENTEEN PER CENT. ALCOHOL by Volume—Each Ounce represents ONE-TENTH OF ONE GRAIN OF COCAINE.

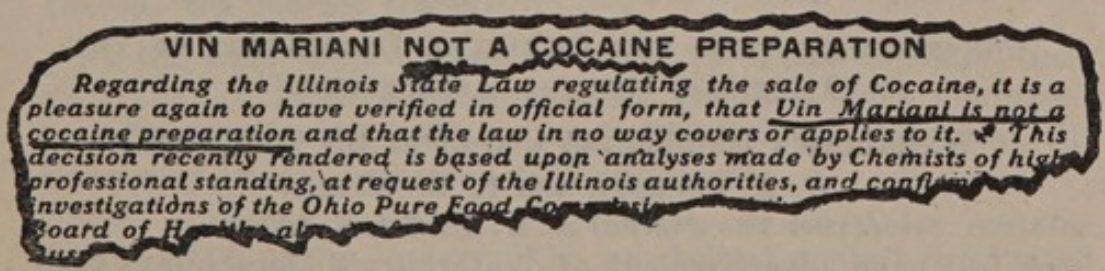
Vin Mariani is prepared and bottled at our New York Laboratory

MARIANI AND COMPANY

PARIS, FRANCE: 41 Boulevard Haussmann NEW YORK: 52

VIN MARIANI IS MADE AT OUR LABORATORY IN NEW YORK CITY

ITIVE CUSTOMS TARIFF IT IS


VIN MARIANI NOT A COCAINE PREPARATION

Regarding the Illinois State Law regulating the sale of Cocaine, it is a pleasure again to have verified in official form, that Vin Mariani is not a cocaine preparation and that the law in no way covers or applies to it. This decision recently rendered is based upon analyses made by Chemists of high professional standing, at request of the Illinois authorities, and confirming investigations of the Ohio Pure Food Commission

Judging from the analysis Vin Mariani corresponds to a mixture of an alcoholic extract from coca leaves and an ordinary Bordeaux red wine, with the addition of about 6 per cent. of sugar. The product is advertised in this country as being recommended by a host of eminent foreigners for almost everything, while abroad, illustrious Americans are similarly quoted.

WATERBURY'S METABOLIZED COD-LIVER OIL COMPOUND

Report of the Council on Pharmacy and Chemistry and Laboratory Contribution on Which It Is Based

(From The Journal A. M. A., Oct. 9, 1909)

The following report has been adopted by the Council and its publication directed.

W. A. PUCKNER, Secretary.

To the Council:—Your committee on pharmacology has read with interest the contribution from the Association's laboratory on Waterbury's Metabolized Cod-Liver Oil Compound. The report shows that misleading and false statements are made in regard to the composition of the product and also that exaggerated and unwarranted claims are made for its therapeutic value. In view of the attempt of the Waterbury Chemical Co. to create a false impression in regard to the therapeutic value of the composition of its product, it is recommended that the following report be adopted and published:

The Council believes that there is a preponderance of evidence to indicate that whatever therapeutic value cod-liver oil has, that value depends chiefly, if not entirely, on its fat (oil). In the opinion of the Council, the word cod-liver oil should not be used in connection with any preparation unless it consists to a large extent (25 per cent. or more) of cod-liver oil. Since Waterbury's Metabolized Cod-Liver Oil Compound contains no appreciable quantity of cod-liver oil, the name is incorrect and misleading, and as a cod-liver oil preparation it is believed to be wholly valueless. The Council has previously voted that Waterbury's Cod-Liver Oil Compound be refused recognition because of conflict with Rules 1 and 6.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

Waterbury's Metabolized Cod-Liver Oil Compound

W. A. PUCKNER AND L. E. WARREN

(From The Journal A. M. A., Oct. 9, 1909)

A full page advertisement of Waterbury's Metabolized Cod-Liver Oil Compound appeared in the *Iowa Medical Journal*, March 15, 1909, in the form of a letter purporting to give the results of an analysis of the product made for the firm by a Chicago chemist. In this letter-advertisement the chemist states at the outset that the results of his examination "are somewhat at variance with the statements made in THE JOURNAL." These statements he quotes as follows:

1. It is a clear liquid and no globules of oil are seen under the microscope. It is therefore not an emulsion.
2. It is of acid reaction when mixed with water and remains clear when strongly acidified. Hence it does not contain a soap, and is not a saponification of fat.
3. It mixes with water without precipitation, hence, it can not contain more than traces of a fatty acid.

The chemist admits in his letter to the firm that his analyses verify statements 1 and 3, but regarding statement 2 he says: "I find that your preparation is acid in reaction, but when strongly acidified gives a distinct turbidity within 10 minutes and a voluminous precipitate within 1 hour. This precipitate is shown to consist of fatty acids of cod-liver oil, which are thrown down by the splitting of the soaps, on acidifying either with sulphuric or hydrochloric acid." From these results he states that to him it seems that the "preparation does not deserve the statement that it contains no soap, as there is no question whatever of the presence of cod-liver oil."

While in the letter published in this advertisement the chemist claims to have demonstrated the presence in the product of "saponified cod-liver oil" he *omits to mention the quantities* of the soap present. In the article that originally appeared in THE JOURNAL (Oct. 13, 1906), in addition to the three paragraphs quoted by the chemist, the following statements were made:

"By these simple tests a physician is easily able to demonstrate that the preparation does not contain cod-liver oil. It is therefore valueless for the purpose of nutrition for which we give the oil. More careful analysis confirms the results of these tests and shows that it contains no fat or fatty acids (except the merest traces) . . ."

At the time these statements were published in THE JOURNAL, the *St. Paul Medical Journal*, October, 1906, contained an advertisement for Waterbury's Metabolized Cod-Liver Oil Compound, which contained this statement:

"The only tasteless preparation on the market which contains Cod-Liver Oil in its entirety. The metabolized product is obtained by the action of digestive ferments on pure Cod-Liver Oil."

In the *Ohio Medical Journal* of Feb. 15, 1907, there appeared in the form of an advertisement what purported to be an analysis of Waterbury's Metabolized Cod-Liver Oil Compound by Prof. C. N. Kinney of Drake University. While Professor Kinney made a quantitative analysis of the preparation the quantities were omitted from the analysis as pub-

lished. A footnote added by the Waterbury Chemical Company called attention to this fact and closed as follows:

"Any physician who is not satisfied with the analysis we will be only too glad to furnish the complete analysis by our representatives."

If this weirdly constructed sentence meant anything, it meant that the complete analysis would be furnished on request. Such requests to the company, however, from various sources failed to elicit the information required nor was the "complete analysis" forthcoming. The inference to be drawn is fairly plain.

In a circular accompanying the product as sold at present, this statement occurs:

WATERBURY'S
METABOLIZED COD LIVER OIL COMPOUND
WITH CREOSOTE AND GUAIACOL OR PLAIN

DOES CONTAIN COD LIVER OIL
DOES ALLAY FERMENTATION
DOES AID DIGESTION
DOES ASSIST ASSIMILATION
BUT DOES NOT DISTURB THE STOMACH

As previous examinations disclosed only the merest traces of cod-liver oil in the product while claims were made that it "represents cod-liver oil in its entirety," and in view of the fact, too, that present advertisements emphatically declare that cod-liver oil is present in the preparation as now sold, it was thought best to examine some of the preparation with especial reference to the quantities of fatty acids from cod-liver oil.

The results of the examination are breifly as follows: The total quantity of acids isolated amounted to about 0.3 per cent., and of this amount about two-thirds was *salicylic acid.* Thus it appears from the examination of the specimens bought on the open market that the preparation contains at most but 0.1 per cent. of the fatty acids from cod-liver oil, a totally insignificant quantity.

Notwithstanding the protestations by the manufacturers, in the form of published analyses and circulars, it is seen that the statements published in THE JOURNAL, Oct. 13, 1906, p. 1207, are essentially substantiated; it is further evident that the product does not deserve to be designated as a cod-liver oil preparation. To obtain a medicinal dose of cod-liver oil the patient would be compelled to swallow the contents of a bottle of this mixture, and as, the product contains 11 per cent. alcohol the patient who did so would probably experience a degree of exhilaration not referable to cod-liver oil.

PART II.

CONTRIBUTIONS FROM THE CHEMICAL LABORATORY.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

ANUSOL HEMORRHOIDAL SUPPOSITORIES

W. A. Puckner and L. E. Warren

(From The Journal A .M. A., Oct. 2, 1909)

An abstract of an article concerning "anusol suppositories" was published in THE JOURNAL, Jan. 23, 1909. This gave the results of an analysis by a foreign chemist, J. F. Suyver, which were to the effect that "anusol suppositories" contained no "anusol." Schering & Glatz, the American agents for "anusol" suppositories, took exceptions to the abstract, asked that THE JOURNAL retract, and submitted the findings of a chemist in support of their claim that the suppositories do contain "anusol." To determine the composition of "anusol hemorrhoidal suppositories" as they are found on the American market, trade packages were purchased (April 6, 1909) and submitted to examination[1] in the Association's laboratory.

According to the claims of the manufacturers, 12 suppositories contain:

"Anusoli	7.5 grams
"Zinc oxid	6.0 grams
"Balsam Peruv	1.5 grams
"Ol. theobrom	19.0 grams
"Ungt. cerat	2.5 grams"

Calculated to percentages the formula reads:

Anusoli	20.54 per cent.
Zinc oxid	16.44 per cent.
Balsam Peruv	4.11 per cent.
Ol. theobrom	52.06 per cent.
Ungt. cerat	6.85 per cent.

When this product was submitted to the Council some time ago, Schering & Glatz stated that, according to the manu-

1. Details of the quantitative analysis of "Anusol Hemorrhoidal Suppositories" will appear in the annual report of the Chemical Laboratory of the American Medical Association, or they may be had on request.

facturer, "anusol" is the "iodo resorcin sulphonate of bismuth, having the following rational formula: $[C_6H_2ISO_2.O(OH)_2]_3Bi$. In the meta-dioxybenzol $C_6H_4(OH)_2$, the resorcin, one H has been replaced by one I, and for another H the sulfonic-acid group So_2-OH has been substituted, so that meta-dioxybenzol is transformed into $C_6H_2ISO_2$-$OH(OH)_2$. In the sulfonic acid the H of OH is replaced by Bi and, as Bi is trivalent the above rational formula results."

According to this formula "anusol" should contain:

Iodin	32.99 per cent.
Sulphur	8.34 per cent.
Bismuth	18.07 per cent.

And the "anusol" suppositories should contain:

Iodin	6.77 per cent.
Sulphur	1.71 per cent.
Bismuth	3.71 per cent.

Examination showed that the suppositories contain about 0.08 per cent. iodin, or 1.2 per cent. of the amount claimed; 0.28 per cent. sulphur, or 16.3 per cent. of what is claimed; 0.71 per cent. bismuth, or 19 per cent of what is claimed; and zinc equivalent to 16.5 per cent. zinc oxid, or about 100 per cent. of claim.

From the standpoint of the iodin content alone, assuming that all of the iodin found is present in the form of "anusol," the results of the examination of the product (as found on the American market) verifies, for all practical purposes, Suyver's statement that "anusol suppositories contain no anusol," for the quantity of iodin present is so minute (about 1/82 of that required by the formula) as to be unworthy of serious consideration. The presence of sulphid in appreciable amounts was demonstrated showing that the sulphur is present, at least in part, in the form of sulphid and not as sulphonate as is claimed. In a measure, too, this is in accord with the findings of Suyver, who concluded that, in the product which he examined, the bismuth was present in the form of sulphid. The proportions of sulphur and of bismuth (respectively about 1/6 and 1/5 of the required amounts) indicate still further that the product is not all that it is claimed to be.

A specimen submitted by Schering & Glatz to the Council two years ago contained 0.09 per cent. iodin, or 1.3 per cent. of the amount claimed; 0.23 per cent. sulphur, or 13.4 per cent. of the claimed amount; and 0.52 per cent. bismuth, or 14 per cent. of what is claimed by the formula. Since the above determinations were made another specimen of Anusol Hemorrhoidal Suppositories was received from Schering &

Glatz, July 16, 1909. This sample was found to contain about: 0.075 per cent. iodin, or 1.1 per cent. of the amount required by the formula; 0.265 per cent. of sulphur, or 15.5 per cent. of the requirement and 0.88 per cent. bismuth, or 23.7 per cent. of the required amount. It will thus be seen that the composition of the oldest specimen and also that of the specimen recently sent, corresponds in a general way with that of the one first examined.

Whether judgment be based on the determination of the bismuth, the sulphur or the iodin, the results just given clearly show that the claims made concerning the composition of "Anusol Hemorrhoidal Suppositories" are not substantiated by the facts.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

BRUSH'S REMEDY FOR SEASICKNESS

W. A. Puckner and W. S. Hilpert

(From The Journal A. M. A., May 15, 1909)

As a number of inquiries have been received regarding a much advertised "Brush's Remedy for Seasickness," the preparation was subjected to analysis in the Association's laboratory. The report follows:

"Brush's Remedy for Seasickness" is sold in five-ounce bottles in which are blown the name and the use of the preparation. Besides giving the name and use of the preparation, the label contains the following statement:

"It is confidently claimed that this preparation will prevent seasickness and carsickness if used strictly in accordance with the following directions:

"A dessertspoonful in a wineglass of water every three hours commencing at least 24 hours before sailing and repeating the dose occasionally during the voyage.

"The Brush Chemical Co., New York, N. Y."

A small vivid red pamphlet that goes with the bottle more fully elaborates on the claimed virtues of the "remedy." The following are specimen statements taken at random from the pamphlet:

"The only known specific that will invariably prevent *mal de mer.*"

"Seasickness positively prevented."

" . . . is totally harmless and has not the slightest unpleasant effect on the heart or circulation."

In addition to other equally broad statements and comments, several testimonials are given to convince the skeptical.

The "remedy" is a light yellow liquid, without odor, but with a decidedly acid taste. Qualitative tests demonstrated the presence of citric acid and sodium bromid, but the presence of other acids, metallic radicles or any alkaloids could not be denmonstrated. Quantitative determinations showed the presence of 14.94 gm. sodium bromid and 2.71 gm. citric acid per 100 c.c. of the preparation. A small quantity of an organic coloring matter was also found.

From the results of the chemical analysis of "Brush's Remedy for Seasickness," it is concluded that it is essentially a solution of citric acid and sodium bromid, and hence has the value only of these ingredients.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

BURNHAM'S SOLUBLE IODIN

W. A. Puckner and A. H. Clark

(Abstracted from The Journal A. M. A., March 28, 1908)

An analysis of Burnham's soluble iodin, according to its manufacturers one of the most notable discoveries of the age, was made in the Laboratory of the American Medical Association. The results, which agree with those obtained by Wilbert and others (Proc. Am. Pharm. Assn., 1903, li, 409), indicate that Burnham's soluble iodin is a solution of iodin in alcohol made miscible with water by the presence of some iodid. It is true that this is not potassium iodid and is not, entirely at least, hydrogen iodid (hydriodic acid), but this is of slight importance compared with the fact that it is a solution in alcohol of free iodin and an iodid and, therefore, is essentially the same as Lugol's solution. It is of interest also to note that the amount of free iodin is not constant: analysis showed that one specimen, after standing for a month, contained nearly 40 per cent. more free iodin than it did when first purchased. The amount of iodin found corresponds approximately to 3.0 gm. of free iodin and 2.0 gm. of combined iodin in 100 c.c. of the solution. Lugol's solution contains 5.0 gm. of free iodin and 10.0 gm. potassium iodid in 100 c.c. Burnham's soluble iodin tablets, each said to contain three minims of Burnham's soluble iodin, were also analyzed. The details of this analysis show that the tablets contain approximately one-fourth the amount of free iodin and approximately two-thirds the amount of total iodin that should be contained to agree with the label. The outcome of the analyses is not a surprise, since the extravagant claims made by the Burnham Soluble Iodin Company are enough to condemn their product.

Physicians will be perfectly justified in looking with suspicion on all such unscientific claims of specially important secrets possessed only by drug manufacturers, especially when not substantiated by painstaking analyses. Whenever it is desired to administer free iodin, Lugol's solution (Liquor Iodi Compositus, U. S. P., Physician's Manual, p. 84) is an inexpensive and perfectly available preparation.

[Contribution from the Chemical Laboratory of the American Medical Association]

"HYDROCYANATE OF IRON—TILDEN"

W. A. Puckner and W. S. Hilpert

(From The Journal A. M. A., June 19, 1909)

Among the many inquiries received regarding the composition of secret remedies was one in reference to "Hydrocyanate of Iron" manufactured by The Tilden Company, New Lebanon, N. Y. This preparation is advertised as being "unexcelled as a remedy for epilepsy, hysteria, chorea, neurasthenia, locomotor ataxia, neuralgia, migraine, anemic headaches, and all convulsive or reflex neuroses dependent on impairment of the brain or spinal cord." It is also said to be "valuable in uterine reflex neuroses due to congestion; in amenorrhea due to anemia and chlorosis and suppressed menstruation."

The term "hydrocyanate of iron" is an unfamiliar one and is not found in any available reference work on chemistry. Thinking that the term might have been loosely applied to ferrocyanid of iron, or Prussian blue (a compound once suggested for epilepsy, but long ago considered useless), the correspondent wrote to the manufacturers asking if such were the case. The Tilden Company answered:

> " . . . our preparation Hydrocyanate of Iron is not Prussian blue in any sense of the word. Prussian blue has no curative properties as applied to all forms of epilepsy. Prussian blue is Ferrocyanid of Iron while our preparation is Hydrocyanate of Iron."

The only statements in the Tilden Company's advertising matter, regarding the composition of hydrocyanate of iron are the following:

> "Hydrocyanate of Iron (Tilden's) is a correct and scientific combination of well known principles."
>
> "Hydrocyanate of Iron (Tilden's) combines well known properties of ferruginous salts with the sedative action of Hydrocyanic acid."

The last statement would lead one to expect the presence of available iron and cyanogen ions. In fact, the in-

ference to be drawn from all the company's "literature" is that "hydrocyanate of iron" is a definite chemical compound in the same sense as is ferrocyanid of iron, and that inference is still further borne out in the letter to our correspondent. This being the case, the Tilden Company was again written to and asked for the chemical formula of "hydrocyanate of iron," with the following result:

"Replying to your inquiry regarding the formula of Hydrocyanate of Iron we beg to state the composition of this preparation is a trade secret and we therefore do not care to furnish the desired information."

This reply verified the opinion already formed that "hydrocyanate of iron" is a secret preparation. Its analysis was then taken up in the Association's laboratory.

EXAMINATION OF THE TABLETS

The product appears on the market in cartons said to contain one ounce of one-grain tablets. On the cartons, in addition to the name of the preparation and the name and address of the manufacturers, are the names of diseases for which it is recommended. The tablets, in the specimens analyzed, were dark blue, rather hard and slightly bitter in taste and had an average weight of 0.1382 gm., or about 2 grains. They were found to be practically insoluble in water and dilute mineral acids; aqueous oxalic acid solution partially dissolved them, yielding a blue solution. Boiling with alkali hydroxid solution decomposed the tablets, yielding iron in an insoluble form and a solution of alkali ferrocyanid, as demonstrated by the appearance of a deep blue precipitate on the addition of ferric chlorid solution. The portion insoluble in alkali when boiled with hydrochloric acid yielded a solution containing iron, approximately equivalent to 50 per cent. Prussian blue. These properties are all characteristic of Prussian blue and, taken together, identify Prussian blue as a constituent of "hydrocyanate of iron (Tilden.)" The insoluble residue from the iron determination possessed the properties and constituents of talc and constituted practically one-half of the tablets. Extraction of the tablets with chloroform or ether in the presence of ammonium hydroxid yielded a small amount of organic material which contained bodies having the properties of, and responding to tests for, quinin or cinchona alkaloids and caffein. The presence of a salicylate was also indicated.[1]

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1. Details of the quantitative analysis of "Hydrocyanate of Iron—Tilden" will appear in the Annual Report of the Chemical Laboratory of the American Medical Association or they may be had on request.

From the analysis it is concluded that "hydrocyanate of iron (Tilden)" is essentially a mixture of approximately equal parts of talc and Prussian blue, containing traces of organic matter having the general properties of alkaloids.

COMMENT: When a firm exploits an abandoned remedy for so hopeless a disease as epilepsy under a name not known to chemistry and with a false representation of its pharmacologic qualities, such action may rightly be assumed to show ignorance or worse. "Hydrocyanate of iron," if it means anything, means the cyanid of iron, but the preparation put out under that name is, according to our chemists, not cyanid of iron, but the ferrocyanid of iron commonly known as Prussian blue. This substance has been tried for epilepsy and abandoned. Yet the firm recommends it as a "peerless remedy" for this disease. "The Tilden Company holds the key to the situation in the treatment of epilepsy. We have the remedy that does the work."

Not that epilepsy is the only disease for which this hypothetical chemical compound may be prescribed. Torticollis has been "successfully treated with hydrocyanate of iron." In chorea, we are told "a richer and better blood supply" should be furnished the nervous and vascular system and "the irritation of the motor centers" must be allayed.

"Hydrocyanate of iron serves admirably to accomplish both of these purposes. It carries the hemoglobin to the blood in its most easily assimilable form and its hydrocyanic acid possesses remarkable sedative powers . . . . "

It is not possible for it to have any value in anemia because of its insolubility, yet we are told:

"In conditions marked by poverty of the blood producing anemia or chlorosis, reacting on the nervous system and calling for a chalybeate, hydrocyanate of iron (Tilden's) takes a front rank among the remedies of this class, combining as it does the blood enriching qualities of ferrum with the sedative action of hydrocyanic acid."

As Prussian blue yields no appreciable quantity of hydrocyanic acid under the conditions existing in the animal organism, "the sedative action of hydrocyanic acid" must be as hypothetical as the chalybeate properties attributed to it.

It is strange that a manufacturer, in introducing a new chemical compound, should have to assure his customers that it "contains no opium or alkaloid, of that drug, cocain, chloral hydrate, conium or any of the bromids." Imagine a firm putting, let us say, potassium iodid—a definite chemical compound—on the market and solemnly guaranteeing that it contained no cocain or chloral hydrate!

Would the Tilden Company of twenty-five years ago have served such mental pabulum in its advertising matter?

One would think that the dictates of common humanity would protect the unfortunate epileptic from the machinations of the nostrum maker, especially from the exploitation of a remedy that has been tried and found wanting. A nostrum, however, merely has to measure up to one standard: Will it pay? Meeting this requirement nothing else matters.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

LABEL AND CONTENTS

Discrepancies Found in Estimating Sodium and Potassium in Pharmaceutical Mixtures

W. A. PUCKNER

(From The Journal A. M. A., Nov. 6, 1909)

The Council on Pharmacy and Chemistry submitted to the laboratory for examination a proprietary alkaline elixir of rhubarb which, according to the label, contained among numerous other ingredients, 20 grains of potassium bicarbonate to each fluid ounce. As a result of the laboratory analysis[1] it was reported to the Council that if all the potassium in the preparation was present in the form of the bicarbonate, the amount of potassium bicarbonate thus indicated was less than 2 grains per fluidounce instead of 20 grains as given on the label. In fact the examination seemed to show that practically all the bicarbonate was present as sodium bicarbonate, a result that the present—modified—label on the product bears out.

The explanation offered by the firm regarding the discrepancy between the statement on the labels and the facts as brought out by the laboratory analysis was as follows:

"The original formula called for potassium bicarbonate as printed on the label, but acting on the advices of a number of physician friends, we substituted sodium bicarbonate for part of potassium bicarbonate and reduced the total alkalinity about one-half. . . . In publishing the formula we went back to the original record on file in the office and the dis-

1. Details of the analytical method pursued in estimating the amount of sodium and potassium in the presence of organic matter will appear in the annual report of the Chemical Laboratory of the American Medical Association.

crepancy which you have noticed is due to lack of co-ordination between the various departments."

The name of the firm putting out this preparation is not published as the label has been changed to conform with the facts. The matter is referred to for the specific purpose of calling attention to the need of some sort of control or oversight of non-official pharmaceutical products. The Council on Pharmacy and Chemistry, with the aid of the Association's laboratory, has repeatedly brought to light both the lack of uniformity of composition and the discrepancies between labels and contents that exists in many proprietary preparations; these, too, emanating from some of the more reliable firms. What the state of affairs must be in the case of those proprietaries put out by the pseudo-pharmaceutical houses which have no reputation at stake, can better be imagined than described. If the Council and the Association's laboratory have accomplished nothing more than the awakening of manufacturers to the fact that the physician demands that he shall know just what he is giving his patient, these bodies have more than justified their reason to be.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

MERCURIC IODID SOLUTIONS FOR INTRAMUSCULAR INJECTIONS

W. A. Puckner

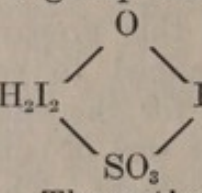
(From The Journal A. M. A., Feb. 13, 1909)

In view of the interest in the intramuscular injection of mercury compounds in general, and of mercury sozoiodolate in particular,[1] the result of an examination of a sample of this drug is worthy of comment. Dr. Archibald Church, professor of nervous diseases in Northwestern University Medical School, submitted this sample, stating that it was said to be a solution of mercury sozoiodolate, and that he had had eminently satisfactory results in using it by intramuscular injection.

MERCURY SOZOIODOLATE

The substance sold under this name is said to be the mercury salt of di-iodo-phenol-sulphonic acid, $C_6H_2.OH.I_2.HSO_3$, in

1. THE JOURNAL A. M. A., Sept. 15, 1906, p. 881; Sept. 5, 1908, p. 859; Dec. 5, 1908, p. 1990.

which one atom of mercury has replaced the hydrogen of the sulphonic acid group and of the phenol group, yielding the compound of  (L. Rosenthaler, Neue Arzneimittel, p. 110). Theoretically, it should contain 40.67 per cent. iodin and 32.06 per cent. mercury. This mercury compound is said to be insoluble in water, but soluble in solutions of chlorids, bromids or iodids. Examination of a specimen obtained from Merck & Co., indicated that the mercury and iodin content agreed essentially with the theory and its insolubility in water and solubility in a solution of iodids was also confirmed.

SOLUTION MERCURY SOZOIODOLATE

In the solution which was submitted for examination, sodium and mercury were the only metallic elements found. From an estimation of the mercury, the sodium and the iodin contents, it was concluded that 100 c.c. of the solutions contained approximately one gram of mercury sozoiodolate and somewhat less than three grams of sodium iodid. A solution obtained by dissolving one gram of mercury compound in three grams sodium iodid and sufficient water to make 100 c.c. corresponded closely in its chemical behavior and composition to the solution submitted for examination.

SOLUTION SODIUM MERCURIC IODID

When a mercuric compound is treated with alkali iodids, a complex salt, an alkali mercuric-iodid results (see New and Nonofficial Remedies, 1909, page 94). If a mercurous compound is treated with iodid, some of the mercury is changed to alkali-mercuric iodid, and part is reduced to the metallic state. From this it would seem that when mercury sozoiodolate is dissolved in sodium iodid, the compound is decomposed and the solution contains sodium mercuric iodid. The behavior of the mercury sozoiodolate when in the process of solution appears in every way to confirm this. If this is the case, the question at once arises, why should not mercuric iodid be used in the place of the organic mercury compound, since the efficacy of mercuric iodid has been firmly established? With this in mind, a solution was prepared containing an amount of mercuric iodid approximately equivalent in mercury content to the 1 per cent. mercury sozoiodolate so-

lution, viz.: mercuric iodid 0.8 gm., sodium iodid 3 gm., water sufficient to make 100 c.c. This solution was submitted to Dr. Church, who reports that preliminary trials indicate that the solution possesses all the advantages of the solution of mercury sozoiodolate.

This matter is published in the hope that others who are interested in the subject and who have had unsatisfactory results with other mercury solutions may give this formula a trial:

℞.	gm.	or	c.c.
Hydrargyri Iodidi Rubri.....	8		gr. xii
Sodii Iodidi	3	or	gr. xlv
Aquæ 100			f℥ iiiss

The solution may be prepared by any competent pharmacist and the physician will be certain of its mercury content. If this solution is well borne and is therapeutically equal to the solution of mercury sozoiodolate, it again illustrates the frequently demonstrated fact that a complex organic compound is not necessarily superior to a well-known drug of firmly established value. In the case under discussion, physicians have presumed that they were using a new and wonderful mercury compound, when in reality the process of dissolving the drug had decomposed it into the well-known mercuric iodid.

[Contribution from the Chemical Laboratory of the American Medical Association]

POSLAM

W. A. Puckner and W. S. Hilpert

(From The Journal A. M. A., May 22, 1909)

A number of inquiries having been received regarding the composition of "Poslam," the preparation was examined in the Association's laboratory. It is evident, from the letters received, that this nostrum is widely advertised. As physicians are likely to be questioned by their patients as to the therapeutic value, or lack of value of "Poslam," it is desirable that they should be in a position to express an intelligent opinion on the subject.

EXAMINATION OF THE PRODUCT

The preparation is found on the market in small three-quarter ounce "trial" tins, and in 5½ ounce jars bearing the

name "Poslam," and the name of the manufacturers, "The Emergency Laboratories, 32 West Twenty-fifth street, New York City," with descriptive matter, in which it is stated that *"the success of Poslam in the cure of eczema and all kindred skin diseases has been absolute. . . ."*

Poslam as examined in the Association laboratory was found to be a gray ointment of the consistency of petrolatum and possessing an odor of oil of tar. Qualitative examination demonstrated the presence of zinc oxid, sulphur, starch, tar oil, menthol, salicylic acid and a fatty base, probably petrolatum. From the results of quantitative estimations it was concluded that the composition of Poslam was essentially as follows:

Zinc oxid	12.01 parts
Sulphur	6.67 parts
Corn starch	22.00 parts
Tar oil	15.18 parts
Menthol, Salicylic acid	Small quantity of each
Fatty base q. s.	100 parts

From the results of the analysis it can be seen that the preparation depends for its action on such simple remedies as zinc oxid, sulphur and oil of tar. These have long been used and known as more or less effectual remedies for the treatment of skin affections, but certainly do not warrant such claims as are made in the advertising matter sent out with poslam stating it to be "The newest medical discovery for the treatment of eczema and all other skin affections" and " . . . entirely different from anything yet used . . ."

[Contribution from the Chemical Laboratory of the American Medical Association]

SALIODIN

W. A. Puckner and A. H. Clark

(From The Journal A. M. A., Oct. 26, 1907, 1454)

[The Council on Pharmacy and Chemistry refused recognition to Saliodin because it conflicted with Rules 1 and 6, and directed publication of the following:

W. A. Puckner, Secretary.]

Saliodin is sold by the Saliodin Chemical Co., Scranton, Pa. In the literature and on the trade package the following "formula" is given:

FORMULA

Each Grs. XX of Saliodin contains approximately:

℞

Salicylic Acid, (Aceto—Salicylate)	- -	Grs. XV
Iodine, (Iodate) Equivalent to Iodide Potass		Grs. XV
Acetic Acid, (Acetate) Equiv. to Acetate Potass		Grs. V
Aconite - Equiv. to		Tr. Aconite R. Gtts. IV
Bryonia - - "	"	Tr. Bryonia, Gtts. V
Colchicum - "	"	Vin. Colchicum R. Gtts. XV
Capsicum - "	"	- Tr. Capsicum Gtts. II
Oil Gaultheria "	"	- - - - ♏ III

This formula being indefinite and vague, the examination of saliodin was taken up in the Association laboratory.

From the analysis we calculate the composition of saliodin to be approximately equivalent to a mixture of:

Sodium salicylate	57.54
Potassium iodid	1.18
Potassium acetate	30.00
Matter volatile at 130° (oil of anise, oil of gaultheria, moisture, etc.)	8.10
Undetermined (extractive?)	3.18
	100.00

The analysis shows that the formula is not only indefinite and vague, but incorrect and false.

To emphasize the incorrectness of the published formula the following comment on the first two items is offered:

In the "formula" it is stated that 20 grains of saliodin contain approximately "salicylic acid (aceto-salicylate) Grs. XV." The statement is not clear, but conveys the impression that 20 grains of saliodin contain an amount of an aceto-salicylate, a salt of acetyl-salicylic acid (aspirin), equivalent to 15 grains of salicylic acid. But the chemical examination shows that it contains neither acetyl-salicylic acid, or salt of acetyl-salicylic acid, nor even salicylic acid itself. In the place of these, the analysis shows that over half of saliodin is the common, every-day sodium salicylate.

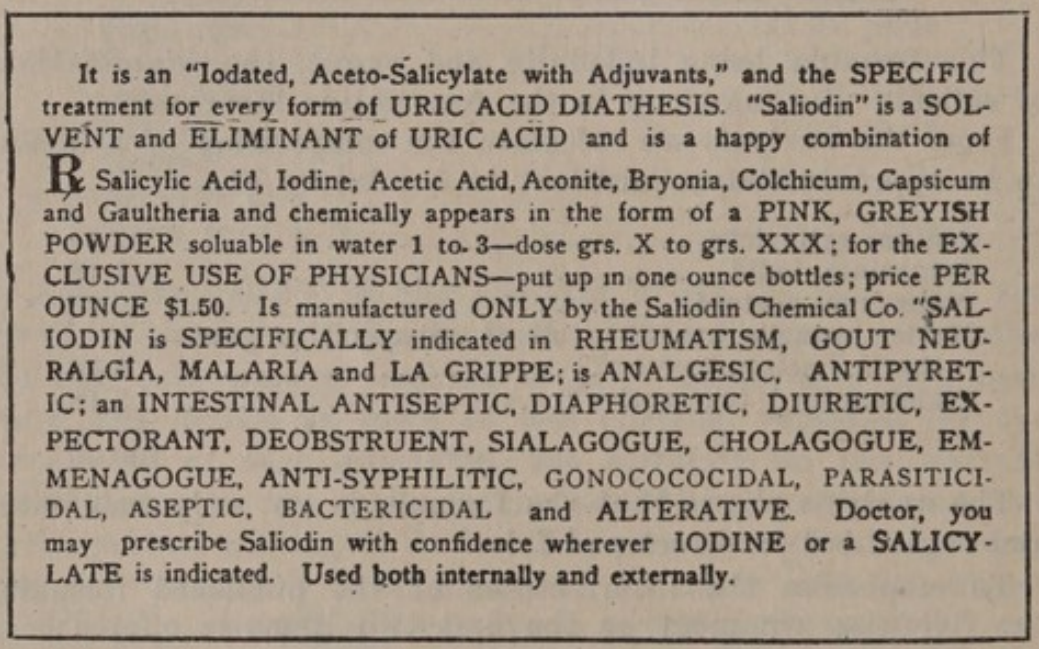
According to the "formula," each 20 grains of saliodin contains "iodin (iodate), equivalent to iodid potass. Grs. XV." This statement, too, is vague, but conveys the impression that 20 grains of saliodin contain an amount of iodin, in combination as an iodate, which corresponds in iodin content to 15 grains of potassium iodid. But the analysis shows that the

product does not contain any iodate whatever, and that the amount of iodin contained in it is sufficient to account for only ¼ grain of potassium iodid in each 20 grains of saliodin.

COMMENTS

The above report is published simply as another example of the "ethical proprietaries" that physicians are asked to prescribe. It is not unique. It is neither better nor worse than hundreds of others.

To show what absurdities appear in the "literature" (?) that is sent to physicians, we reproduce a paragraph from an advertising pamphlet. The promoters' statement as to the composition of the product is absurd, but not more so than are the claims made for it as a therapeutic agent. There is



It is an "Iodated, Aceto-Salicylate with Adjuvants," and the SPECIFIC treatment for every form of URIC ACID DIATHESIS. "Saliodin" is a SOLVENT and ELIMINANT of URIC ACID and is a happy combination of ℞ Salicylic Acid, Iodine, Acetic Acid, Aconite, Bryonia, Colchicum, Capsicum and Gaultheria and chemically appears in the form of a PINK, GREYISH POWDER soluable in water 1 to 3—dose grs. X to grs. XXX; for the EXCLUSIVE USE OF PHYSICIANS—put up in one ounce bottles; price PER OUNCE $1.50. Is manufactured ONLY by the Saliodin Chemical Co. "SALIODIN is SPECIFICALLY indicated in RHEUMATISM, GOUT NEURALGIA, MALARIA and LA GRIPPE; is ANALGESIC, ANTIPYRETIC; an INTESTINAL ANTISEPTIC, DIAPHORETIC, DIURETIC, EXPECTORANT, DEOBSTRUENT, SIALAGOGUE, CHOLAGOGUE, EMMENAGOGUE, ANTI-SYPHILITIC, GONOCOCOCIDAL, PARASITICIDAL, ASEPTIC, BACTERICIDAL and ALTERATIVE. Doctor, you may prescribe Saliodin with confidence wherever IODINE or a SALICYLATE is indicated. Used both internally and externally.

Reproduction (much reduced) of a paragraph in the advertising pamphlet on Saliodin. Note the twenty-one indications for Saliodin. Lest some condition might be overlooked, we are advised to use it "internally and externally." Isn't this scientific therapy?

not a "patent medicine" on the market for which any more blatant, extravagant and ridiculous claims are made.

The manner of exploiting saliodin is another illustration of the tendency on the part of nostrum-makers to advertise their wares through pseudo-scientific articles published in a certain class of medical journals. In the pamphlet sent out by the Saliodin company appears a reprint of an article from the *Philadelphia Medical Summary* of February, 1905. It is entitled "A Similarity in the Etiologic Factors of Rheumatism and Malaria," and was written by J. C. Denston, M.D. In it

occurs this statement: "The manufacturers (of saliodin) publish their formula and, *I think*, distribute samples and literature on request." The charming ingenuousness of this statement is fully realized when it is understood that J. C. Denston is the president of the Saliodin company. This is also another illustration of what is now a common occurrence, viz.: men who are engaged in manufacturing proprietary products and who have an M.D. degree use that degree as a commercial asset, and by this means the average reader is led to think that articles written by them in praise of their own products are spontaneous tributes from practicing physicians.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION.]

THE PRESENCE OF SULPHITE IN COMMERCIAL SOLUTIONS OF SUPRARENAL ALKALOID.

W. A. Puckner and W. S. Hilpert.

(From The Journal A. M. A., Oct. 31, 1908)

In response to the request of the Council, Adnephrin Solution (Stearns) was examined to determine the presence or absence of sulphite. As a check on the work the three other preparations of suprarenal alkaloid which have been accepted by the Council were tested in connection with Adnephrin. Two of these preparations contain sulphite, but this openly stated by the manufacturers. Nothing is said of the presence of sulphite in the third preparation, and the tests demonstrated the absence of this preservative.

TESTS.

Three samples of Stearns' Adnephrin Solution were purchased in the open market and qualitatively examined and found in each case to contain sulphite.

Specimen 1, on examination, was found to contain sulphite corresponding to 0.34 gm. anhydrous sodium sulphite to 100 c.c. adnephrin solution. As a check on this estimation, the total sodium and total chlorids were estimated, confirming the sulphite determinations.

In Specimen 2, the sulphite content was equivalent to 0.28 gm. anhydrous sodium sulphite to 100 c.c. of Adnephrin Solution, corresponding with the estimation made on Specimen 1. To prove this further, the sulphate, present as such, and the total sulphate after oxidizing the sulphite to sulphate were

determined, resulting in figures which demonstrated the correctness of the sulphite estimations.

From the results of the above estimations, Stearns' Adnephrin Solution was demonstrated to contain sulphite equivalent to approximately 0.3 gm. sodium sulphite to each 100 c.c. of the solution.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

UNGUENTINE

W. A. Puckner and A. H. Clark

(From The Journal A. M. A., March 27, 1909)

Attention has been called at various times to the fact that the value of a published "formula" to a proprietary remedy is in direct ratio to the reliability of the manufacturer publishing it. When medical journals first insisted on their advertisers letting physicians know the contents of the remedies they wished to sell them, medical literature reeked with formulas—some of them of weird and wonderful design. Since the advent of the Food and Drugs Act, which requires that labels shall approximate truthfulness, and particularly since the Council on Pharmacy and Chemistry has investigated a number of proprietary remedies, the publication of "formulas" is not so common.

Unguentine, manufactured by the Norwich Pharmacal Co., is one of those remedies whose advertisement for years always included "a formula"; more recently, however, this is not in evidence. In an advertisement which appeared about ten years ago, the "formula" given is:

"Carbolic acid ..... 2 per cent.
"Ichthyol ..... 5 per cent.
"Alum .....15 to 16 per cent."

It was claimed that by a special process of their own, the manufacturers had eliminated most of the astringent properties of the alum rendering it non-irritant. It was also stated that "the base of Unguentine is pure petrolatum." Later the manufacturers seem to have changed the composition of their product, or at least the "formula" given in the advertisements was changed. Thus it appeared:

"Alum .....15 per cent.
"Zinc oxid ..... 5 per cent.
"Carbolic acid ..... 2 per cent.
"Ichthyol ..... 5 per cent.
"Aromatics and antiseptic oils with specially prepared petrolatum and animal fat base."

The introduction of zinc oxid, aromatic and antiseptic oils and animal fat was a new feature. Somewhat later, and particularly since the passage of the national Food and Drugs Act, no formula or other statement in regard to the composition seems to have appeared in the advertisements in the medical press. In the 1906 price-list (p. 170) the following formula appears:

"Unguentine represents:
"Alum (non-irritating) .....15 per cent.
"Phenol ..... 2 per cent.
"Ichthyol ..... 5 per cent.
"Zinc oxid ..... 5 per cent.
"Aromatic and antiseptic oils, with especially prepared petrolatum and purified animal fat."

In the price-list issued for 1908—after the Food and Drugs Act went into effect—the following appears:

"Unguentine represents:
"Alum compcund (non-irritating)
"Phenol,
"Ichthyol,
"Zinc oxid,
"Aromatic and antiseptic oils, with especially prepared petrolatum and purified animal fat."

Thus the proportions are omitted, and alum becomes "alum compound," whatever that may mean.

In view of the conflicting statements made by the Norwich Pharmacal Company, in regard to their leading specialty, Unguentine, and especially because much stress was laid on the filing of their "guarantee" under the Food and Drugs Act, it was decided to ascertain of what Unguentine really consists.

From our analysis we conclude that Unguentine contains not alum but aluminum acetate (small amounts of alum may be present as impurities in the aluminum acetate), zinc oxid, or more probably impure zinc carbonate, and that the entire quantity of both does not exceed 5 per cent. It contains no ichthyol, or if any but the merest traces, and less than 1 per cent. of phenol. The aromatic oils amount to not more than approximately 1 per cent. in all. The ointment-base is, in the main, petrolatum.

In Unguentine we have, therefore, another proprietary "specialty," regarding the composition of which indefinite, false or misleading statements have been made—this irrespective of protestation of honesty by the firm.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

URICEDIN

W. A. Puckner and A. H. Clark

(Abstracted from The Journal A. M. A., Nov. 23, 1907, 1788)

In view of the results of investigations by Zernik of Uricedin as sold in Germany, and because it is being advertised to physicians in this country, an examination of this product was made in the laboratory of the American Medical Association. Zernik's report shows how this remedy has varied in its composition as put on the market in Germany. From their analysis the authors find that uricedin is not a definite chemical compound as is claimed, but is a simple mixture whose composition is approximately:

Sodium sulphate (anhydrous)	61.52 per cent.
Sodium citrate (anhydrous)	29.62 per cent.
Sodium chlorid	2.13 per cent.
Citric acid (anhydrous)	3.25 per cent.
Moisture	2.53 per cent.
Undetermined	0.95 per cent.
	100.00

Uricedin, therefore, is not a definite chemical compound as claimed, but a simple mixture which consists essentially of sodium sulphate (dried Glauber salt) ⅔, and sodium citrate ⅓. It is, therefore, a typical nostrum, and, as it appears, one the composition of which is changed from time to time to suit the whim of the manufacturer. The therapeutic claims made for it are of the usual extravagant character. According to a recent advertisement it is "used successfully for Gouty Diathesis, Urinary Calculi, Rheumatoid Arthritis," "useful in Migraine, Occipital Headache, Epilepsy, Hay Fever, Asthma," etc. If such a simple mixture will do all that this one is claimed to do, let us use it, but prescribe its ingredients under their proper names. Such a mixture would cost only a few cents a pound, but this nostrum is listed at $1.25 a bottle of five ounces, or probably $1.75 at retail, and this for the benefit of its foreign manufacturers and their agents.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION]

URISEPTIN

W. A. Puckner and W. S. Hilpert

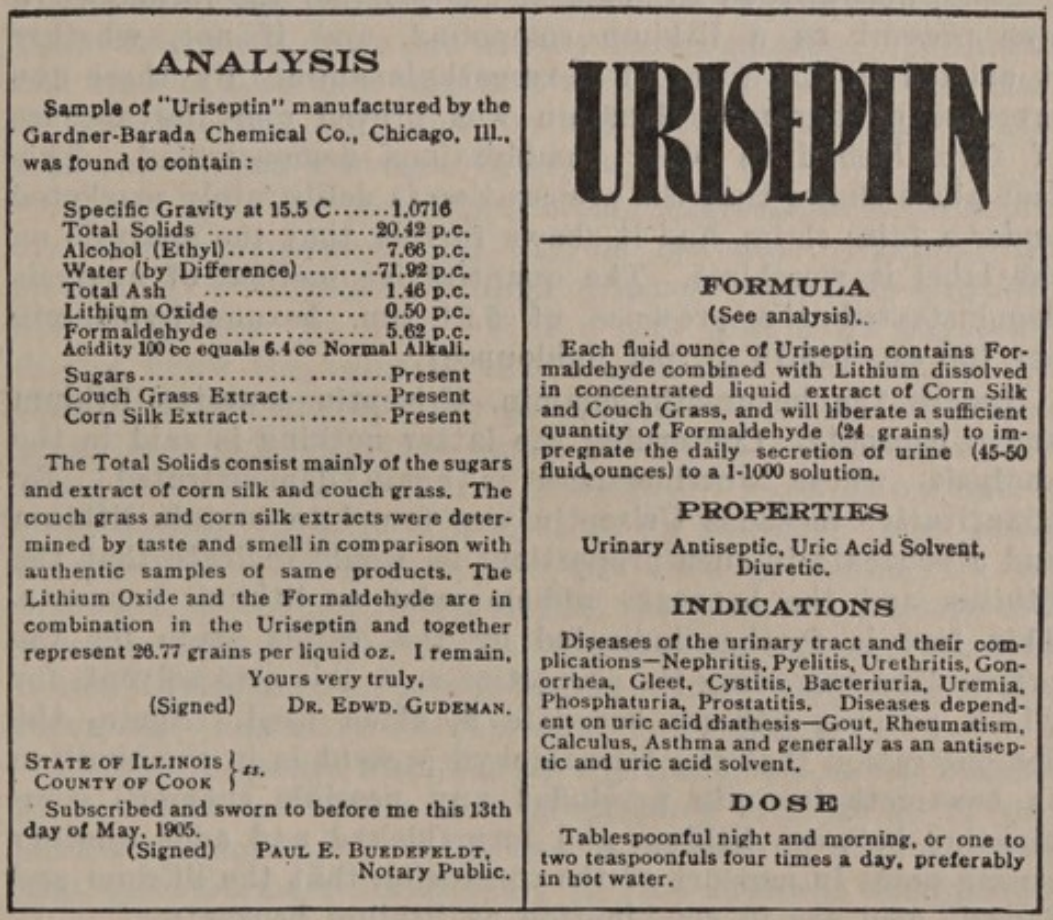
(From The Journal A. M. A., Aug. 29, 1908)

"Uriseptin," manufactured by the Gardner-Barada Chemical Co. of Chicago and claimed to be a "urinary antiseptic, uric acid solvent and diuretic," was examined in the laboratory of

the American Medical Association to determine to what extent the claims made for it are justified.

The preparation as purchased in the open market bears a label which presents the claims of the manufacturers, emphasized by the chemical analysis duly signed by an analyst and attested by a notary. Accompanying is a reproduction of part of the label.

Before the examination had extended very far it was found that discrepancies existed between facts and claims, and by



ANALYSIS

Sample of "Uriseptin" manufactured by the Gardner-Barada Chemical Co., Chicago, Ill., was found to contain:

Specific Gravity at 15.5 C	1.0716
Total Solids	20.42 p.c.
Alcohol (Ethyl)	7.66 p.c.
Water (by Difference)	71.92 p.c.
Total Ash	1.46 p.c.
Lithium Oxide	0.50 p.c.
Formaldehyde	5.62 p.c.
Acidity 100 cc equals 6.4 cc Normal Alkali.	
Sugars	Present
Couch Grass Extract	Present
Corn Silk Extract	Present

The Total Solids consist mainly of the sugars and extract of corn silk and couch grass. The couch grass and corn silk extracts were determined by taste and smell in comparison with authentic samples of same products. The Lithium Oxide and the Formaldehyde are in combination in the Uriseptin and together represent 28.77 grains per liquid oz. I remain,

Yours very truly,

(Signed) Dr. Edwd. Gudeman.

State of Illinois } ss.
County of Cook }

Subscribed and sworn to before me this 13th day of May, 1905.

(Signed) Paul E. Burdefeldt, Notary Public.

URISEPTIN

FORMULA

(See analysis).

Each fluid ounce of Uriseptin contains Formaldehyde combined with Lithium dissolved in concentrated liquid extract of Corn Silk and Couch Grass, and will liberate a sufficient quantity of Formaldehyde (24 grains) to impregnate the daily secretion of urine (45-50 fluid ounces) to a 1-1000 solution.

PROPERTIES

Urinary Antiseptic, Uric Acid Solvent, Diuretic.

INDICATIONS

Diseases of the urinary tract and their complications—Nephritis, Pyelitis, Urethritis, Gonorrhea, Gleet, Cystitis, Bacteriuria, Uremia, Phosphaturia, Prostatitis. Diseases dependent on uric acid diathesis—Gout, Rheumatism, Calculus, Asthma and generally as an antiseptic and uric acid solvent.

DOSE

Tablespoonful night and morning, or one to two teaspoonfuls four times a day, preferably in hot water.

Reduced reproduction of part of the Uriseptin label.

the time the analysis was complete Uriseptin was found to be in the same class as many other proprietary remedies that have been discussed in these columns.

Our examination shows that the most misleading statement is that concerning the "lithium-formaldehyd" compound the presence of which is claimed, more or less directly, by both the manufacturers and the analyst employed by the manufacturers. Although the chemical properties of lithium and formaldehyd indicate in themselves that the existence of such a compound would be most improbable, yet considerable time

was spent in searching the chemical literature for such a compound. Thorough search, however, demonstrated that no such compound, nor any that even approximated it, has been described.

The question then arose as to the form in which the lithium and the formaldehyd are present. The statements regarding its properties as a urinary antiseptic and the fact that the preparation is said to slowly liberate formaldehyd in the bladder point strongly to the presence of hexamethylenamin.

Tests[1] were applied to demonstrate whether the formaldehyd was present as a lithium compound, and if not, whether it existed in the form of hexamethylenamin. By these the presence of hexamethylenamin was proved and the absence of formaldehyd in other combinations demonstrated. This fact alone shows that the preparation is deliberately marketed under a false claim, and it shows further that the analysis on the label is worthless. The quantitative method of analysis demonstrated the presence of 5.51 gm. hexamethylenamin per 100 c.c. (25.15 gr. per fluidounce).

Besides the hexamethylenamin, Uriseptin contains lithium and a benzoate. Concerning the latter nothing is said in the analysis, whose worthlessness is again demonstrated. By quantitative methods Uriseptin was found to contain lithium and a benzoate in such proportions as would indicate that the lithium and the benzoate radicle exist as lithium benzoate. This fact is further indicated by the claims made for the preparation regarding its properties as a uric acid solvent, for which purpose lithium benzoate is often used. Again, the demonstration that the formaldehyd present is in combination as hexamethylenamin precluded any possible chemical combination between lithium and formaldehyd and adds another strong point in support of the conclusion that the lithium and benzoic acid are in combination as lithium benzoate.

CONCLUSION

By chemical analysis the active ingredients of Uriseptin are shown to be hexamethylenamin, approximately 5.5 gm. per 100 c.c. (about 25 gr. to each fluid ounce), and lithium benzoate, approximately 0.70 gm. per 100 c.c. (about 11 gr. to each fluid ounce), neither of which compounds is mentioned in the advertising matter on the label or in the so-called "analysis" on the

1. These were published in full in Jour. Am. Chem. Soc., September, 1908; an outline of the analysis appeared in THE JOURNAL A. M. A., Aug. 29, 1908.

label. The statements concerning the composition of Uriseptin are false and appear to be a deliberate attempt to mislead physicians.

COMMENT.—Investigation of the various "patent" and so-called "ethical proprietaries" advertised to the public and to the medical profession shows that those that have any value as therapeutic agents depend for that value on some well-known drug or drugs. Hence, while many proprietaries have some virtue, the ingredients which are of any value are so concealed by the coined and "near-scientific" names applied to them that these drugs are usually unrecognizable. The many and various acetanilid mixtures furnish examples of this class of proprietaries. And now we find another example in that much advertised nostrum, Uriseptin.

According to our chemists, the chief ingredients of Uriseptin are hexamethylenamin and lithium benzoate.[2] Hexamethylenamin is a valuable so-called urinary antiseptic—probably one of the best we have. It is a pity that more physicians do not know the value of this drug in and of itself; it is a common ingredient of many proprietaries, and yet too seldom prescribed under its true name. There is no reason for its being given in the form of a nostrum; it requires no skill in compounding, for it is best given in its powdered form, either in capsules or otherwise. So that, like acetanilid, the old argument of the nostrum men that the preparation needs skill in compounding will not hold. If a physician wants to prescribe hexamethylenamin let him prescribe it in its simplest and best form, and thus know exactly what he is giving.

Lithium benzoate also has its rightful place in the materia medica, but not hidden in a proprietary mixture to be prescribed unknowingly. It is hard to conceive of any one thing that operates more disastrously against scientific therapeutics than the vicious practice of marketing under proprietary names standard and valuable drugs, with their identity purposely concealed. Yet how frequently it is done. Well-known drugs of unquestioned worth are combined with those that are little known and of doubtful value, or more likely absolutely worthless, the mixture is put on the market under a high-sounding name and it is exploited through physicians as a panacea for all kinds of diseases.

In this, as in so many other instances, an "analysis" made to order is given to lend an air of apparent respectability and

2. Note the report of the Council on Uron (page 51), another mixture of these two drugs.

scientific standing to the preparation or to its exploiters, with the object, of course, of misleading physicians into thinking they are reading unbiased testimony. In addition, the "literature" accompanying the preparation is usually a jargon of pseudo-scientific verbiage put in to serve the same purpose as the analysis—that of catching the careless physician.

This state of affairs will continue just so long as the medical profession will tolerate it—and no longer. So long as members of our profession will prescribe proprietaries on the statements of their owners—both as to their composition and therapeutic value—just so long will pseudochemical and pseudopharmaceutical companies fatten at the expense of the medical profession and to the detriment of the public health.

[Contribution from the Chemical Laboratory of the American Medical Association]

VERONAL-SODIUM AND MEDINAL

W. A. Puckner and W. S. Hilpert

(From The Journal A. M. A., Jan. 23, 1909)

Veronal is a trademarked name for diethylbarbituric acid, a condensation product of diethylmalonic acid and urea which has ome into somewhat extended use. A sodium salt of this acid has recently been offered to the medical profession by two different firms, one, the makers of Veronal—the Farbenfabriken of Elberfeld Co.—calling the product Veronal-sodium, and the other—the Chemische Fabrik auf Actien, Berlin—giving it the name of Medinal. Both Veronal-sodium and Medinal having been submitted to the Council, their examination was taken up by us in the Association laboratory. It was found that the composition of both brands of this salt agreed with the statements made and it appeared to be a definite chemical substance. A claim made for one of these products, however, is open to criticism. In submitting Medinal to the Council the American agents, Schering and Glatz, stated—and the same statement is made in the advertising matter—that Medinal is "soluble even in cold water to the extent of 20 per cent.; with the aid of heat 30 per cent. solutions, permanent in the cold, may be prepared." This statement is, on the face of it, a contradiction of a well-known physical law. Under ordinary conditions, if hot water is saturated with a substance more soluble in hot than in cold water, when the water is cooled the substance will separate out until only the amount which is

soluble in cold water remains. Experiments to determine the solubility of Medinal showed that a solution saturated at a temperature of 5 C. contains 6.08 per cent. of the substance by weight; at 15 C. a saturated solution contains 16.87 per cent.; at 25 C. it contains at saturation 17.18 per cent., while at 91 C. the point of saturation was reached when 32.5 per cent. of Medinal had been dissolved. Water at 91 C. saturated with Medinal and filtered while hot, when cooled to 25 C. in a thermostat and filtered was found to contain only 17.35 per cent. Medinal. The statement that a 30 per cent. solution of Medinal is permanent in the cold is, therefore, incorrect.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF THE AMERICAN MEDICAL ASSOCIATION.]

ZINC PERMANGANATE

An Examination Made to Determine the Purity of Preparations on the Market

W. A. PUCKNER and W. S. HILPERT

(From The Journal A. M. A., Feb. 6, 1909)

Zinc permanganate, not being official in any pharmacopeia, has no definite standard of purity. At the request of the Council on Pharmacy and Chemistry, an examination of zinc permanganate tablets was taken up in the Association's laboratory. To judge the quality of the tablets, it was necessary to learn the quality of the available brands of zinc permanganate on the market, an examination of which was undertaken.

ZINC PERMANGANATE

Specimens were purchased in the open market and, in order to obtain samples of recent manufacture, the various manufacturers and dealers were advised that their products were to be examined and were requested to submit specimens. In general, the purpose of this examination was endorsed and samples were promptly submitted.

In appearance the samples varied from dry, lustrous, crystalline masses of a dark-brown, almost black color, to moist, fine particles, more or less contaminated with the decomposition products of the permanganate. The bottles containing the moist samples bore evidence of decomposition by the varying degrees of discoloration of the inner surface of the glass.

The specimens varied but slightly in solubility, all dissolving to deep violet-red solutions containing varying quantities of insoluble manganese oxid.

The specimens were examined to determine their permanganate contents with the following results:

Brand.	Source.	Per Cent. of $Zn(MnO_4)_2 6H_2O$.
The Mallinckrodt Chemical Works..	Purchased	73.77
The Mallinckrodt Chemical Works..	Submitted	73.70
Powers-Weightman-Rosengarten Co..	Purchased	97.05
Powers-Weightman-Rosengarten Co..	Submitted	96.99
Merck & Co.....	Purchased	88.72
Merck & Co.....	Submitted	91.49
Lehn & Fink.....	Purchased	72.76
Lehn & Fink.....	Submitted	96.77

The specimens of the Powers-Weightman-Rosengarten Company's product were large crystalline masses free from any coating or admixture and readily soluble, leaving scarcely any insoluble matter. The Mallinckrodt Company's product was in small moist particles, devoid of the metallic luster characteristic of the product. It dissolved less readily than the P.-W.-R. brand and left considerable insoluble matter. The samples from Merck & Co. consisted of medium sized masses, free from moisture, but not so lustrous as the purer samples; they dissolved rather readily, but left an appreciable quantity of insoluble matter. The specimen bearing the name of Lehn & Fink, purchased in the open market, consisted of very finely divided material showing considerable evidence of decomposition; on the other hand, the specimen submitted was free from any signs of deterioration and consisted of large, well-formed, unbroken and dry crystals.

TABLETS OF ZINC PERMANGANATE

Three specimens of zinc permanganate tablets were examined. One specimen was submitted for examination by Burroughs Wellcome & Co.; the other two were products of H. K. Mulford Co., one specimen being supplied by the firm and the other purchased in the open market.

Burroughs, Wellcome & Co.'s Tablets: The tablets submitted by this firm showed unmistakable signs of decomposition by the presence of a coating of manganese oxid, which penetrated the interior of the tablets to some extent. They were very hard and dissolved very slowly, when simply agitated with a large amount of water, yielding in this manner only about 50 per cent. of the permanganate actually contained therein. When placed in the quantity of water required

to make a solution of the strength suggested by the manufacturers the individual tablets varied in the ease with which they dissolved. In one case the tablet, in the required amount of water and frequently agitated, required three hours for complete disintegration; another required four hours, and still another after being in water eighteen hours showed only faint signs of disintegration. Only when the tablets were disintegrated by trituration with water was it possible to dissolve all the permanganate present. The tablets contained 86.28 per cent. of the claimed content of zinc permanganate (0.008 gm. per tablet).

H. K. MULFORD CO.'S TABLETS: In these tablets the properties were found to correspond more nearly to pure zinc permanganate. In color the tablets were almost black, showing no signs of decomposition or discoloration and were easily disintegrated in water, leaving scarcely any insoluble matter and requiring no trituration to effect solution; but in the actual estimation the tablets were all triturated simply for the sake of uniformity of technic. The tablets contained, in the specimen purchased in the market, 89.60 per cent. and in the specimen submitted by the manufacturer 89.58 per cent. of the amount of zinc permanganate claimed (1 grain per tablet).

SOLUTION OF ZINC PERMANGANATE

One specimen of Merck's zinc permanganate solution, 25 per cent., was also examined. It was found to contain 95.45 per cent. of the amount of zinc permanganate claimed, and might, therefore, be pronounced as complying with the label.

In 1881, Biehl[1] found that some brands of zinc permanganate solution had only 7 per cent. of the amount of the salt they were claimed to contain, while some of the crystalline solid products contained only 62 per cent. zinc permanganate. It is commendable that the manufacturers have made sufficient improvements since that time in the manufacture of zinc permanganate to bring it to the uniformity of the present-day product. The analyses show that the specimens found on the market (with one exception, that of Lehn & Fink), correspond in composition with those obtained direct from the manufacturers or dealers.

From the above it will be seen that the purity of zinc permanganate now on the market varies from 72.76

1. Proc. Am. Pharm. Assn., xxix, p. 268.

per cent. to 97.05 per cent., a difference of 23.29 per cent. In view of this, it is evident that some standard of purity for zinc permanganate should be established.[3] With this end in view, this examination has been submitted to the Council on Pharmacy and Chemistry with the following recommendation: That zinc permanganate be included with New and Nonofficial Remedies as an unofficial non-proprietary article, and that it be required to contain not less than 90 per cent. of pure zinc permanganate. Physicians desirous of using this product will, therefore, be able to obtain a salt of good quality if they will write in their prescriptions: "Zinci Permanganas, N. N. R."

As zinc permanganate is more easily reduced than potassium permanganate, the zinc salt is said to be the more powerful antiseptic and the claim is made that a comparison of the efficiency of the two substances based on the permanganate test is perhaps open to criticism. Physicians who wish to experiment with zinc permanganate may be interested in knowing that owing to its higher molecular weight zinc permanganate must be used in relatively larger quantities than potassium permanganate, provided the same permanganate content is wanted. By comparison of the equivalent molecular weights, about 1.4 gm. commercial (90 per cent.) zinc permanganate contains the permanganate equivalent of 1 gm. potassium permanganate.

[Contribution from the Chemical Laboratory of the American Medical Association]

ZYME-OID

W. A. Puckner and W. S. Hilpert

(From The Journal A. M. A., May 23, 1908)

Zyme-oid, manufactured by the Oxychlorine Chemical Company of Chicago, is advertised as "a powerful gastrointestinal antiferment" which will "arrest and prevent bacterial fermentation in any portion of the intestinal tract, whether the media be acid or alkaline." These extravagant statements, like many others made regarding the properties of zyme-oid, are very similar in character to those made in the circulars accompanying the preparation oxychlorine, manufactured by the same firm and exposed in The Journal, July 6, 1907, page 54. (See page 35 of this book.)

As examples, several parallel statements help to show this similarity. The formula (?) of oxychlorine, as expounded on the label, is given in full, while in the case of zyme-oid only a hint is given as to its composition, but still sufficient to point to a similarity between the two:

OXYCHLORINE	ZYME-OID
"Oxychlorine is a tetraborate of sodium and potassium combined with oxychlorid of boron, thus: $(6NaKB_4O_7)BOCl_3$."	"Zyme-oid is a double borate salt."

In the matter of claims for chemical stability the two seem to be very closely allied:

Oxychlorine is "a stable salt under all conditions until brought in contact with sub-oxygenated organic matter."	Zyme-oid is "a product which is stable enough for keeping purposes, but which readily yields nascent oxygen in the presence of bacterial products."

The therapeutic properties attributed to these sister products are even more similar, for we find that:

"Oxychlorine is adapted to all morbid and abnormal fermentative alimentary states."	"Zyme-oid is a powerful gastrointestinal antiferment."

Many more statements and claims could be quoted to show a similarity between, amounting almost to an identity of, oxychlorine and zyme-oid.

With these facts in mind, the analysis of zyme-oid was undertaken in order to compare it with the previously examined oxychlorine and to determine to what extent the claims made for zyme-oid are upheld by its composition. The analysis indicated, as was expected, that zyme-oid is essentially the same as oxychlorine as is shown in the following, quoted from the report of the analysis of each:

ANALYSIS OF OXYCHLORINE		ANALYSIS OF ZYME-OID	
Potassium (K)	12.26	Potassium (K)	13.50
Sodium (Na)	8.20	Sodium (Na)	9.84
Chlorate (ClO_3)	25.32	Chlorate (ClO_3)	27.50
Nitrate (NO_3)	21.70	Nitrate (NO_3)	24.22
Boric acid anhydrid (B_2O_3)	18.63	Boric acid anhydrid (B_2O_3)	13.42
Water, calculated	13.29	Water, calculated	10.42

Assuming that the chlorate in zyme-oid is present as potassium chlorate and the nitrate is present as sodium nitrate, the figures obtained by analysis correspond to a mixture approximately as follows:

Potassium chlorate ($KClO_3$)	40.43
Sodium Nitrate ($NaNO_3$)	33.22
Potassium tetraborate ($K_2B_4O_7$)	1.60
Sodium tetraborate ($Na_2B_4O_7$)	3.31
Boric acid	21.14

From the results of the analysis and from the physical properties of zyme-oid we conclude, just as was done in the case of oxychlorine, that the preparation is not a definite chemical compound, but is essentially a mixture of alkali chlorate and nitrate with boric acid, probably produced by fusing together the constituents.

COMMENT

An examination of the claims made for the firm's two products, while, as already proved, disclosing many points of similarity, will also show one remarkable difference. We refer to the skilful indefiniteness that pervades the claims made for zyme-oid and which defies scientific refutation. This verbal obscurity is becoming daily more common in the "literature" of firms marketing nostrums. Since the Council has analyzed many of the much-advertised articles and proved the unreliability of the pseudo-scientific claims made for them, the more cautious of the nostrum-mongers have modified the matter descriptive of their products. They have called to their aid the principle that words were given to man to conceal thought rather than to express it, and they have reduced equivocation to a fine art. Wherever it was possible to put forward claims by implication rather than by expression this has been done.

To substantiate further the claims made by the manufacturers of zyme-oid for their product, a laboratory report is brought in evidence. This report, which is written more in the style of a peruna testimonial than that of a conservative scientific statement, fails to verify the claim that zyme-oid is a "double borate salt," but confines itself to a statement of its harmlessness and its anti-fermentative properties. In passing, it seems regrettable that scientific laboratories should, for a pecuniary consideration, be willing to jeopardize their reputations by lending their names to the furtherance of nostrum exploitation. The results of the examination of zyme-oid demonstrate that the product is no more worthy of the physician's consideration than its close, and equally worthless, relative, oxychlorine.

PART III

MISCELLANEOUS NOSTRUMS

ALLEOTONE

(Abstracted from The Journal A. M. A., Feb. 1, 1908, 379)

The formula of this preparation, given in the literature, reads as follows:

Alcoholici (Monatomic)	gr. 1/1000
Quininæ Sulphatis	gr. 1/384
Ac. Sulph. Dil. (10 per cent.)	gtt. 2½
Ac. Nitrici Dil. (10 per cent.)	gtt. 1/77
Ac. Butanol-Dioic	gr. 1/3
Tr. Ferri Chloridi	gtt. 1/26
Aquæ	gtt. xx

The formula is worthless. It can only mislead and mystify. Here and there, it is true, flashes of truth appear, but the greater part of the literature is a mere jumble of inaccurate and mystifying statements. The various constituents of the preparation are taken up as follows: The advertising literature states that "Monatomic Alcohol is one of the constituents of all nerve tissue: It is a product of the replacement of one atom of hydrogen of the hydrocarbons by their hydroxyl group H.O." This information does not inform, since there is a vast number of monatomic alcohols and of every description. The assertion that the preparation "contains a salt" would be perfectly analogous and just as enlightening. Of "Ferri Chlo" the literature says: "Ferri Chlo is found with all proteids and nucleins and herein acts as magnetic iron, aiding the play of the electrical travel." The first assertion is untrue, for iron does not exist as chlorid in the cells of the body, but as some organic iron compound; neither is it found in all proteids, but principally in nucleoalbumins; and all proteids do not contain nucleoalbumins. The assertion that the iron chlorid "acts as magnetic iron aiding the play of the electrical travel" is nonsensical and on a par with the electrical belt method of exploitation, and suggests forcibly the class to which Alleotone belongs. The literature further states: "Sulphuric and nitric acids act in removing hydrogen atoms and substitute atoms of the radical NO_2; that is, as hydrogen tranquilizes the

speed of burning or oxidation, its action is substituted by the atom nitrogen which is energy itself, nitrogen being the base of all explosives." Sulphuric acid is certainly an oxidizing agent and in virtue thereof removes hydrogen; but not in a solution whose concentration with respect to sulphuric acid is approximately only 0.82 per cent. The statement that nitrogen is the "base of all explosives" is another example of the methods of the promoters. As it is a well-known fact, however, that nitrogen itself is one of the least reactive of gaseous elements, little confidence can be placed in such remarks as "Nitrogen which is energy itself." Another mystifying term used in the formula is "Ac. Butanol-Dioic," which is a true chemical name, certainly, but it is one by which few physicians will recognize simple malic acid, an ordinary vegetable acid widely distributed in ripe fruits, such as apples and pears, and possessing the properties simply of a relatively weak organic acid. To describe it as exercising any potent influence "in the oxidation of the phosphorus as lecithin in the cell"—especially in the extremely low concentration in which it is stated to exist in Alleotone—is simply an absurd juggling with words. It is not much to be wondered at that the public should be taken in by pseudoscientific "literature;" but it is not only strange, it is discreditable to our profession, that among its members should be found any to accept such rubbish as the above quoted "literature" as information worth acting on—yet such there are, judging from the testimonials.

The Commercial Value of Adverse Criticism

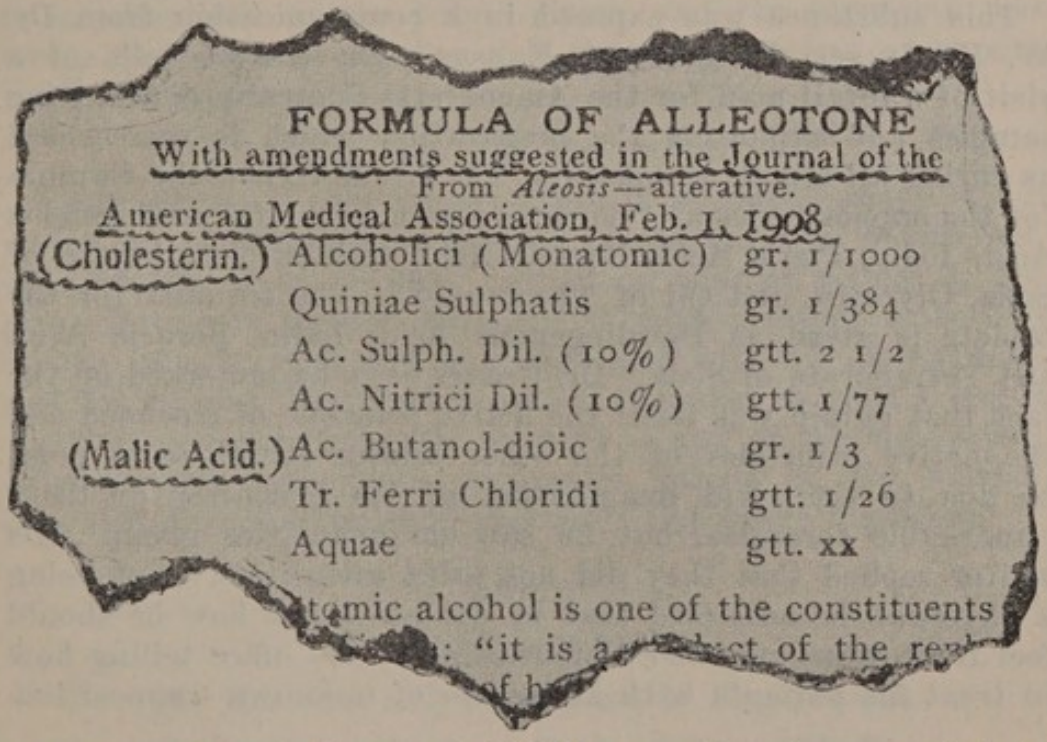
(From The Journal A. M. A., Oct. 17, 1908)

For skilful attempts to convert a "knock" into a "boost," commend to us the discredited nostrum exploiter. The federal Food and Drugs Act did much to bring out this amiable quality—possibly developed it. While somewhat ancient history, it is well to call to mind what happened when the excise authorities insisted either that the "patent medicine" booze, Peruna, have some medicine put in it, or else that its manufacturers should go into the saloon business. Hartman at once got out a new label stating that "for a number of years a multitude of grateful friends" had urged "that Peruna be given a slight laxative quality." Thenceforth the innocents and near-innocents could get their perunaese jag only at the risk of a "bad quarter of an hour."

One of the latest attempts to wriggle out of an uncomfortable position, and at the same time make capital out of the

wriggling, is seen in the advertising of Alleotone, a nostrum of the pseudo-scientific type, which was shown up in THE JOURNAL of Feb. 1, 1908. The "formula" furnished is for the most part a jargon of misleading and mystifying nonsense and fulfils the same purpose as the voluble "patter" of the gentleman who is manipulating three shells and a pea at the county fair.

Every constituent of the "formula" was discussed in THE JOURNAL and the absurdities and impossibilities of each dwelt on. Did the manufacturers of Alleotone feel downcast over the exposure of their humbug? Not to judge by their advertising, for they write to physicians that "since the A. M. A. analyzed Alleotone it has made great strides"—direction not specified. But the choicest piece of impudence, and one that but for its dishonesty would be laughable. is found in this portion of their advertising pamphlet:



FORMULA OF ALLEOTONE
With amendments suggested in the Journal of the
From *Aleosis*—alterative.
American Medical Association, Feb. 1, 1908

(Cholesterin.)	Alcoholici (Monatomic)	gr. 1/1000
	Quiniae Sulphatis	gr. 1/384
	Ac. Sulph. Dil. (10%)	gtt. 2 1/2
	Ac. Nitrici Dil. (10%)	gtt. 1/77
(Malic Acid.)	Ac. Butanol-dioic	gr. 1/3
	Tr. Ferri Chloridi	gtt. 1/26
	Aquae	gtt. xx

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f h

In the original, the words "With amendments suggested in the Journal of the American Medical Association, Feb. 1, 1908," and also "(Cholesterin.)" and "(Malic Acid.)," which we have underscored in the illustration, are printed in red and have been added to the original "formula." Such are the uses of adversity.

What claim, if any, the exploiter of this nostrum—B. F. Copeland—has to medical or pharmaceutical knowledge, we do not know. In fact, to be consistent with the "ethics" of the

nostrum business he need have none. Such knowledge, indeed, tends to hamper that free play of the imagination so necessary in this work. We understand that he has at different times been in charge of a stave factory and connected with a brokerage firm, which may exert some subtle influence in developing the ability to relieve suffering humanity, though the connection is not quite clear. One would imagine, however, that the keen business instinct, untrammeled by any considerations of conscience, which is exhibited in the exploitation of Alleotone, would in purely commercial pursuits have long since assured a competence.

AMENORETTS

"The Great Cure for All Female Trouble"

(Abstracted from The Journal A. M. A., March 24, 1906)

This substance was exposed in a communication from Dr. W. H. Graves, Dodge City, Kansas. Dr. Graves tells of a visit of a retail man for the Amenoretts Company distributing samples and exploiting the preparation which is represented as curing all female complaints. The circular gave the formula for the suppositories as "the active principles of Pyrolingenous Acid, Iodin, Picric Acid, Boracic Acid, Quinin, Tetraborate of Soda, Glycerin, and Oil of Theobromo." The formula for the tablets is given as Pyrolingenous Acid, Iodin, Boracic Acid, and Tetraborate of Soda. Dr. Graves says he remarked on the fact that quinin was itself the active principle of cinchona and the active principles of the other known constituents must be due to the vivid imagination of the concocter of these remarkable formulas, but he saw no quantities given. His visitor replied that they did not print quantities. Not being a physician he admitted that he did not know how he should feel if he were one, and a man came to his office telling how to treat his patients with an article of unknown composition.

AMOLIN DEODORANT POWDER

(Abstracted from The Journal A. M. A., Feb. 22, 1908, 626)

Amolin is a "patent medicine" put on the market by the Amolin Chemical Company. After enumerating the claims made for the preparation by the promoters, THE JOURNAL states that a sample of the powder was examined in the Association laboratory. Amolin was found to be a very fine

white powder slightly unctuous to the touch, similar to boric acid or talcum and emitting a faint odor of thymol. Qualitative tests showed the presence of large quantities of boric acid and traces of thymol. Further examination demonstrated the absence of alum, zinc salts and other metallic constituents usually employed in the preparation of deodorant powders. Neither did the tests indicate the presence of salicylic acid, phenol, or any similar organic antiseptic except thymol.

NINETY-NINE PER CENT. BORIC ACID

In plain words this remarkable powder is practically nothing but boric acid, and furnishes another illustration of what has so often been proved, i. e., that "patent" and "ethical proprietary" medicines usually depend on some well-known drug, or drugs, in every-day use for whatever therapeutic value they possess. This particular preparation happens to come under the designation of "patent medicine," simply and only because it is advertised to the public direct, and the physician who wrote us got his knowledge of it through a patient—reversing the usual order.

BORIC ACID AND ITS QUALITIES

Boric acid is a good thing; there is no doubt about it. It makes a splendid dusting powder; there are few, if any, better. Modify it as one may, give it an odor or a color to disguise it as one pleases, surround it with mystery or secrecy as one sees fit, it is still but boric acid with all its virtues—and limitations. Dissolved in water, it makes as good a mouth wash, as good an antiseptic solution as any of the high priced, extravagantly advertised, antiseptic lotions on the market, of which it forms the chief and most important ingredient.

ANTIKAMNIA

The Nostrum and Its Method of Exploitation

(From The Journal A. M. A., July 1, 1905, 55)

Our readers will be interested to learn some of the remarkable properties which, according to the statements of the manufacturers, this antikamnia possesses. We quote from the advertising literature:

The well-known nerve specialist (?), Dr. Harley, in an interview published in the *London Daily Express,* says: "I have treated more than one American for nervousness and 'brain fag' directly due to their incessant energy. I had a young man in here this morning who complained of headache 'in the back of the neck.' He

was threatened with congestion of the brain, and seemed somewhat aggrieved when I told him he had been trying to do too much. I also treated a young American woman who, since her arrival in London, had apparently been living on antikamnia tablets by the advice of her physician. It was the only thing, she said, which kept her 'braced up' for the strain of sight-seeing."

(Why did the young woman consult this Dr. Harley—for the drug habit?)

Note the following:

For the severe pains or rheumatism, dysmenorrhea, neuralgia, gout, sciatica and lumbago, as well as for the lightning pains of locomotor ataxia, there can be no quicker and more lasting relief obtained than by the administration of antikamnia and codeine tablets.

Imagine an intelligent physician trying to treat the diseases mentioned below with the various impotent means of the pharmacopeia and physiological therapy when he might depend on antikamnia! We quote again:

As a Pain Reliever.—In headache, cephalalgia, hemicrania, migraine [some other words might have been thrown in so as still more to emphasize the headache business], myalgia, coryza, la grippe and its sequalæ, the lightning pains of locomotor ataxia and all pains due to irregular menstruation.

As an Anodyne or Sedative.—In alcoholic delirium, indigestion, cardialgia, gastralgia, dyspepsia, hysteria, insomnia, inebriety, car-sickness, sea-sickness, worry and sight-seer's fatigue.

As an Antipyretic.—In typhoid, intermittent, puerperal and malarial fevers, bronchitis, pneumonia, pleurisy, and tuberculosis.

As an Anti-Neuralgic.—In acute or chronic neuralgia, facial neuralgia, earache, pain about the teeth, angina pectoris, neurasthenia, palpitation, pains of locomotor ataxia and sciatica.

As an Anti-Rheumatic.—In acute or chronic rheumatism and gout, fever and pleurodynia.

There is no remedy so useful and attended with such satisfactory results as antikamnia tablets in the treatment of melancholia with vasomotor disturbances, anemic headaches, emotional distress, and active delusions of apprehension and distrust. They increase arterial tension and promote digestion, as well as being particularly serviceable in relieving the persistent headache which accompanies nervousness.

In neurasthenia, in mild hysteroid affections, and in the various neuralgias, particularly ovarian, and in the nervous tremor so often seen in confirmed drunkards, they are of peculiar service. In angina pectoris this drug has a beneficial action; it relieves the pain and distress in many cases, even when amyl nitrite and nitroglycerin have failed entirely. In pseudo-angina, frequently observed in hysterical women, its action is all that can be desired.

Patients who suffer from irritable, weak, or palpitating heart, needing at times a pain reliever, can take antikamnia tablets, without untoward after-effects, knowing that the heart is being fortified. In delirium tremens, they relieve when there are great restlessness, insomnia, the general lowering of the nerve power.

Only the vivid picture of a crisis in locomotor ataxia or the agony of a true migraine, can impress the observer with the full value of this pain reliever.

The following testimonials are from physicians:

Dr. Caleb Lyon, an old Bellevue practitioner, in referring to antikamnia and codein tablets, says:

In my practice they accompany the maid from her virgin couch to her lying-in chamber, assuaging the perplexities of maidenhood and easing the trials of maternity with most gratifying results. I earnestly hope that the proprietors of this valuable remedial agent will keep it up to its present standard of purity and excellence.

Dr. Walter M. Fleming, A.M., M.D., New York City, writes:

. . . With all the experience of more than a quarter of a century, in the treatment of winter cough, and all its complications of laryngeal, bronchial and pulmonary irritability, dyspnea, asthmatic spasms, and finally whooping cough—usually the most persistent and tenacious of all these membranous maladies—I find no one remedy more strongly indicated, or which yields more prompt and satisfactory results than antikamnia and heroin tablets, composed of antikamnia 5 grains and heroin hydrochloride 1/12 grain. . . . Result: a prompt and efficient expectorant, at once relaxing the harsh and rasping cough, releasing the tenacious, sticky and gelatinous mucus which is soon readily expectorated, while the soothing influence of the antikamnia is at once manifested, greatly to the comfort and contentment of the patient. . . . Independent of the fact of the direct applicability of this remedy to the various membranous maladies of the lungs, bronchi, fauces and nose, it proves also, an invariable remedy in all febrile cases where anodyne is required. This, together with its analgesic and antipyretic merits, eminently qualify this combination for a responsive agent in the treatment of nearly all the numerous febrile attacks characterized by pain, nervousness, insommnia and their accompanying symptoms.

"Antikamnia and Quinin"

If there is any virtue in the particular combination known as "antikamnia," a physician prescribing the tablets supposed to contain combinations of "antikamnia" and some other drugs should have some guarantee that they contain those remedies. Take, for example, the tablets advertised and sold as "antikamnia and quinin." It might reasonably be supposed that the tablets contained the combination known as "antikamnia;" this, however, seems not to be the case. Previous analyses, as published[1] by us, have shown that antikamnia contains approximately 20 per cent. of sodium bicar-

1. THE JOURNAL A. M. A., June 3, 1905; reproduced on page 9 of this edition.

bonate, yet two chemists, working separately, have been unable to find this ingredient in the tablets advertised and sold as "antikamnia and quinin." Are we to understand, therefore, that the manufacturers do not consider the bicarbonate of sodium of importance in their preparation, antikamnia; or are they guilty of misrepresentation and of misleading physicians in omitting this constituent from their product antikamnia when that is combined with the bisulphate of quinin? The above statement regarding the omission of bicarbonate of sodium from the quinin combination may be verified by any physician who desires to make a few simple chemical tests—carbonic acid is not given off when the tablets are treated with dilute acids, as would be the case if sodium bicarbonate were present. Further, while the ordinary "antikamnia" contains no constituent not soluble either in water or in chloroform, and while quinin bisulphate is readily soluble in water, the tablets said to contain antikamnia and quinin bisulphate, when treated successively with water and with chloroform, leave a residue of more than 18 per cent.

One of the chemists who analyzed the preparation for us, in commenting on this in a letter, says: "The matter which is insoluble in water, alcohol or in chloroform, i. e., the substance which is neither 'antikamnia' nor quinin bisulphate, amounts to more than 18 per cent. in 'antikamnia and quinin bisulphate tablets.' The tablets weigh close to five grains and are said to contain 2.5 grains each of antikamnia and quinin bisulphate. How is this possible when each tablet contains almost one grain of foreign substance (chiefly starch)?"

Further comment is superfluous. We have presented facts to our readers and leave them to draw their own conclusions.

Adding Insult to Injury

(Abstracted from The Journal A. M. A., Jan. 26, 1907, 340)

When the Council on Pharmacy and Chemistry, nearly two years ago, began its work of independent and scientific investigation of proprietary preparations, some of the questions asked were:

"What guarantee has the medical profession that the formulas of these proprietary medicines are not changed at the will of the manufacturers? How can the physician who confidingly prescribes them for his patients know that the preparation which he orders to-day is the same as that which was furnished him last year, or which may be given him next year, under the same name?"

At once a wail, as of injured innocence, went up from countless vendors of proprietary medicines, who replied with one voice:

"The honor and reputation of the proprietors and manufacturers is sufficient guarantee of the stability and permanence of these preparations."

So vehement were their protestations and so well simulated were their declarations of Pecksniffian virtue that many physicians were deceived thereby. Many medical journals (whose views were, perhaps, slightly biased by the consideration of fat advertising contracts) also were apparently convinced. But the fact was overlooked that guarantees based on honor are of value only in proportion to the amount and quality of honor possessed by the guarantors.

The enactment of the national Food and Drugs Act is bringing many things to light. Some of them are interesting, some would be amusing were they not so utterly despicable. Among other things, it has furnished a demonstration of the value of the "honorable assurances" of nostrum vendors.

The nostrum antikamnia has pointed many a moral in the campaign in the last two years. It was hardly to be hoped that it would deliberately furnish a demonstration of the utter lack of honesty on the part of a certain class of proprietary manufacturers. Yet, relying apparently on the ignorance of the public and the long-continued lethargy of the medical profession, its promoters have, in the last few weeks, unwittingly convicted and stultified themselves. When the pure food law went into effect, the proprietors of this mixture found themselves in a sad dilemma; if they labeled their mixture in accordance with the provisions of the law they would have to admit that it contained acetanilid and that the charges against them were true. Failing to comply with the law, they must go out of business. The latter alternative was not to be thought of. The profits gained by selling, with the aid of careless or ignorant physicians, a five- or ten-cent mixture for $1 were too great to be surrendered without a struggle. The same brilliant intellect, perhaps, that first saw the commercial possibilities in the business, said: "Change the formula. Phenacetin is about as cheap as acetanilid; the patent has just expired and consequently we can get it at a low price. Let us substitute phenacetin for acetanilid."

As a result the profession is treated to an edifying exhibition of virtue triumphant, a wolf so completely covered by the harmless coat of a sheep that he flatters himself that his

wolfish nature is completely concealed. No longer are skulls and skeletons sent out in calendar form as grinning advance agents to be displayed in every doctor's office, but instead a beautiful domestic scene, showing a convalescent child nestling in the arms of its mother. The familiar "AK," however, as usual, is in the lower right-hand corner. And what a change in labels! No longer is antikamnia a chemical entity, but the label now openly but ingenuously declares that "Antikamnia tablets in this original package contain 350 grains of acetphenetidin, U. S. P., per ounce. Guaranteed under the Food and Drugs Act, June 30, 1906. Serial No. 10." While, below, as an entirely unnecessary display of conformity to the Pure Food Act, appears this statement:

> The Antikamnia tablets in this original ounce package contain no acetanilid, antifebrin, antipyrin, alcohol, morphin, opium, codein, heroin, cocain, alpha- or beta-eucain, arsenic, strychnin, chloroform, cannabis indica or chloral hydrate.

Truly, Satan is appearing as an angel of light. What a gratification it is to the long exploited profession to know that antikamnia contains no alcohol, no chloroform, no cannabis indica, no chloral hydrate. How unfortunate that this spontaneous display of confidence is not carried far enough to inform the profession of the ingredients, aside from phenacetin, contained in the mixture!

The label is an admission that the nostrum does not contain what it was never supposed to contain, with the exception of acetanilid, and is directly an attempt to conceal the real contents. The proprietors know that the dear public, whose "pains, headaches, neuralgias, women's aches and ills, grippal neuroses, nervousness, insomnia, rheumatism, lightning pains of locomotor ataxia, sciatica, etc.," they are longing to assuage, will not know that acetphenetidin is the official designation for what is popularly known as phenacetin, and that this dangerous product is found in the new mixture in the proportion of approximately 4 grains to a 5-grain tablet. Evidently they also presume considerably on the ignorance of our profession, or why should they make the brazen statement that four grains of phenacetin is the "most reliable remedy" for the long list of diseases enumerated on their advertising calendar?

When the formula for which such wonderful virtues was claimed was suddenly thrown overboard, was the medical profession, which by its short-sighted patronage had built up this business, notified in any way of the change? Search the new advertising matter of this nostrum from beginning to end and

you will not find one word to show that "The Antikamnia tablets in this original ounce package" differ in the slightest particular from those sold to the profession and the public for years past. This being true (and the statements of the promoters themselves are our authority for it), what remains of the pratings of "honor" and the "guarantee of the manufacturers"? Has a physician no right to know when a change is made in the formula of a preparation which he has been prescribing for years?

What assurance has the profession that, at any moment, a cheaper or more dangerous drug may not be substituted for "acetphenetidin" if thereby the law can be evaded or the profits of the delectable business enhanced?

How can any conscientious physician prescribe, for those who confide their lives to his care, a preparation the stability of the formula of which must depend absolutely on its owner's whim?

How can a physician with the slightest sense of responsibility to his patients allow his office to be used as a free advertising bureau for a preparation manifestly founded and developed on deceit and misrepresentation?

How can any medical journal, except those avowedly and unblushingly seeking to aid the nostrum maker to exploit the profession, whose interests they claim to serve, continue to carry the deceptive and misleading advertisement of a twice exposed fraud?

How can any physician with a particle of self-respect or manhood continue to support, by subscription or contribution, any medical journal which, by accepting such advertising, allies itself with the army of deceit and chicanery?

Still Further Duplicity

(Abstracted from The Journal A. M. A., Feb. 8, 1908, 467)

When the Food and Drugs Act went into effect the manufacturers of this preparation, instead of continuing to put out the same mixture as they had been doing, radically changed the composition by substituting acetphenetidin (phenacetin) for acetanilid. By doing this the company avoided the disagreeable necessity for acknowledging on the label that the nostrum contained acetanilid, as was shown by the analysis published in THE JOURNAL, June 3, 1905. In addition to stating that the package of antikamnia contained acetphenetidin, the company also stated that it contained no "acetanilid, antifebrin, antipyrin, alcohol, morphin, opium, codein, heroin,

cocain, strychnin, chloroform, cannabis indica, or chloral hydrate." Knowing that the nostrum is being advertised in Great Britain and Canada as well as in the United States, THE JOURNAL obtained some Antikamnia from London, and it was analyzed in the Association's laboratory. As was suspected, the analysis showed that Antikamnia as sold abroad has the same composition now as it had in the United States before the Food and Drugs Act went into force, viz.: Acetanilid, 67.75 per cent.; caffein, 4.88 per cent., and citric acid and sodium bicarbonate, by difference, 25.36 per cent. This corresponds with the analysis previously made and published in THE JOURNAL, June 3, 1905. The Antikamnia on the market in this country was also analyzed and it was found to contain: Acetphenetidin (phenacetin), 72.05 per cent.; caffein, 13.95 per cent.; citric acid and sodium bicarbonate, 14 per cent. The preparation sold as "Antikamnia and Quinin" was also analyzed, and it was found that starch had been substituetd for the bicarbonate of sodium which is found in the Antikamnia itself. The details of the analyses are given with the following comments: "The above are brief statements of bald facts. Two of these should be emphasized: (1) When the Food and Drugs Act went into force, January, 1907, the manufacturers of Antikamnia, rather than acknowledge the truth of the past —we can imagine no other reason—materially and radically changed the composition of their preparation, and did this without notifying the medical profession or intimating in any way, so far as we can learn, that such a change had been made. We have no doubt they believed they had a right to do as they pleased with their own; that it was nobody's business but theirs what they did with their own preparation, or how they changed it. As they never had told physicians what it contained, there was no reason why they should do so now. This is logical, and we cannot blame the manufacturers so long as the medical profession is willing to be humbugged. (2) For the same reason, we presume, they claim that they have a right to continue to use acetanilid in the product for the foreign market. The Food and Drugs Act applies only to the United States, of course, and acetanilid being cheaper, why not use it? What is the difference if one is more dangerous than the other? The fact that the Antikamnia sold abroad differs from that sold in this country some may say is of no special interest to us. Still this fact is worth noting: The dose of acetphenetidin — phenacetin — (7½ grains) is nearly double that of acetanilid (4 grains): one becoming accustomed to a

certain dosage of the nostrum as sold in this country might, while abroad, unwittingly be led to take a double dose of acetanilid.

Samples, Form Letters and "Prescriptions" Sent to the Laity

(From The Journal A. M. A., April 18, 1908, 1281)

To the Editor: — The enclosed "literature" is being sent broadcast to the laity by the Antikamnia people and still a great many of the physicians throughout the country are prescribing the preparation thus advertised. Will the time ever come when the medical fraternity will awaken to the fact that it has been humbugged by a great many manufacturing concerns? I certainly hope so.

J. W. DuVal, M.D., Wichita Falls, Texas.

Comment:—The "literature" referred to by our correspondent consists of a form letter and a small pamphlet. The letter reads as follows:

Dear Mr.————:

Do you ever suffer pain? If so, try Antikamnia Tablets; Sample enclosed. Your druggist will supply then in any quantity (10 cents worth or more), also in our regular "Vest-Pocket Boxes." Sincerely yours,

The Antikamnia Chemical Company.

The pamphlet accompanying the letter is entitled "Practical Prescriptions," and contains a list of diseases and morbid states arranged alphabetically from "Alcoholism," "Asthma" and "Backache" to "Wind," "Women's Pains" and "Worry." For the one hundred and twenty-two conditions listed, "Antikamnia," "Antikamnia and Codein" or "Laxative Antikamnia and Quinin" are prescribed, demonstrating that the "prescriptions" are more "practical" than scientific.

In many respects the methods of the proprietors of "headache powders" and "anti-pain pills" are less offensive to one's sense of professional decency that the course pursued by the Antikamnia people. The former have at least never recommended their products as "ethical proprietaries;" they have not used medical men as their unpaid agents; the claims made for their products have been no more exaggerated; and they have not found it necessary, from the requirements of the Food and Drugs Act, to substitute acetphenetidin for acetanilid to avoid giving the lie to their former claims.

As to the query propounded by our correspondent: We are optimistic enough to believe that the time he longs for is already here. The fact that the proprietors of nostrums of

the Antikamnia type are finding it necessary to advertise to the laity is, in itself, evidence of the diminishing demand for such products on the part of the medical profession.

"Distinguished Turpitude."

(From The Journal A. M. A., Nov. 28, 1908)

"Our friends the medicine men seem to be perking up a bit of late. Orangeine is advertising that it cures headaches, cold, grippe, and indigestion by 'removing the cause.' It 'cures' these things on the same principle that by hitting a man on the brain with a club you may 'cure' his headache until his consciousness revives. Antikamnia also shows signs of making claims as false as those made before the exposures; and some, in spite of their evil, are positively diverting, thus:

"PRACTICAL PRESCRIPTIONS

"ALCOHOLISM—(After Debauch) Antikamnia & Codein Tablets.

"Dose:—One every two hours. Teaspoonful Tr. Gentian Comp. three times daily in water."

"Among the other diseases thus prescribed for are ague, asthma, backache, biliousness, 'car sickness,' catarrh (defined as or recognized by 'pain in head'), 'change of climate,' 'chest pains,' colds ('to stop quickly') consumption ('chest pains'!) delirium tremens, delirium from fever, drunkenness, epilepsy, intermittent and remittent fever, hay fever, hiccough, hysteria, locomotor ataxia, 'threatened pneumonia,' sciatica, seasickness, 'shopper's headache,' St. Vitus' dance, toothache, whooping-cough, and 'worry'! Verily, the supply of suckers is forever inexhaustible, and the 'patent-medicine' bunco game will, doubtless, pick up as the public forgets the information which it recently acquired."

The above is from *Collier's Weekly*. Orangeine and Antikamnia—Antikamnia and Orangeine! Has it come to the pass that mere laymen shall class the great "ethical proprietary" Antikamnia with the plebeian "patent medicine" Orangeine? Banish the thought! And yet, who knows; possibly within the year we may see in the street-cars and elevated trains, sandwiched between posters describing Shac and Orangeine, advertisements extolling the virtues of Antikamnia. One pictures the homeward-bound suburbanite, clinging wearily to a strap in an overcrowded street-car, with the ferrule of a fellow-passenger's umbrella intermittently gouging his

intercostal muscles and an obese female standing stolidly on one of his feet. What would be the psychic effect on such an individual of having to face an advertisement which read:

FEELING IS A SENSE.
FEELING PAIN
NONSENSE.
TRY TWO ANTIKAMNIA TABLETS.

In the language of the immortal Hashimura Togo, "We enquire to know."

ANTINEURASTHIN

A New Use for Eggs and Milk

(From The Journal A. M. A., May 22, 1909)

A German nostrum known as "antineurasthin" has been given—for a substantial consideration—many columns of space in British newspapers. This "cure for nervousness" is an "epoch-making discovery" of one Dr. Hartmann. According to the *Pharmazeutische Zeitung* the firm of "Dr. Hartmann" is one of a group of quack-medicine manufacturers against whom the chief of the Berlin police issued a public warning. The commercial possibilities of antineurasthin having thus received a substantial setback in the paternalistic Fatherland, the business, it appears, was transferred to Germany's more *laisser-faire* western neighbor across the North Sea, and we understand is about to appear in this country also.

THE ANALYTICAL "REPORT"

In any event antineurasthin has been heavily advertised as the cure for the "Twentieth Century Disease," and as a remedy that "directly combats the brain-cell and nerve-ganglionic cell degeneracy," whether this sad state of affairs is "due to overwork or mere malnutrition"! Testimonials of the most approved type and an elaborate "report" from an "analyst" with a long string of high sounding titles form part of the stock-in-trade. The editor of London *Truth*, having had occasion to pay his respects to this nostrum, was particularly struck by the positiveness of the statements that appeared in the published "report" of this particular "analyst" regarding the virtues of antineurasthin; they read "a good deal

more like the work of an advertisement-writer than that of a man of science." For instance, the "analyst" states in his report:

"Antineurasthin" does not only "relieve;" it cures by "feeding" the attenuated nerve cells, and thus after awhile, restored to their normal energy and vital powers, they are able to perform their brain and tissue-renewing functions again without external aid.

It is rather unusual for a chemist to express an opinion like the foregoing, on the medical properties of a preparation, based merely on a laboratory analysis. *Truth* sent a representative to the "laboratory" and found that it consisted of some rooms "somewhere upstairs" in the private house at which the "analyst" lodged. The "analyst" himself was not at home and all the landlady could tell about the "Chemical and Physical Laboratories" was that her lodger had "a quantity of bottles" and other paraphernalia in his apartment, "with which he occasionally made appalling smells."

WHAT IS ANTINEURASTHIN?

As to what this "cure for nervousness" is, there seems to be a difference of opinion. According to the manufacturer:

Antineurasthin itself is a scientifically compressed compound of the Myelinic (or Lecithinic) elements of certain costly foods, especially rich in this valuable brain-building constituent of the best of our daily foods.

But the *British Medical Journal*, which had the stuff analyzed suggests that the composition of this marvelous renewer of brain energy is approximately as follows:

Dried yolk of egg	3.8 per cent.
Dried white of egg	5.4 per cent.
Dried separated milk	57.8 per cent.
Gum	2.0 per cent.
Potato starch	22.7 per cent.
Moisture	8.3 per cent.
Aromatic substances	Traces

The daily dose of four tablets or 122 grains would, according to this formula, contain the equivalent of 10 grains of yolk and 43 grains of white of egg (not dried); the ratio between these is about the same as exists in an average egg and the two may be put together and regarded as about a teaspoonful of fresh egg; in addition the daily dose would represent about 2 oz., or a quarter of a tumblerful, of separated milk and a little starch.

In extolling the "lecithinic elements of certain costly foods" of which its product is said to consist, one wonders whether the Antineurasthin Company is guilty of a subtle joke in thus

referring to the outrageously high price of hen's eggs during the past winter! As to the ethics of selling eggs and milk under a fancy name and for a still more fancy price, as a cure of nervousness, we can not do better than quote from the article in *Truth*, already referred to, and which bears the caption, "Hens' Eggs and Nerve Trouble."

"What the public should understand, however, is that most preparations of this kind are based on some remedy, the efficacy of which in certain cases is well-known. In this particular instance the remedy seems to be yolk of egg. The great discovery of Dr. Hartmann converts the domestic hen into a rival of the goose that laid the eggs of gold. The *modus operandi* is worth the attention of poultry farmers. You dry your hens' eggs; you mix them up with plenty of starch, separated milk, or other harmless ingredients; you get a few imposing testimonials and reports from parties who deal in such articles; you engage a smart advertisement-writer, prime him with a little fact and a great deal of scientific jargon; you rent as many pages or columns in the press as you can afford; and your hens' eggs hatch out into handsome dividends. The Twentieth Century Disease, however, goes on as before. My own impression is that quite the worst disease of the twentieth century is the disposition to swallow excessive quantities of preparations of this character, and equally excessive quantities of the newspaper advertisements relating to them."

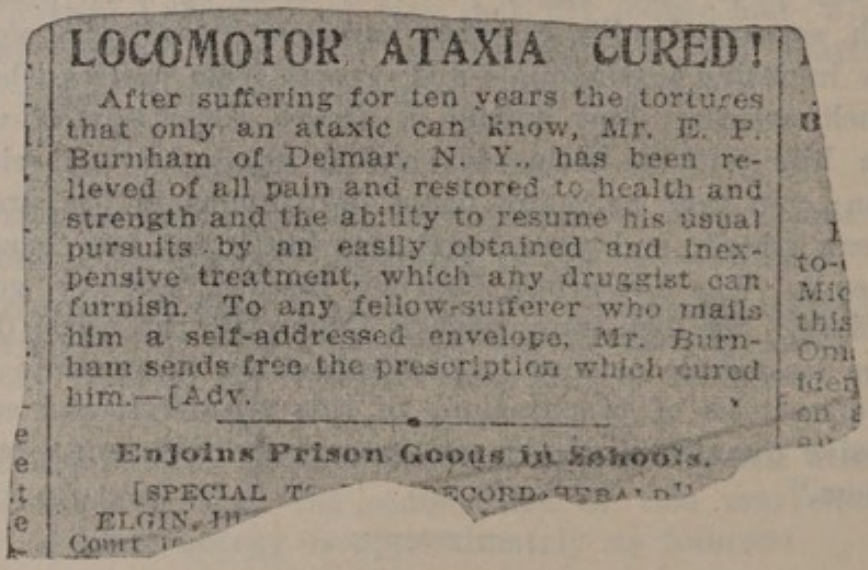
BIOPLASM

How "Ethical" Remedies are Exploited to the Laity

(From The Journal A. M. A., Dec. 9, 1906)

The accompanying advertisement has been appearing in the newspapers for some time, and its resemblance to the old advertisement of the "Rev. Joseph T. Inman" of lost-manhood fame, aroused the curiosity of a member of THE JOURNAL force—or it may have been an innate desire to keep in touch with things. In any event, he, as a layman, answered the advertisement, and, in due time, an imitation typewritten letter was received. In it was rehearsed the old, old story of how the writer had for years suffered the tortures, etc., how he had tried all kinds of physicians, all kinds of patent medicines, serums, various climates, etc., until he heard of the

virtues of the medicines which finally cured him. Accompanying the circular letter was a sheet containing the prescription, with full directions. But it was not the "Rev. Joseph T. Inman" trick in all its apparent simplicity; it was Inman improved. Here is the first prescription: "Bioplasm (Bower) series No. 235a, No. 212, in sealed bottles; 2½ oz., containing about 175 tablets, cost $1.50." Then followed the directions. Farther down the sheet is the second preparation, which is: "Sal Lithin. Take a heaping teaspoonful," etc. Bioplasm! Sal Lithin!! Certainly we have seen these names before. "These prescriptions may be had of almost any druggist. If not, send to the manufacturers, Bioplasm Company, 100 William Street, New York."



LOCOMOTOR ATAXIA CURED!

After suffering for ten years the tortures that only an ataxic can know, Mr. E. P. Burnham of Delmar, N. Y., has been relieved of all pain and restored to health and strength and the ability to resume his usual pursuits by an easily obtained and inexpensive treatment, which any druggist can furnish. To any fellow-sufferer who mails him a self-addressed envelope, Mr. Burnham sends free the prescription which cured him.—[Adv.

Enjoins Prison Goods in Schools.

Of course! We pick up certain medical journals and find that "Bioplasm" and "Sal Lithin" are "ethical proprietary" preparations, put up for physicians' use, for are they not advertised in medical journals? We wondered whether or not the Bioplasm Company was aware of the generous work that E. P. Burnham is doing, but this wonder only lasted ten days, for then came a letter from the company itself, with circulars, testimonials and other literature, all appealing directly to the credulous laymen, and especially to those suffering from that terrible affliction, locomotor ataxia. Of course, the literature said that bioplasm is endorsed by physicians, and, in fact, testimonials from medical men were among the literature sent to this layman by the company.

We shall have something more to say about this wonderful cure-all, bioplasm, in the immediate future.

Claims Made for Bioplasm

ITS COMPOSITION

The circulars sent out by these people bear evidence of having been written by persons who are either densely ignorant of the subject on which they write or decidedly unscrupulous. glance at the following quotations taken from these circulars shows very clearly of what a mass of absurdity and contradiction they are composed:

> After a careful extraction under aseptic methods the enzymes are treated by a process which unites them, creating a new product or ferment which resembles closely the bioplasm of Dr. Lionel S. Beals. . . . There is in bioplasm the several enzymes[1] (ferments) of digestion which include nuclein, lecithin, trypsin, etc.

In another circular we are told:

> Bioplasm is produced from digestive and ductless glandular organs of young herbivorous animals, but it essentially differs from the glandular extracts and nuclein preparations. . . . The defibrinated products after cultivation are desiccated and finally triturated with chemically pure sugar of milk. The exceptional therapeutic virtue of bioplasm is chiefly attributed to the compound element acquired by the process of cultivation described. It positively contains nothing besides the organic products stated, the vegetable ferments being no longer used.

Of course, intelligent physicians know that there is no process by which digestive enzymes may be united, creating a new product of a ferment nature. In the circular we also find this positive statement:

> Bioplasm contains absolutely nothing besides the organic products stated, and its marvelous curative properties reside in the basic ferment resulting from action of the "mother substance" of the several digestive ferments upon each other.

We learn from another circular:

> Bioplasm . . . non-toxic preparation of animal and vegetable enzymes so compounded as to preserve their original cell vitality.

Note we have just quoted that the vegetable ferments are no longer used, and that only the organs of young herbivorous animals are utilized. The enumeration of nuclein and lecithin as digestive enzymes is sufficient to show that the writer of the circular knows little of the subject on which he has written.

ITS THERAPEUTIC CLAIMS

The therapeutic claims made for this cure-all are as grotesque and as absurd as are those which are made regarding its composition. It would be wearisome to enumerate all the

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1. We quote spelling, and grammer exactly in all these extracts.

diseases which it is claimed to cure, but a few taken at random will not be out of place:

> Equally efficient in morbid obesity and emaciation. . . . A fatal epidemic of diphtheritic toxemia in West Virginia was checked only when Bioplasm was used.

Here is what appears on the label as it is sold in the drug stores:

> Indications: All neuroses or other disorders in which assimilation and metabolism are faulty. Most prompt and powerful restorer of leucocytes and phagocytes, immunizing by strengthening bactericidal properties of blood. Unique as neuro-nutrient and blood builder, invaluable in Tuberculosis, Typhoid, Scarlet and Malarial Fevers; in Diphtheria, Pneumonia, La Grippe, Dysentery, etc.; Locomotor Ataxia, in Pelvic diseases of women and convalescence.

It may be interesting for physicians who are prescribing bioplasm to have quoted for their edification some of the testimonials from the laity:

BROMIDROSIS (OFFENSIVE PERSPIRATION)

"I found relief in a short time after beginnig Bioplasm, more noticeable to others than myself. I think it is due to say that, while I was taking it, I used no other remedies."

"IMPOTENCE"

"I became incompetent at the age of 45, as a result of a long nervous strain from overwork and unusual responsibility. For four years I have tried many doctors and many remedies, including the rest cure, with some improvement in my general health, but none in my functions. I was gradually drifting towards melancholia, when a physician advised me to try Bioplasm. I did so faithfully, and inside of a week noticed a change in my feelings. My depression disappeared and my ambition returned, and gradually all my powers and functions were restored to me. I used nothing but Bioplasm, except an occasional aperient. In my whole vigorous life I was never better in every way than I am now— and I consider myself a perfect man, thanks to Bioplasm. This should be made known to the million sufferers, such as I, and you may use this as you see fit."

"INFANTILE INDIGESTION"

. . . "We had no more trouble with baby after using that sweet powder (Bioplasm), which she took greedily, and the only medicine you have prescribed which we have not had a struggle with her to take. The relief from suspense is great, I assure you." . . .

A WONDERFUL CURE

Among the diseases in which Bioplasm seems to get in its work most effectively is tuberculosis, and if one-tenth of what the literature claims for it were true, consumption would soon be a thing of the past. Here is one instance worth recording: A certain physician reported one of the most rapid cures ever effected. His patient had night sweats that were very bad, had been to Colorado, "has taken all the patent medicines on

the market," his previous physician gave him up and said he could not live through the winter; nine physicians had treated him and given him up, assuring him that his days on earth were few.

This is enough to show that the poor patient was in the very last stage, and yet a miracle was performed, for after giving the Bioplasm for a week the testimonial says:

"The change in my patient during the seven days of treatment is most remarkable. The night sweats have ceased. The appetite has improved, and the condition of the lungs has improved to such an extent as to make me sanguine where I have been utterly hopeless. . . . Doctor, I feel like a new man. My strength is rapidly returning, and all I want now is a little more time and Bioplasm, and Bio will put me on a sound basis for the enjoyment of life, and a happy old age—a living chagrin to the many physicians who have been pointing me to the grave."

But there is another side to this bright picture. Before us is correspondence to the effect that the patient died soon after this testimonial was written. The doctor who reported the remarkable cure had been in practice but a little while. He evidently imposed on himself, and in a recent letter he expresses regret that he wrote as he did. It is for this reason that we omit his name. In a letter recently received he says:

"Yes, I have used Bioplasm a number of times since with absolutely no results. . . . I was very enthusiastic at that time and it is certain that I would not attach such value to the treatment as at the time mentioned. When I wrote to the Bioplasm people, it was simply with the hope that their product might be of value to those afflicted with tuberculosis."

LOCOMOTOR ATAXICS CURED

The following letter from one whom we will call X, as we do not care, under the circumstances, to publish his name, is one of the bits of literature that is doing good work for Bioplasm:

———, June 9, 1905.

Bioplasm Company, 100 William Street, New York City:

Gentlemen:—Your inquiry about Mr. R——, the tabetic patient from Mexico, who has been taking Bioplasm for some seven or eight months, I want to answer briefly, so as to cover the ground.

Mr. R—— is about 45 years old, rather frail all his life. . . . Something less than a year ago he began to experience trouble with his legs and general health . . . and on consultation with doctors was promptly pronounced a tabetic, having almost all the classical symptoms. His people here came to me, asking what to do. I could only advise Bioplasm. This was begun as soon as he could get a supply from you, in the meantime being treated with strychnin, massage, and so forth. . . . No improvement. Soon after beginning Bio, felt better. Five or six months ago he came here. When he arrived he could not get on a street car. To see him walk was agony. Soon he was taken to the cars with an

attendant. Shortly after he was going around alone. Took long walks. Got better every day. He called on me yesterday, and upon inquiry said: "The padded sensation of soles still present to some degree, and knee-jerk absent. Aside from these, I consider myself a well man." He looks well, feels well, walks well, and as far as can be told IS well.

Could all ataxics see this case as I have seen it, they would send in such a blast for Bio that you would flee from it. Doubtless, "things seen are mightier than things heard" (of), and there are so many "cures" reported that, like miracles, dwindle at short range, that one more or less will not count for much—in print. But I have seen this, and I believe.

Since coming here Mr. R—— has taken Bio constantly, and also has had massage twice a week. No other treatment, except that he has been going through some of the kicking for "re-education."

Yours very truly, ——, M.D.

A physician in Kansas wrote to the Bioplasm people, asking them to give him the names of some reputable and well-known physicians who had used Bioplasm with the success that was claimed for it. In reply the Bioplasm people said:

We take pleasure in referring you to Dr. X, whose letter we enclose herewith (see above), and who is well known and highly esteemed in ———.

We had already written for information in regard to Dr. X and received a reply to the effect that no such physician was practicing in ————. On receiving the communication from our Kansas correspondent we again tried to get information in regard to Dr. X, which resulted in the following letter just received from our investigator:

> In regard to Dr. X, of whom you wrote me a few days since: He graduated from ———— years ago; he suffers from locomotor ataxia, and can only get around in a wheel chair; he is a deaf-mute, and has been in that condition for ten years; he has not practiced any for twelve years; he has no license in this state or county. He uses Bioplasm himself, and thinks he derives benefit from it. He says that he only recommends it from his personal experience. Dr. C. is his attending physician and has charge of him in a general way. Dr. C. says that he is a perfectly innocent, well-meaning, broken-down man.

We have followed up several other testimonials and it would make interesting reading if we had space to devote to a record of the results of the investigation.

One physician from Pennsylvania writes:

> "I am glad that Bioplasm is finally being exposed. About two years ago the Bioplasm people imposed on we younger physicians by giving us testimonials and ending with selling us five bottles of their dollar size for $2.50.

I dispensed an entire bottle with no effect whatever in any of its so-called usages. The other four I have still as a reminder of my folly. A few days ago a 'locomotor ataxic' told me of his wonderful new cure or 'sure cure' and behold it was Bioplasm, which he got direct from the firm with their wonderful 'epitome.' He had just run out of his '175 tablets for $1.50,' and wanted to get some more."

When some great disaster overtakes a community and the dead and dying lie scattered about, fiendish ghouls steal forth to despoil the dead and helpless. By common consent such loathsome creatures are usually ordered shot when found at such work; but with what words can we characterize those still more loathsome creatures who scent quarry in that vast army of the sick and miserable, who, loath to acknowledge the presence or approach of the king of terrors, turn to those who speak them fair with bright promises of succor while they rob them of a few dollars and, far worse, ofttimes of the one chance of help which medical science affords? And what shall be said of physicians who, consciously or unconsciously, aid in such a despicable business?

Bioplasm's Originator

An instructive and yet pathetic incident relative to this nostrum was revealed in the death of Dr. Peter Manuel Wise, which occurred Sept. 22, 1907. Dr. Wise, it is understood, was the originator, and for some years the most important factor in pushing the sale of, Bioplasm. In one of the numerous form letters sent out by him, he said: "You can depend on it, Doctor, that if Bioplasm is taken properly by a tabetic, for not less than four months, his disease is permanently checked." Dr. Wise died a tabetic. Surely Fate in her unkindest moods never perpetrated a more ghastly irony.

BLENZ'S REMEDY.

A New Modification of an Old Trick.

(From The Journal A. M. A., Oct. 31, 1908)

Reaching the "patent-medicine"-taking public via the family physician has long been a classic procedure on the part of the nostrum manufacturer; reaching the laity through the officially appointed officers of health is the latest modification or extension of the older dodge. In a "form" letter addressed "To County Physicians," Blenz & Co., of Decatur, Illinois, 'take the liberty to address you in reference to our Remedy,"

which "checks all diseases and all tendency to disease and returns the person to perfect health."

Here are a few of the pathologic conditions in which Blenz's Remedy is declared to be indicated:

Blood Poison.	Kidney Disorders.
Asthma.	Rheumatism.
Fevers, all kinds.	Women's Diseases.
Dyspepsia.	Cancer.
Catarrh.	Piles.
Neuralgia.	Pneumonia.
Syphilis.	Tuberculosis.
Gonorrhea.	Smallpox.
Coughs, Colds.	Malaria.

To head off any purchaser, however, who might feel that he was not getting his money's worth, we are told that "Blenz's Remedy not only moves (sic) the diseases mentioned in this circular, but all others incidentally thereto." Surely a valuable preparation to keep around the house. Should you be suffering from palpitation, paralysis or piles "take 5 or 10 grains after each meal" of Blenz's Remedy. "After the relief is obtained continue using for ten days so as to move every germ from the system." When the last germ has regretfully taken its departure, you may feel safe—but not before, because "the germs entering the system through the stomach are the shifters of life," and no one is desirous of having such an essential thing as life shifted. In fact, as Blenz tells us, "every person desires to look as well as they can"—a sentiment whose principle is as sound as its expression is grammatically unstable.

Without having given the "remedy" a clinical trial, but basing our conclusions purely on the description and claims so picturesquely set forth in the advertising, we may concede its potency in at least one condition. At $10.00 a pound—the price asked—it seems beyond dispute that in the administration of this remedy the congested condition of a plethoric pocket-book would find immediate relief.

In a burst of rhetorical imagery and mixed metaphor, we are told that "the Body is the Theater of Disease where the drama of Life is actually played." From the pamphlet furnished, we gather that this theater is under the exclusive management of Blenz & Co., who furnish the interior decoration—for a consideration. Whether or not life is a drama is open to question; when we think of the business which this firm is engaged in, we incline to the belief that existence approaches farce-comedy, in which the physician plays the part of the unsophisticated ruralite and the nostrum exploiters assume the rôle of the "green-goods" man.

THE "BRACERS"

(From The Journal A. M. A., April 17, 1909)

"Patent Medicines" Whose Sale Requires a Liquor Dealer's Tax

We have referred before to the admirable work done by the President's Homes Commission and the vast amount of data collected by it and published in its report. The report of one of its committees—that on social betterment—by its chairman, Dr. George M. Kober, contains information of more than ordinary interest to the medical profession. In the chapter on the "Alcohol Question," attention is called to the increasingly large number of what have been called "booze medicines" on the market—that is, alcoholic preparations sold under proprietary names as medicinal products. As a matter of fact, the amount of medicinal agents—aside from alcohol—contained in these "bracers," is so small as to be negligible. The Commissioner of Internal Revenue has published lists of these "medicines" which have been analyzed in his department, and found "insufficiently medicated to render them unsuitable for use as a beverage." The druggist is forbidden to sell these "medicines"—classed as "compound liquors" by the Internal Revenue Department—unless he "has already paid special tax as retail liquor dealer." In his report, Dr. Kober gives the names of over 120 of these "patent-medicine" drinks, together with the alcohol percentage as "ascertained from the Commissioner of Internal Revenue in a communication dated Nov. 28, 1908." We give below a partial list of these, omitting those quoted as having less than 20 per cent. of alcohol:

NAME OF PREPARATION	ALCOHOL PER CENT.	NAME OF PREPARATION	ALCOHOL PER CENT.
Angostura Aromatic Tincture Bitters	45.00	Blackberry and Ginger Cordial (Standard Chemical Co.)	25.62
Aromatic Bitters	42.14	Black Tonic	44.62
Atwood's La Grippe Specific	32.70	Bonekamp Stomach Bitters	20.34
Augauer Kidney Aid	35.65	Bonekamp Bitters	37.03
Augauer Bitters	34.13	Brown's Aromatic Cordial Bitters	42.14
Belvedere Stomach Bitters	20.32	Brown's Vin Nerva Tonic	27.32
Bismarck Laxative Bitters	21.14	Botanic Bitters	20.44
Bismarck's Royal Nerve Tonic	20.67	Cinchona Bitters	27.44
Blackberry Cordial (Strother Drug Co.)	21.50	Clifford's Cherry Cure	35.90

NAME OF PREPARATION	ALCOHOL PER CENT.
Clifford's Peruvian Elixir	24.77
Crescent Star Jamaica Ginger	42.65
Cuban Gingeric	31.09
Dandelion Bitters	30.15
De Witt's Stomach Bitters	23.86
Dr. Brown's Blackberry Cordial	29.04
Dr. Hoffman's Golden Bitters	26.30
Dr. Sterki's Ohio Bitters	21.67
Dr. Dade's Blackberry Cordial	28.84
Dr. Bouvier's Buchu Gin	39.83
Dr. Fowler's Meat and Malt	33.70
Dr. Worme's Gesundheit Bitters	27.92
Dr. Rattinger's Bitters	27.10
Ducro's Alimentary Elixir	23.01
Elixir Calisaya	22.96
Ferro China Bascal	32.10
Ferro China Bissler	28.87
Gastrophan	26.10
Gentian Bitters	39.95
Gilbert's Rejuvenating Iron and Herb Juice	23.81
Ginger Tonic	25.31
Glycerine Tonic (Elixir Pepsin)	39.72
Green's Chill Tonic	37.88
Jack Pot Laxative Bitter Tonic	24.95
Juni-Kola	22.89
Juniper Kidney Cure	24.21
Karlsbader Stomach Bitters	21.56
Katarno	27.60
K. K. K.	24.12
Kola and Celery Bitters	20.68
Kreuzberger's Stomach Bitters	40.22
Kudros	29.33
Lemon Ginger	28.88
Meta Multa	32.98
Milburn's Kola and Celery Bitters	20.68
Neuropin	32.02
O'Hare's Bitters	44.93
Old Dr. Jacques Stomach Bitters	40.02
Old Dr. Scroggin's Bitters	24.74
Our Ginger Brandy	26.24
Panama Bitters	32.83
Pepsin Stomach Bitters	34.96
Peptonic Stomach Bitters	23.12
Rockandy Cough Cure	23.85
Severa's Stomach Bitters	22.66
Smith's Bitters	34.41
Steinkonig's Stomach Bitters	32.05
Tatra (Latra)	22.90
Tolu Rock and Rye	30.08
True's Magnetic Cordial	26.09
U-Go	32.14
Uncle Josh's Dyspepsia Cure	30.06
Westphalia Stomach Bitters	31.96
William's Kidney Relief	37.00

BROMIDIA

Deaths from the Use of the Remedy

(From The Journal A. M. A., April 21, 1906, 1221)

Dr. Horatio C. Wood, Jr., Philadelphia, writes:

"One of the deleterious results of using proprietary mixtures even when the formula is known is that the physician gets in the habit of thinking of the mixture as a remedial entity, instead of a combination of active ingredients, and is thereby

led to use this combination in cases in which he would have avoided the individual drugs making up the mixture. The following item is taken from the Philadelphia *Evening Telegraph*, February 13, and also appeared in several New York papers; it preaches an eloquent but pathetic sermon on this subject:

Withing an hour after his father, a Brooklyn physician, had given him a dose of bromid, H. G. P., a prodigal son, died yesterday at his father's home in Brooklyn. Two years ago, when he appeared to have sown his wild oats, the father made him superintendent of his country place, near Grants Mills, Delaware County. A week ago the son left his place, and at 1 o'clock yesterday morning appeared at his father's Brooklyn home. He was nervous, and at 9 a. m. begged for a sedative.

"I prescribed the usual quantity of bromidia," the young man's father told a reporter. "He was weak and had suffered from weak heart and kidney trouble for some time."

An hour later the father found the son dying and administered restoratives, but to no avail.

"In an article published in THE JOURNAL, June 10, 1905, page 1836, I quoted in regard to bromidia the remarkable statement of the manufacturers that it is "the safest hypnotic known," and questioned how the addition of potassium bromid and tincture of hyoscyamus could overcome the depressant action of the chloral, which is the active ingredient of this nostrum. If the physician had thought of his bromidia as a solution of chloral rather than as a solution of bromid he probably would have hesitated before using it in an alcoholic case."

The following appeared in the Bangor (Me.) *Commercial*, March 8:

Frank H. Perkins, a newspaper reporter of Plymouth, Mass., was found dead in a room in a hotel in Augusta, Sunday. The coroner stated that death was due to bromidia poisoning, but whether the drug was taken accidentally or with suicidal intent is a matter of conjecture. Perkins was a newspaper correspondent in Plymouth for 22 years. He left a few weeks ago to accept a position on the city desk of the Kennebec *Journal*. While a resident of Plymouth, he was correspondent for a number of Boston papers, and in recent years was connected with the Plymouth *Observer*. He was 55 years old and unmarried. It is understood that his nearest surviving relative is an aunt in Middleboro.

The above item was sent to Dr. O. C. S. Davies, Augusta, with a request that he send us a more complete report of the case. In his reply Dr. Davies stated that Mr. Perkins had at one time been an inmate of an inebriates' home and that he had gone to Augusta to do newspaper work, but had

been unable to hold the position because of his condition. Dr. Davies in his letter, says: "When the body was found, there were eleven one-ounce bromidia bottles about the room or on his person. Nine were entirely empty and the other two were about half full. None of these bottles indicated that they had been purchased on a physician's prescription, only the druggist's label marked 'bromidia' being on them."

BROMO-SELTZER

Its Composition and Some of Its Effects

(From The Journal A. M. A., Sept. 29, 1906, 2158)

In response to requests for information regarding the composition of bromo-seltzer, we had the preparation analyzed. According to the analyses, 100 parts of the effervescing salts contain:

Potassium bromid	10.53 parts
Acetanilid	4.58 parts.
Caffein	1.20 parts

Assuming an average dose of the preparation—a teaspoonful—to weigh 76 grains (5.0 gm.), each dose would contain:

Potassium bromid	7 grains (0.5 gm.).
Acetanilid	3 grains (0.2 gm.).
Caffein	8 grains (0.05 gm.).

Since a half ounce of this preparation is often taken at a dose, and since many, especially women, are taking it daily, it is anything but "harmless."—THE JOURNAL, Feb. 10. 1906, p. 454.

A case of poisoning from this preparation was reported by Dr. D. T. Quigley, North Platte, Neb., in THE JOURNAL, Feb. 10, 1906, p. 454.

Dr. W. J. Robinson, New York, reported a case of impotence following the excessive use of this nostrum.—THE JOURNAL, Aug. 18, 1906, p. 508.

Dr. H. B. Hemenway, Evanston, Ill., reported the death of a woman, aged 31, from acetanilid poisoning caused by taking bromo-seltzer.—THE JOURNAL, Dec. 29, 1906, p. 2158.

BUFFALO LITHIA WATER

It Is Now an "Alkaline Diuretic"

(From The Journal A. M. A., Sept. 12, 1908)

CHICAGO, Aug. 10, 1908.

To the Editor:—A few weeks ago the representative of the Buffalo Lithia Water called on me at my office. In discussing the merits of the water, I called his attention to the fact that it contained merely a trace of lithium. He replied that they made no claim for it as a lithia water, but sold it as an alkaline water which the physician might prescribe as he saw fit. He said that the name was selected simply to distinguish it from the host of other mineral waters. If my memory serves me correctly, this constitutes a remarkable change of front on the part of the promoters of this widely advertised mineral water. Not long ago it was highly vaunted as a uric acid element depending on its content of lithium for its therapeutic action. Doubtless many physicians during the last twenty years have prescribed gallons of this water, sometimes for patients who could ill afford to pay for it, on the supposition that it contained lithium, and was, therefore, a valuable remedy against uric acid. What is the reason for the abandonment of this claim on the part of the proprietors? Is it because, following closely the advance of medical science as they must, they have learned that lithium is no longer regarded as a uric acid eliminant? Or have they learned for the first time from the government analyses that their water contains practically no lithium? The claim that the water is an alkaline water is no better supported by facts than that it is a lithia water. This also they can learn from the government report if they will read it carefully. The alkaline theory will doubtless serve its purpose until attention is called to the fact that it is a calcic saline water. It will be interesting then to learn what quality will next be invoked to sell it. It seems as if it is time that physicians should awake to an appreciation of the need of caution in accepting the claims of those who have mineral waters to sell. There is as much need for supervision here as in the case of proprietary remedies. * * * *

COMMENT:—Were it not for the tragic element it would be ludicrous to note the way in which manufacturers and proprietors of medicinal agents adjust themselves to varying conditions. Adaptation to environment is the essential element for success. This is illustrated by the facts brought out by our correspondent in the above letter.

When Buffalo Lithia Water was first put on the market uric acid was the scapegoat on which most of the sins of etiologic ignorance were heaped. Contemporaneous with, and in a sense a corollary of, the uric acid fallacy was another hypothesis, viz., that lithium was the uric acid eliminant *par excellence.* The proposition, therefore, was a simple one: Uric acid causes disease; lithium eliminates uric acid; *ergo,* Buffalo Lithia Water, because it contains lithia, eliminates disease. Q. E. D.

The result of these two theories, combined with skilful advertising on the part of the proprietors, made Buffalo Lithia Water a valuable piece of property. "The mills of the gods grind slowly," but finally government and other chemists, with small appreciation of the psychic and commercial value of the name, demonstrated that Buffalo Lithia Water contains but the merest trace of lithium—an amount almost as small as the hypothetical gold in a widely advertised liquor cure.

Now, therefore, it is an "alkaline diuretic." While government analysts dispute the claim that it is an alkaline water, yet its proprietors may rest assured that the statement regarding its diuretic properties is beyond contradiction, for water of any kind is the simplest, surest and most universal of diuretics. It may be noted in passing that the more recent advertisements refer to Buffalo Lithia Springs Water instead of Buffalo Lithia Water. This is a distinction with a difference and the change in title has probably been brought about by that great agency for comparative righteousness in advertising—the national Food and Drugs Act!

CAPUDINE

Another of "The Subtle Poisons"

(From The Journal A. M. A., Oct. 17, 1908)

A great many inquiries reach the Association's laboratory regarding various nostrums and "patent medicines" with requests for analyses, but the number of preparations thus brought to notice is so great that it would take an army of chemists to satisfy all inquiries. As it is, only such preparations are examined as will serve as examples of a class of nostrums which it is desired to expose or that are of special interest to the profession. Hick's Capudine Cure—or as it is known to physicians "Elixir Capu-Hicks"—is one of such examples, and its investigation has been deemed advisable.

MANUFACTURERS' CLAIMS

The manufacturers — the Capudine Chemical Company, Raleigh, N. C.—issue two kinds of advertising pamphlets—one for physicians and another for the public. The medical profession is told that Capudine is

> . . . especially recommended for the relief of all headaches, colds, la grippe, neuralgia, sick headache, nervous headache, acidity, flatulency, and indigestion pains, also for dysmenorrhea, after pains, etc.

A formula of the type that usually accompanies preparations of this character is given:

> Elixir Capu is composed of the combined Bromids of Potassium, Sodium and Ammonium, Caffein, Capu, Elixir Peppermint, Adjuvants and Correctives, Syrup and water, q. s.

To elucidate further and for the information of those who have never heard of the substance capu, we are told:

> Capu is a cellulin product—Chemical formula $C_{18}H_{20}N_3O_4$ possessing very powerful analgesic properties and is a mild antipyretic.

In a "Laundry List" pamphlet extolling the virtues of the remedy, the public are informed that

> Hicks' Capudine CURES all headaches, indigestion, la grippe, colds, etc.
>
> No remedy ever placed before a suffering mortal has the wonderfully quick powers of Capudine.
>
> Hicks' Capudine is not a "dope"; will not produce a habit.
>
> Try this splendid remedy and enjoy life once more.
>
> Capudine is a liquid, acts immediately and is sold by dose at soda founts, and in 10, 25 and 50c bottles at drug stores.

LABORATORY FINDINGS

Capudine (whether in the form of Elixir Capu-Hicks, or as Hicks' Capudine Cure) is a brown, rather syrupy liquid, slightly alkaline to litmus, with an aromatic odor and a salty taste. Besides 8 per cent. of alcohol, Capudine was found to contain sugar, aromatics, chlorids, caffein, antipyrin and salicylates. Quantitative estimations demonstrated the presence of about 1.25 gm. (19 grains) of antipyrin and caffein to each fluid ounce, and salicylates equivalent to about 0.9 gm. (14 grains) of salicylic acid to each fluid ounce. Thus Capudine depends for its action principally on antipyrin.

COMMENTS

As a barefaced attempt to exploit, at the same time and with the same preparation, both the medical profession and the public, this nostrum is probably preëminent in the annals

of the "patent medicine" business—a business whose claims to deceit and mendacity are already high. That medical journals should aid and abet such methods would seem unbelievable. Testimonials are forthcoming, of course. In the pamphlet to the laity, these come from the butcher, the baker and the candlestick maker, while in the "literature" to physicians, at least some of the testimonials—"case histories," if you please! —come, it is needless to say, from our old testimonio-maniac friend, W. T. Marrs,[1] M.D., of Peoria Heights, Ill. As Dr. Marrs has recommended, at various stages of his literary career, such remedies as Neurilla, Antikamnia, Bromidia,

Reproduction (reduced) of an advertisement of Capudine in a medical journal (*Medical Summary*). In this way the physician is reached.

Reproduction (reduced) of an advertisement to the public appearing in a religious publication, the *Baptist Flag*.

Chionia, Arsenauro, Cactina Pillets, Thialion, Phenoseptine, Papine, Calcidin and others too numerous to mention, his opinion regarding Capudine must be considered authoritative. Dr. A. S. Reed of Naples, Maine, also details a "case history" in which the marvelous results achieved by the administration of Capudine are surpassed only by the still more marvelous spelling and composition of the testimonial.

1. See THE JOURNAL, March 14, 1907, p. 897.

In the lay press we find Capudine extensively advertised in the typical "patent medicine" style. In the "Laundry List" pamphlet, previously referred to, which goes direct to the public, there are graphically portrayed some of the conditions in which Capudine is indicated.

For the purpose of determining the attitude of the Capudine Chemical Company regarding its policy of combining the "patent medicine" and "ethical proprietary" business in one and the same preparation, a Chicago physician wrote, asking if it made any particular difference whether he wrote a prescription for Elixir Capu-Hicks or told his patients to go to the drug store and ask for a bottle of Hicks' Capudine Cure. The Capudine Chemical Company rose gracefully to the bait and swallowed it hook and line. The answer, dated Sept. 28, 1908, is so ingenious and enlightening that we give it almost in full. For the purpose of emphasizing certain passages we have employed italics and small capitals:

> "We use the name Elixir Capu-Hicks so that Doctors can write for it and have their prescriptions filled *without the consumer knowing that it is the same thing as the advertised product.* A great many of our doctor friends prefer this.
>
> "In regard to the cost to the druggist it is the same and we presume that MOST DRUGGISTS DISPENSE CAPUDINE BY THE DOSE OVER THE COUNTER AND ELIXIR CAPU-HICKS ON PRESCRIPTION FROM THE SAME ONE-PINT OR ONE-GALLON BOTTLE OF CAPUDINE, WHICH IS PERFECTLY ALL RIGHT [! !]. Though some of our drug friends buy it labeled as Elixir Capu-Hicks specially for their prescription trade."

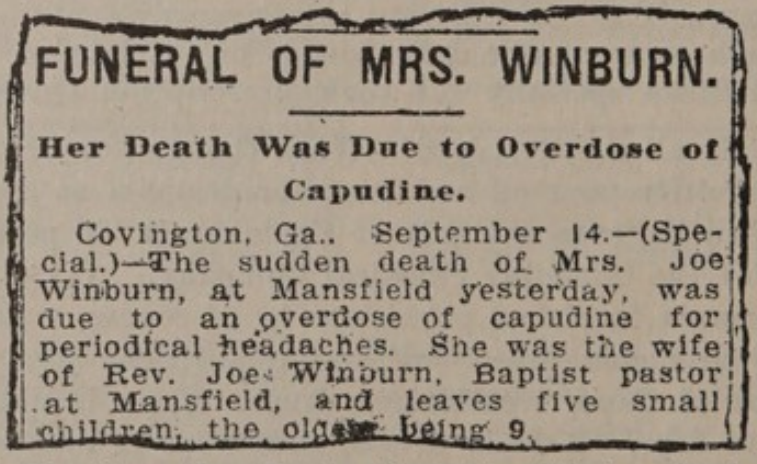
"Perfectly all right" indeed! What though you deceive your patient, stultify yourself and use your druggist as a catspaw; just so you increase the sale of Capudine it "is perfectly all right"—for the Capudine Chemical Company.

The formula furnished physicians is, of course, a joke. The various ingredients given—without quantities—are, with the exceptions of Capu, well-known drugs. Capu is not so well known; in fact, its circle of acquaintances is limited to the Capudine Chemical Company. According to the company (and if it doesn't know, who does?) "capu is a cellulin product—chemical formula $C_{18}H_{29}N_3O_4$." This looks abstruse and scientific, and doubtless in many cases prevents further impertinent and awkward questions. The description only lacks one thing to prevent it qualifying for an honored position in the hall of

fakes—a "structural formula" of weird and impressive design. The great unknown—Capu—is, of course, as the analysis demonstrates, our old friend antipyrin. On the "literature" furnished physicians and on the advertising distributed to the public, great stress is laid on the fact that Capudine "contains

Diagnosis and treatment in the home! Reproduced from the "Laundry List" pamphlet sent out to the public.

no acetanilid." This puts the nostrum in that dangerous class of "patent medicines," increasingly common of late, in which a heart-depressing drug is present, but one, unfortunately, which



FUNERAL OF MRS. WINBURN.

Her Death Was Due to Overdose of Capudine.

Covington, Ga., September 14.—(Special.)—The sudden death of Mrs. Joe Winburn, at Mansfield yesterday, was due to an overdose of capudine for periodical headaches. She was the wife of Rev. Joe Winburn, Baptist pastor at Mansfield, and leaves five small children, the oldest being 9.

Reproduction from the Atlanta (Ga.) *Constitution*, Sept. 15, 1908, which gives the lie direct to the statement that Capudine "does not contain poisonous drugs."

the Food and Drugs Act does not require to be specifically named on the label. Mr. Adams, in the "Great American Fraud" series says, in speaking of the labels on "patent medi-

cines:" "If the words 'warranted harmless' appear anywhere, look twice over for the Ethiopian in the woodpile." We would say if the words "contains no acetanilid" appear on the label of any "headache cure," it is a safe guess that some other equally dangerous heart-depressant is there in its place. The statements that (1) "Hicks' Capudine is not a 'dope'"; (2) "does not contain . . . poisonous drugs," and (3) "will not produce a habit," are three separate and distinct falsehoods. As to its "harmlessness," a telegram that appeared in the Atlanta (Ga.) *Constitution*, which we reproduce, refutes briefly but tragically, this cruel lie. Dr. E. W. Warren, of Palatka, Fla., reports the case of a woman who was thought to have been murdered, but the state's attorney concluded that her death was caused by too much Capudine.

And this hybrid "'patent medicine'-proprietary" is to be found advertised in medical journals! How much longer will the medical profession put up with it?

CASTORIA

(From The Journal A. M. A., Jan. 4, 1909)

Some thirty years ago one Dr. Samuel Pitcher patented a formula for the preparation of a syrup of senna with aromatics obtained by extracting senna with hot water containing a little sodium bicarbonate. This preparation was sold under the copyrighted name "castoria." Since then the patent for this preparation has expired and the preparation as well as the name "castoria," have become public property. According to the patent, the formula is as follows: To 135 pounds of senna leaves add 35 gallons of water at 65 degrees C., in which has been dissolved 48 ounces of sodium bicarbonate. Exhaust the senna by percolation until 240 pounds are obtained. In this dissolve 210 pounds of sugar and 4 ounces of Rochelle salts; then add spirit of gaultheria, 18 pints, and spirit of pepo, spirit of chenopodium (wormseed), spirit of peppermint and spirit of anise, of each 2 ounces. Castoria, therefore, appears to be a syrup containing an aqueous extract of senna with aromatics. Senna preparations, prepared by extracting the drug with water containing alkalies were at one time supposed to have special value, in that certain resinous principles of senna were eliminated by this treatment. Now the resinous principles are removed by extracting the drug with alcohol

and rejecting the alcoholic extraction which contains the resinous material; the drug prepared in this manner is then extracted with water. Such a preparation is official in the U. S. Pharmacopeia as Syrupus Sennæ.

CATARRH AND COLD CURES

The Composition of Some "Patent Medicines" Analyzed by the British Medical Journal

(From The Journal A. M. A., Feb. 6, 1909)

In continuing its investigation of secret remedies, the *British Medical Journal* (Oct. 24, 1908) takes up "catarrh and cold cures," giving analyses of Dr. Lane's Catarrh and Cold Cure, Van Vleck's Catarrh Balm, Dr. Mackenzie's "One Day" Cold Cure, Keene's "One Night" Cold Cure, Munyon's Catarrh Tablets, Munyon's Special Catarrh Cure, and Birley's Anti-Catarrh.

DR. LANE'S CATARRH CURE

Dr. Lane's Catarrh Cure turns out to be a dilute solution (0.4 per cent.) of phenol (carbolic acid) and common salt (3.3 per cent.) in water. The preparation on which the Keene company guarantees the breaking up of any "ordinary" cold in one night is said to consist of "Cascara, Bromid, Quinin, Ipecac, Camphor, Bryonia." The analyst was unable to find any indication of bromid, camphor, cascara or ipecac, while the quinin turned out to be a trace of impurity in the cinchonin present, but he did find acetanilid in very appreciable quantities.

MUNYON'S SPECIAL CATARRH CURE

Munyon's Special Catarrh Cure consisted of sugar, which had possibly been medicated with a tincture containing infinitesimal quantities of medicinal agents. The usual disproportion between cost and retail price is maintained in these as in other secret remedies.

Editorially the *British Medical Journal* takes up these "catarrh cures" as examples of the methods of the nostrum makers and notes how the seriousness and evil consequences of the disease are exaggerated, quoting the statement from the advertisement of one of the articles that "it is estimated that over 20,000 people died in the United Kingdom last year of consumption caused by catarrh." "The remedy put forward for this malignant disease is shown," says our con-

temporary, "to consist of a solution of a pinch of common salt with a trace of carbolic acid, the actual cost of the quantity sold for a shilling [24 cents] being one-thirtieth of a farthing [1/60 of a cent]." The *British Medical Journal* concludes: "So long as quack and secret nostrums enjoy their present immunity from legal control, the only way to educate the public out of the practice of resorting to their employment appears to be persistent exposure of their useless or harmful nature. The public, or that part of it which plumes itself on its knowingness, is perhaps disposed to assume that the opinions of medical men on the subject are biased, but accurate statements of the real composition of particular nostrums can hardly fail to carry weight, even with the most suspicious."

COUGH MEDICINES

The Composition of Some Much Advertised Secret Cough Remedies

(From The Journal A. M. A., Feb. 13, 1909)

In another of its series of articles on "Secret Remedies," the *British Medical Journal,* Dec. 5, 1908, p. 1697, deals with the composition of a few of the most widely advertised cough medicines. The analysis of cough mixtures is not easy, as many of the ingredients used are devoid of definite active principles that can be identified. The formulas, even if they are given, do not necessarily represent the actual ingredients. The discovery of potent remedies, such as preparations of opium, ipecacuanha, etc., is more important and more likely to be successful.

KAY'S LINSEED COMPOUND

According to the analyses, this preparation is fairly represented by ipecacuanha wine, 42 minims; morphin 1/7 grain; chloroform 5 minims in each fluid ounce.

OWBRIDGE'S LUNG TONIC

This much-advertised "patent medicine" is a similar preparation to Kay's Linseed Compound.

POWELL'S BALSAM OF ANISEED

This has been reputed to contain morphin and evidence has been brought to that effect in legal proceedings, but the analyses showed 0.012 per cent. of an alkaloid which was not

morphin, although it may have been one of the derivatives of that alkaloid. It is evident that the composition of the remedy has been changed.

DR. KILMER'S INDIAN COUGH CURE

Analysis of this nostrum, which is manufactured in the United States, showed that 100 parts contained 63 parts of solids, of which practically the whole was sugar; there was also present about 2 per cent. of alcohol and about 0.5 per cent, of oil of pine, with rather less than 0.1 per cent. of a resinous substance agreeing well with the resins from compound tincture of benzoin; a small resinous deposit also remained adhering to the inside of the bottle. A trace of a bitter yellowish substance was present, which may have been the aloes contained in the compound tincture, but did not agree perfectly with it in character; the quantity was too minute for exact identification. No alkaloid was present.

CROSBY'S BALSAMIC COUGH ELIXIR

Analysis showed the presence of sugar, a trace of chloroform, sulphuric acid, acetic acid; a trace of an aromatic substance probably derived from tolu, and a minute trace of alkaloid. The sulphuric acid corresponded to 40 minims of the official dilute sulphuric acid in one fluidounce.

VENO'S LIGHTNING COUGH CURE

This "patent medicine" contained glycerin, alcohol and a small amount of resin and no alkaloid was present. There is some reason to believe that the resin is derived from "Grindelia robusta"; but positive proof of the presence of this drug could not be obtained.

KEATING'S COUGH LOZENGES

These were found to correspond approximately to the following formula: Morphin, 0.007 grain; ipecacuanha, 0.07 grain; extract of licorice, 2.1 grains; sugar, 13 grains in one lozenge.

BEECHAM'S COUGH PILLS

The composition of these pills is expressed as follows: Morphin, 0.0035 grain; powdered squill, 0.1 grain; powdered aniseed, 0.3 grain; ammoniacum, 0.3 grain; extract of licorice, 0.4 grain in one pill.

CUTICURA RESOLVENT

A Weak Solution of Potassium Iodid

(From The Journal A. M. A., May 23, 1908)

In the investigation of secret remedies the *British Medical Journal* (April 18, 1908), takes up the nostrums advertised to the British public for the treatment of skin diseases. Among these the Cuticura remedies which are prepared by the Potter Drug and Chemical Corporation, Boston, and are widely sold in America, are of special interest. The advertisements recommend these preparations for a variety of skin affections and imply their special value in syphilis. The remedies consist of the cuticura soap, ointment and an internal remedy known as Cuticura Resolvent. The last named preparation is said to be alterative, antiseptic, tonic, digestive, and aperient, and is recommended for purifying the system of humors of the skin, scalp, and blood, with loss of hair. It is to be given in a dose of two teaspoonfuls for adults three times a day. Analysis showed the composition of the mixture to be:

Potassium iodid	17 grains
Sugar and glucose	486 grains
Extractive	8 grains
Alcohol	10 fluidrams
Water sufficient to make	6½ fluidounces

In this preparation, which is sold for 60 cents for 6½ ounces, no alkaloidal substance was present; the extractive gave a slight indication of the presence of a preparation of rhubarb; all other drugs with well-marked characters were absent. It is a good illustration of the power of advertising and the faith of the credulous public that less than a grain of potassium iodid at a dose is believed to produce effects when given in a secret nostrum which cannot be attained by the usual methods of treatment.

DANIEL'S CONCENTRATED TINCTURE OF PASSIFLORA INCARNATA

Curious Pharmacologic Action of May-Pop (Passiflora Incarnata)

(From The Journal A. M. A., Oct. 9, 1909)

In perusing the "literature" of some of the fearfully and wonderfully made proprietary mixtures on the market one is uncertain whether the attitude of their manufacturers is "We aim to please" or one of "Heads we win, tails you

lose." The uncanny elasticity of pharmacologic action in proprietaries of the type referred to is the cause of this uncertainty. For instance we find that both amenorrhea and menorrhagia are amenable to the same remedy and it is nothing unusual for a nostrum to be both a stimulant and a sedative.

We are reminded of this fact in perusing the "literature" of Daniel's Concentrated Tincture of Passiflora Incarnata, a proprietary marketed by J. B. Daniel, Atlanta, Ga. According to the booklet this remedy is to be employed in both convulsions and paralysis. Unlike many nostrums the proprietor claims to base his recommendations on exact pharmacologic investigations of which he produces two brands; the doubting physician pays his money and takes his choice. If he has a case of convulsion let him consult the laboratory report of Dr. Isaac Ott, who tells us that "in Passiflora Incarnata we have a drug of considerable power producing a depressant action on the reflex activity of the spinal cord." If, on the other hand, the physician has a case of paralysis to deal with he should turn over the page and take the authority of the certificate of the "Iamatological Bureau" which states, "it notably exalts the reflex function of the spinal cord."

Let the doctor in search of a hypnotic that is not a hypnotic and a powerful remedy that "does not endanger the heart" take his choice between these two contradictory actions. It is all the same to the nostrum maker so long as the doctor uses his "only reliable preparation of May-Pop" for all cases, every time and all the time.

But, seriously, isn't it about time that such opera bouffe methods of presenting medicinal agents to physicians should be resented by the medical profession? Disease itself is a serious thing and the treatment of disease is no trifling matter. The attempt to induce physicians to use a preparation by investing it with incongruously contradictory virtues neither flatters the intelligence of the medical profession nor invests pharmacy with any degree of dignity.

ECTHOL

(From The Journal A. M. A., March 13, 1909)

To the Editor:—Can you give me any information concerning "Ecthol" (Battle & Co.), marketed as an "alterative and antiseptic"? In one instance I have unwillingly prescribed it, with apparently no effect.

W. D. CHAPMAN, M.D., Silvis, Ill.

ANSWER.—Ecthol, advertised in a style typical of nostrums, is said to contain as its active ingredients *Echinacea angustifolia* (Pale Purple Cone Flower) and *Thuja occidentalis* (Arbor Vitæ). Neither of these drugs is official in the U. S. Pharmacopeia and information concerning their therapeutic value amounts practically to unverified claims that they are useful as alteratives and in certain inflammatory conditions. The viciousness of vaunting an internal remedy for serious septic conditions without ample basis of fact is self-evident. A pamphlet before us, entitled "Ecthol in the Sudan," is a fine example of nostrum advertising, calculated to captivate the unthinking physician with its show of science and to mislead him into believing that the remedy exploited has been endorsed by high authority. It begins with a eulogy of the Wellcome Research Laboratory at Khartum, Sudan, and its second report, and the work of the laboratory is described and praised. In close connection with this praise of legitimate scientific work, we are told that ecthol is used in the Sudan, "and that it is regarded as almost a specific in certain classes of diseases." The reader is left to infer that its use is described in the report, although the advertiser is careful not to say so. Three pictures of patients with smallpox, chickenpox and syphilitic ecthyma, respectively, are reproduced from the report and without apparent break in the article we are told that "it is in precisely such cases that ecthol gives its most striking results." Of course, the Wellcome Research Laboratory report contains no such mention of ecthol. While such attempts to bolster up a preparation by weaving its praises into an account of a strictly scientific report may be "good business," it is in fact *prima facie* evidence of the valuelessness of a remedy apparently unable to stand on its own merits.

ENO'S FRUIT SALT

(From The Journal A. M. A., April 11, 1908)

PHILADELPHIA, March 21, 1908.

To the Editor:—Can you furnish the formula of Eno's Fruit Salt? A patient under my observation took this preparation on the advice of a friend and has since developed signs of cardiac dilatation, weakness and arrhythmia. A. A.

ANSWER:—According to an analysis in the *Pharmaceutische Centralhalle*, Nov. 1, 1906, Eno's Fruit Salt consists of about

50 per cent. sodium bicarbonate, 15 per cent. sodium bitartrate and 35 per cent. free tartaric acid. Therefore, its composition is very similar to that of seidlitz powder.

ENTERONOL

The "Greatest Germicide Known to Science"!

(Abstracted from The Journal A. M. A., March 21, 1908, 977)

This preparation is put on the market by the Enteronol Company, Oswego, N. Y., which declares that Enteronol is "the greatest antiseptic and germicide known to science," and that it "destroys the germs of typhoid fever, acute and chronic diarrhea, dysentery, cholera infantum, cholera morbus, summer complaint, Asiatic cholera, etc., within two hours." The formula furnished by the company reads as follows: "Ipecac, sub. nit. bismuth, latalia rad., camphor, lupulin, caffein and rheum." The attention of the Council on Pharmacy and Chemistry of the American Medical Association was directed to this preparation by a correspondent who had received a circular from the Enteronol Company. He sent a dollar to the company asking for a sample of "latalia rad." that he might study the drug botanically, as he was unfamiliar with it. He expected to receive by return mail a sample of root or bark, but instead, he received three boxes of Enteronol and the information that as "latalia rad." costs from $25 to $45 a pound the company could not afford to send samples. In a circular letter sent out by this company "latalia rad." is said to grow on the sides of the Himalaya Mountains in India, and that the company is unable to obtain enough for its own use. This statement is probably correct, and no one else could secure the drug either. A sample of Enteronol was submitted to Professor Day, of the University of Illinois, and to Professor Kraemer of the Philadelphia College of Pharmacy. Professor Day reports that he was "unable to find any mention of the drug 'latalia rad.,' which is stated as one of the ingredients of this preparation. I have searched the usual works of reference on pharmacognosy without being able to find any reference to a drug of this name. A microscopic examination of the tablets shows the presence of rhubarb and of ginger, but no lupulin, at least not in substance; nor could I locate definitely any ipecac, also stated to be one of the ingredients. Since ginger is not stated to be one of the ingredients of the compound, it, perhaps, may be the mysterious stranger 'latalia rad.' I was unable to locate any of the

ordinary astringent drugs, such as kino, grameria, or nutgall." The results of Professor Kraemer's examination were practically identical with those obtained by Professor Day. A report from the chemical laboratory of the American Medical Association states that as Professors Kraemer and Day suggested the presence of alum, tests were made for this substance. The analysis, details of which are given, leads to the conclusion that alum is the chief constituent of Enteronol. The report adds strongly to the impression that "latalia rad." is simply a ruse to catch the unwary and trusting physician who lacks the time to look into the botany of every new plant discovered, and who is willing to trust the honesty of every manufacturer. Attention is also directed to the fact that while bismuth and caffein are mentioned as ingredients tests made in the laboratory failed to discover either of these substances. Since there is no lupulin, no ipecac, no caffein, no bismuth, and possibly no "latalia rad." one is forced to the conclusion that the "formula" is meaningless and worthless, and that it is used simply to satisfy the demand for formulas for proprietary remedies. This is one more beautiful illustration of the absurdity of accepting a preparation because the "formula is on every package."

An Invitation to The Journal to Humbug the Profession

(From The Journal A. M. A., Nov. 20, 1909)

THE JOURNAL has received a circular letter from the Enteronol Company, in which the following liberal offer is made:

"We are willing to take one-fourth or one-half page 'ad' in your Journal for a year at the regular rate, on condition that you accept payment therefore in our GUARANTEED 7 per cent., preferred stock at par; or if you desire, in ENTERONOL at the net wholesale price to physicians."

Not that this offer is made exclusively to THE JOURNAL:

"A large number of medical journals have accepted the foregoing proposition; many carrying this advertising for several years already."

"Our company is cooperative; we paying no cash for advertising. The company is owned principally by physicians, medical journals, and druggists."

The journals of which we have record that carry the enteronol advertisement are: *Kansas City Medical Record, Milwaukee Medical Journal, Toledo Medical and Surgical Reporter, Proctologist, Pediatrics,* and the *Atlanta Journal-*

Record of Medicine. If the statements made by the Enteronol Co. are true, we might infer that these journals are being paid for advertising space either with "preferred stock" or with the nostrum itself. As we have previously shown, however, the veracity of the enteronol advertising matter is by no means unimpeachable.

Enteronol, it will be remembered, was exposed in THE JOURNAL, March 21, 1908. It is advertised as the "greatest antiseptic and germicide known to science," and possesses (?) such remarkable power that it "destroys the germs of typhoid fever, acute and chronic diarrhea, dysentery, cholera infantum, cholera morbus, summer complaint, Asiatic cholera, etc., within two hours." "The original product is found only high up on the sides of the loftiest mountains in the world—the Himalayas of India."

THE "LITERATURE" FORMULA

Of course it has a "formula":

Ipecac		Lupulin
Sub. nit. bismuth	Latalia rad.	Caffein
Camphor		Rheum

This seems very open and above board, except as to quantities, until one tries to find out what "latalia rad." is; then it is discovered that it is the "mysterious stranger" of pharmacognosy. Experts to whom this "remedy" was submitted were unable even to find mention of such a drug or plant as "latalia rad." Nor was this the only fake found concerning the stuff; carefully conducted experiments repeatedly carried out in the Association's laboratory failed to disclose even a trace of bismuth subnitrate or caffein. These experiments did show, however, that the tablets contained an amount of aluminum corresponding to over 25 per cent. of crystallized alum. This led to the conclusion that alum, whose presence is not even hinted at in the "formula," is the chief constituent of enteronol and as a corollary that the formula is meaningless and worthless.

THE LABEL FORMULA

There is a curious lack of coordination between the "formula" as printed on the label and that given in the "literature." The Food and Drugs Act, it will be remembered, makes lying on the label illegal, and therefore dangerous; statements in advertising matter that does not accompany the product, however, are not controlled by that law. The "formula" in the

"literature" we have already given; the "formula" on the label gives the following ingredients:

Ipecac		Lupulin
Sub. nit. bismuth	Opium, ¼ gr.	Caffein
Camphor		Rheum

Two things about this are worth noting: One is that the name of the ingredient on which the manufacturer lays so much stress—latalia rad., the mysterious Himalayan plant—is absent from the label. This would seem to indicate that what has already been intimated by THE JOURNAL—namely, that latalia rad. is a figment of the imagination—is a fact. The second noticeable thing about the label "formula," as distinct from the "formula" in the advertising matter, is that on the label we find there is opium in the preparation. Why is no mention made of the presence of this potent drug in the advertising matter?

To determine how nearly the present statements made by the Enteronol Company approximate truthfulness, our chemists were asked to examine the nostrum as it is now sold. Their report follows:

LABORATORY FINDINGS

An original package of enteronol tablets was purchased on the open market and submitted to the Association laboratory for examination. In general appearance, odor and taste the new tablets are similar to those previously examined. The formula for the old tablets was given as "Ipecac, Sub. nit. bismuth, Latalia rad., Camphor, Lupulin, Caffein, Rheum," and is still used in the circulars. But the label on the trade package no longer mentions "latalia rad." Since the presence of "latalia rad.," in the old tablets, was questioned, and as new labels have ceased to display the name, it was thought possible that caffein and bismuth might now be constituents of enteronol, as the drugs are still mentioned in the new formula on the label. Accordingly, enteronol was examined chemically to verify the statements on the label regarding the presence of caffein and bismuth in the tablets.

The specimen submitted to the laboratory some time ago was found to contain neither bismuth nor caffein. By employing the same methods as were used before (the usual tests for detecting caffein and bismuth), neither caffein nor bismuth could be demonstrated. It is thus evident that this new specimen of enteronol, the statement on the label to the contrary notwithstanding, contains neither bismuth nor caffein—at least, in appreciable quantities.

One would think that the discrepancy between "formulas" and facts would prove of interest to the stockholders of the

Enteronol Company, especially as we are told that the policy of the company is to have "practical men as stockholders." We are informed:

"Therefore, we have physicians, advertising experts, printers, publishers, engravers, boxmakers, lithographers, druggists, lawyers, traveling salesmen, officers and men holding executive positions in various manufacturing and commercial corporations, editors of medical publications, bishops, clergymen and missionaries—men from all the fields particularly valuable commercially for our great enterprise."

Yet if the physician-stockholders do not care to concern themselves about the composition of the nostrum from the sale of which they derive dividends, it can hardly be expected that the boxmakers or traveling salesmen will be interested.

STOCK FOR SALE

Medical journals are not alone in being invited to participate in the exploitation of this nostrum, *vide* a circular letter from the Enteronol Company addressed "To Investors":

"We offer at par of $10 each, 1,000 shares of our Guaranteed 7 per cent. Preferred Stock, cumulative dividends, payable quarterly . . . Profits on business done last year were 54 cents for every dollar expended . . . *We guarantee absolute security for your investment. Safer than a bank.*" [Italics ours.—Ed.]

We are told that at present the Enteronol Company manufactures two products: a castor-oil preparation, known as fig-ol, and enteronol. Very shortly, however, the company expects to "add seven equally efficient products."

"The average cost to manufacture, ready to ship, a dollar's worth of these goods is less than ten cents."

"In enteronol alone, the company has fortunes and the only thing needed to bring tremendous results and dividends of 100 per cent. is the proper amount of judicious advertising."

Here are some samples of the judicious (?) advertising:

"One Christian missionary, the Rev. Paul Singh of Jubbulpore, India, testifies that he cured thirteen severe cases of Asiatic Cholera with a box containing less than thirty tablets" [of enteronol].

"Wm. F. Oldham, bishop of Southern Asia, writes us that enteronol cured nine cases out of ten of Asiatic Cholera. Now just think of India and China with their 800,000,000 people who are dying by the thousands of a disease which we have the power to cure so easily."

How like a discourse by that delightful character of Mark Twain's—the visionary Colonel Sellers—this reads. As he said about his "Infallible, Imperial, Oriental Optic Liniment:"

"Why in the Oriental countries . . . every square mile of ground upholds its thousands on thousands of struggling, human creatures—and every separate and individual devil of them's got the ophthalmia."

The prospective stockholder is told that an ordinary business concern reaches the limit of financial possibilities in a few years, but:

"Not so with the Enteronol company—it is a mail-order business and the world is its territory."

Even so with Colonel Seller's "Optic Liniment:"

" . . . it's a patent medicine whose field of operations is the solid earth."

And we are told elsewhere that "about four-fifths of the outstanding stock is held by the medical profession alone"!

And this stuff is advertised in medical journals!!

We are sometimes in danger of being too optimistic regarding the results of the propaganda for reform in proprietary medicines. Cases like this act as a corrective.

FRUITOLA

A Fake Remedy for Gallstones

(From The Journal A. M. A., March 14, 1908)

WEST ELKTON, OHIO.

To the Editor:—A neighboring practitioner has been giving treatment for gallstones, his patients paying him $50 if they pass any stones. I think the remedy he uses is sold under the name of "Fruitola." The patients are said to pass hundreds of gallstones after using it. Have you any account of the stuff? I think the concretions, which pass without pain, are soft and float when fresh. I believe that olive oil is the bulk of the remedy. A. W. Y. CONARROE.

ANSWERS—Fruitola is a "patent medicine" which is alleged to have the wonderful power of relieving appendicitis or any intestinal inflammation without an operation. It is also said to be a system-cleanser, to remove gallstones and to cure all stomach trouble. Dr. E. E. Flagg of Mooreland, Okla., writes us that he has obtained identically the same results with large doses (2 ounces) of olive oil.

When olive oil was suggested for the treatment of gallstone colic, it was noticed repeatedly that after its administration the patient passed a considerable number of small lumps which were supposed to be gallstones. Chemical examination of these concretions showed, however, that they mainly consisted of soap which had been produced by the digestion of the oil. This observation has since been made use of by nostrum manufacturers to convince physicians and their patients of the efficiency of their preparations in securing the expulsion

of gallstones. A simple examination will usually show the true nature of these bodies, since they disintegrate readily when stirred in water. It is probable that they consist of fecal matter mixed with the mass of soap.

The value of olive oil in painful affections of the gastro-intestinal tract is well established and there is much clinical evidence to its soothing action in cases of gallstones, but the physician should not be misled into supposing that he has secured the elimination of a large number of gallstones because the patient passes a large number of lumps of soap, and he should be equally cautious in admitting the claims of the nostrum manufacturers that their remedies secure the passage of gallstones unless he has the opportunity to examine and test the stones for himself.

"GETWELL TABLETS."

How the Anti-Cori-Zine Chemical Company Extends Its Business.

(From The Journal A. M. A., Dec. 19, 1908)

Physicians who are financially interested in the exploitation of questionable proprietaries (and happily we believe there are very few of these) usually excuse their course on the grounds that their preparations are advertised in medical journals, therefore they must be ethical. This placebo to professional conscience deceives no one, neither does it excuse, but it permits of a definite answer to an unpleasant question. With a "patent medicine" it is different. No physician who wishes to retain his self-respect desires to become in any way identified with so disreputable a business. It is not to be wondered at, therefore, that when a "patent medicine" firm is desirous of selling stock in its concern it leaves physicians severely alone.

Some of these concerns evidently believe that the dental profession does not share the feelings of the physician on this subject. At least that would seem to be a justifiable conclusion after reading some "form" letters sent to dentists by a Chicago broker.

"Being a dentist, you are far enough removed from the position of professional jealousy (maintained by physicians) to see the subject in its practical light and I take it that profits made from 'patent medicines' are just as attractive to you as from any other source. . . . ."

"All of this is by way of presenting an opportunity of sharing in the profits of one of the biggest earners in the proprietary field

yet discovered. This is the Getwell Tablets. . . . . This tablet has been in use for 15 years in St. Louis among the practicing physicians. . . . . ."

"A year ago a company was organized among the most prominent men of St. Louis (a city that boasts more big fortunes made from patent medicines than any other in America) called the Anti-Cori-Zine Chemical Company. . . . . ."

"A campaign was made in Chicago and $10,000 spent in advertising. The success was phenomenal."

"You doubtless know of the tremendous success made by the Antikamnia people of St. Louis, which has made the originator many times a millionaire, to say nothing of the profits it made for dentists who took the first stock. . . . . ."

Then follows a statement of the amount of stock that is to be sold and a glowing prognostication of the vast profits to be made. With this "form" letter is another, purporting to be from the Anti-Cori-Zine Chemical Company to the broker, giving information about the financial standing of the company and its personnel.

"The officers of this company are H. W. Hartwell, president (a physician of 25 years' practice in this city). A. D. Hartwell, secretary and treasurer (manufacturer of paints and varnishes). Joseph Griesedieck, vice-president (manager National Brewers' Assn., St. Louis). E. R. Rombauer, L.L.D. . . . ."

"Our tablets are made under contract with Sharp & Dohme of Baltimore, Md. They cost us 65 cents per 1,000 and after boxing and preparation for the market, bring us $13.40 per 1,000."

"You are no doubt acquainted with the splendid profits made on patent and proprietary medicines of this kind, such as Orangeade, [Orangeine?], Cascarets, Bromo-Seltzer, Bromo-Quinine, Laxative Pepsin, etc. . . . . ."

". . . . . The biggest fortunes in St. Louis have been made on patent medicines.. . . . . ."

"Profits in this business are far out of the ordinary and 400 to 600 per cent. is only normal. . . . This is true of every patent medicine of this nature. . . . . ."

There seems to be no particular reason why this new acquisition to the ranks of the "subtle poisons" should not be a financial success. It apparently fulfills all the essential requirements of "patent medicine" ethics: (1) It has been in use for years among practicing physicians (a stock falsehood in this line of business); (2) its company has for its officers an M.D., a paint maker, a brewer and an LL.D.; (3) it is put up "under contract" by an old-line "ethical" house; and (4) there is 400 per cent. profit in it. It would seem that under such auspicious circumstances nothing but gross mismanagement can prevent the Anti-Cori-Zine Company from scoring a big success, as have many St. Louis firms in the same business.

As to the tablets themselves, they vary in no way from their prototypes and are advertised with that classic disregard for truth that characterizes nostrums of all classes.

"No drug habit is formed by the use of Getwell Tablets, even when taken for long successive periods."

". . . . even persons suffering from the severest forms of heart disease can take them without the least danger."

"The average dose is 3 for a man . . . . robust patients may require 1 or 2 more . . . taken at once and repeated in an hour if the mucous discharge is not stopped."

The virtues of this wonderful tablet are due to our old friend, acetanilid, aided and abetted by another drug that is becoming increasingly popular with nostrum mongers—codein. Of the former there are practically 2 grains to the tablet; of the latter, 1/20 grain; there is also a small amount of belladonna. A "robust patient" may take—according to instructions—five tablets as a "starter" and five more an hour later. After thus devouring nearly 20 grains of acetanilid, his robustness might be somewhat impaired, but as this is a business proposition paying 400 per cent., one can hardly expect the Anti-Cori-Zine Chemical Company to mention it.

But Getwell is not the original name of the tablet; its earlier name was Anti-Cori-Zine, and as such it was sold to physicians.

"Anti-Cori-Zine is an ethical preparation advertised only to the medical profession."

Like many another acetanilid mixture before the Food and Drugs Act spoiled the game, Anti-Cori-Zine was advertised as a "synthetic."

"Anti-Cori-Zine is not a mere mixture of various remedies holding a reputation as cold cures, *but it is a definite, synthetic chemical.*" [Italics are ours.—ED.]

Presumably an enlightened medical profession combined with a federal statute has caused the "synthetic" falsehood to become stale, flat and unprofitable, and there is now more money to be made in advertising to the public direct rather than via medical journals and physicians.

The medical profession should at least be glad to learn from an outside source that the "position of professional jealousy (maintained by physicians)" prevents it from looking on the "profits made from patent medicines" as "just as attractive" as those made in a more respectable line of business. The case of Dr. H. W. Hartwell, a homeopathic physician of St. Louis, and president of the Anti-Cori-Zine Chemical Company, seems to indicate, however, that the "position of professional

jealousy" is not universally maintained. Doubtless the broadening influence of a financial venture that pays 600 per cent. enables him to rise above such petty things as "professional jealousy."

GLYCO THYMOLINE

Difficulty of Determining the Formula

(From The Journal A. M. A., Jan. 9, 1909)

UPPER JAY, N. Y., Dec. 5, 1908.

To the Editor:—Will you please inform me where I can find the formula for Glyco-Thymoline? M. E. PROCTOR, M.D.

ANSWER: We can not! Had "a" formula instead of "the" formula been asked for, we could have referred to various advertisements of this preparation. For instance, in the *Boston Medical and Surgical Journal* we find "a" formula as follows:

Sodium	24
Boric Acid	4
Benzoin	4
Acid Salicylic	0.33
Eucalyptol	0.33
Thymoline	0.17
Betula Lenta	0.08
Menthol	0.08
Pini Pumilionis	0.17
Glycerin and solvents	q. s.

In the *Texas State Journal of Medicine* of the same date we also find "a" formula which varies to such an extent with other "formulas" that the editor of this journal, Dr. Chase, refused longer to carry the Glyco-Thymoline advertisement.

Benzo-Salicyl. Sod	33.33
Eucalyptol	0.33
Thymol	0.17
Salicylate of Methyl, from Betula Lenta	0.16
Pini Pumilionis	0.17
Glycerin and solvents	q. s.

In the *New York Medical Journal* of December 5, there is "a" formula which is similar to the one in the Texas journal, except that it has added to it:

Menthol	0.08

Examination of the preparation in the chemical laboratory of the American Medical Association showed that it contained no boric acid, but instead borax; that salicylic acid was not present as acid, but as its sodium salt; that benzoin instead of being present in comparatively large quantities, was practically absent, and sodium benzoate was in its place; that

the compound "benzo-salicyl. sod." was absent, and there was instead, a mixture of sodium benzoate and sodium salicylate.

The results obtained in the Association's laboratory are corroborated by the work of Dr. J. Kochs (*Apotheker-Zeitung*, 1907, xviii, 169). Dr. Kochs states that Glyco-Thymoline is an alkaline solution containing potassium carbonate, sodium benzoate, sodium salicylate, borax, thymol, menthol, glycerin and alcohol.

The published formulas, therefore, disagree, not only among themselves, but with the facts. When purchasing proprietary preparations with such fickle formulas, "you pay your money" for the preparation—"and take your choice"—of formulas.

GONOCOCCIDE

(From The Journal A. M. A., Aug. 24, 1907, 708)

CHICAGO, Aug. 1, 1907.

To the Editor:—Can you give any information about the composition of the preparation known as "Gonococcide," sold by Cox Chemical Co., Chicago? The circular accompanying the package gives the following formula:

C_8H_8BrNO monobromacetanilid; $C_{10}H_{44}N_2C_7HO_3$ eudermol; CaS_32H_2O gypsum and selenite, $CaSo_4$ anhydrite; H_2O aqua and myrrh.

NOTE.—In combining calcium coral with sulphuric acid, calcium occurs as gypsum, selenite and anhydrite.

The literature of eudermol limits the usefulness of that drug to skin diseases. W. H.

ANSWER:—Gypsum, selenite and anhydrite are the names applied to different forms of calcium sulphate. Gypsum and selenite are chemically identical, being calcium sulphate and containing two molecules of water crystallization, $CaSO_4 + 2H_2O$, but differing in crystalline form. Anhydrite is also calcium sulphate, but contains no water of crystallization. The inclusion of three different forms of the same substance should be sufficient to demonstrate the "fakeness" of the formula. The first substance named, monobromacetanilid, has been used as an antiseptic under the trade names of antisepsin and asepsin. It is practically insoluble in water, and hence but little of it can be contained in the preparation. Eudermol is a name given to nicotin salicylate and its use externally has been recommended in scabies, chronic eczema, and other skin diseases. This being practically the only medicinal constituent given in

the formula, its determination in gonococcide was taken up in the Association laboratory. Tests, however, failed to show the presence of this or any other alkaloid. While the addition of iodin to a 0.1 per cent. nicotin salicylate solution produces an abundant precipitate, the addition of iodin to a specimen of gonococcide produced no reaction whatever. Further comment on the formula seems to be unnecessary.

GOWAN'S PNEUMONIA CURE

(From The Journal A. M. A., May 9, 1908, 1541)

WALLBURG, N. C., Feb. 19, 1908.

To the Editor:—Please print the analysis of "Gowan's Pneumonia Cure." What effect does this remedy have on pneumonia? J. A.

ANSWER:—The results of an examination of this preparation in the American Medical Association's laboratory follow:

This preparation was not considered of sufficient importance to warrant an exhaustive chemical analysis, as its general character, sufficient for all practical purposes, can be determined by a cursory examination. The "pneumonia cure" as found on the market is a brownish ointment, having an odor of camphor. When applied to the skin, or subjected to a temperature approximately that of the body, it becomes liquid. It is almost completely soluble in chloroform, indicating the absence of any appreciable quantity of water or inorganic constituents. Tests indicate that the base of the ointment is a fat. From these facts we conclude that "Gowan's Pneumonia Cure" is an ointment composed of some fat having a low melting point and containing camphor, and, if the statements on the label are to be given credence, a small quantity of opium.

This nostrum is recommended by the purveyors as a valuable remedy for local application and it is said to be "antiseptic, nutrient, antipyretic and diaphoretic." It is claimed that it will determine blood to the surface and relieve congestion. The base is said to be emulsified fats which are readily absorbed and the implication is made that the other constituents, also, are absorbed. It probably equals in therapeutic value the old fashioned camphorated oil application. In common with other so-called "cures" sold to the public, its viciousness lies in the false sense of security its use engenders.

HAYES ASTHMA CURE

(From The Journal A. M. A., Oct. 2, 1909)

To the Editor:—Kindly give me information concerning "The Hayes Method for Asthma and Hay Fever," concerning which I enclose a circular. E. PARRISH, Brooklyn.

ANSWER.—The Hayes asthma remedies were analyzed in the pharmaceutical institute of the University of Berlin by J. Kochs, and, according to the *Arbeiten aus dem Pharmazeutischen Institut der Universität, Berlin,* vol. iv, p. 122, with the following results. Six of the seven remedies were examined:

1 (Labeled No. 781).—A cough medicine for use in colds, catarrhs, bronchitis and for the relief of asthma. Dose 20 to 30 drops. This is said by the analyst to contain about 6.5 per cent. of oils, consisting chiefly of oils of turpentine and peppermint, emulsified and sweetened with syrup.

2 (Labeled T. I. Q.).—A remedy that is to be taken in doses of 15 minims three times a day before meals. According to the report, it contained 13.7 per cent. of iodin in the form of potassium iodid, to which had been added a little wine and a small percentage (0.1) of hydrochloric acid.

3 (Labeled No. 769 A.-C.).—A remedy to be given in doses of 30 minims at bedtime, to be repeated two or three times in several hours. This, says Kochs, was a slightly reddish syrup containing 6.7 per cent. of iodin combined as potassium, sodium and ammonium iodids.

4 (Labeled T. II Q.).—A preparation to be taken in doses of 15 minims three times a day immediately after meals. The analytical report shows it to contain 1.08 per cent. of iron in the form of an iron peptonate.

5 (Labeled No. 808).—These were small capsules filled with 0.1 gm. (1.5 grs.) of a loose white powder. It is said "to strengthen the lungs and reduce the tendency to taking cold." Analysis is said to have disclosed that it consisted of quinin sulphate.

6 (Labeled No. 763).—Small white sugar-coated pills. These are said to act mildly on the liver and regulate the digestion. The active principle of these pills as shown by the analysis was resin of jalap.

HEADACHE CURES

The Harmful Effects of Acetanilid, Antipyrin, and Acetphenetidin

(From The Journal A. M. A., July 31, 1909)

The United States Department of Agriculture Bulletin[1] No. 126, issued July 3, 1909, and which was commented on editorially last week, sets forth the results of an investigation conducted by the Bureau of Chemistry with regard to the harmful effects of acetanilid, antipyrin and acetphenetidin. During recent years the use of these remedies and preparations containing them by the people at large, without the supervision of the physician, has increased rapidly and investigation has shown that coincidently there has been a marked increase in the number of cases of poisoning reported, in the number of fatalities, and in the number of instances of habitual use.

Since the passage of the Food and Drugs Act, June 30, 1906, the attention of the Department of Agriculture has been directed to this subject, particularly in connection with the branding of drug products containing one or more of these agents, and an attempt has been made to obtain full and reliable data with regard to their poisonous qualities with the object of furnishing information to the public which would enable them to understand that these remedies should be employed with caution in the absence of reliable medical advice.

The investigation was conducted along two lines: First, an inquiry addressed to medical practitioners in the United States with regard to their personal experience with these drugs; and, second, the study of the cases of poisoning recorded in medical literature. Nearly a thousand letters, each containing eighteen questions, were addressed by the department to physicians throughout the country, the object being to secure information which would represent as closely as possible the conditions existing among the people at large so far as the harmful effects of the drugs in question are concerned. Four hundred replies were received.

The information obtained with regard to the number of instances quoted in medical literature in which poisoning, death, or habitual use has been known to result from the administration of acetanilid, antipyrin, and acetphenetidin is set forth

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1. The Harmful Effects of Acetanilid, Antipyrin and Phenacetin, by L. F. Kebler, Ph.C., M.D., chief Division of Drugs, Bureau of Chemistry, with the collaboration of Drs. F. P. Morgan and Philip Rupp, assistant chemists.

in Section A of the accompanying table. The information summarized in Section B is based on the data submitted by physicians. Granting that the 525 physicians who did not reply had no cases to report, the question may profitably be asked, if 925 physicians have observed 814 cases of poisoning by these drugs, 28 deaths which are attributed to their use, and 136 instances of habitual use, how many such cases have in all probability been observed by the 125,000 physicians scattered throughout the United States? The summary, C, includes both the number of cases recorded in medical literature and those reported by physicians.

The bulletin contains information with regard to dosage, the extent to which these drugs are employed by physicians, poisoning and habitual use, the nature of the ill effects produced, etc. It also contains references to the recorded cases of poisoning, together with a brief abstract of each case.

POISONING BY ACETANILID, ANTIPYRIN AND PHENACETIN

A.—Cases Recorded in Medical Literature

	POISONING.	DEATH.	HABITUAL USE.
Acetanilid	297	13	32
Antipyrin	488	10	..
Acetphenetidin	70	3	1
Total	855	26	33

B.—Data Submitted by Physicians

	POISONING.	DEATH.	HABITUAL USE.
Acetanilid	614	16	112
Antipyrin	105	5	7
Acetphenetidin	95	7	17
Total	814	28	136

C.—Total Number of Cases

	POISONING.	DEATH.	HABITUAL USE.
Acetanilid	911	29	144
Antipyrin	593	15	7
Acetphenetidin	165	10	18
Total	1,169	54	169

Sanitariums and the Acetanilid Habit

(From The Journal A. M. A., Aug. 14, 1909)

To the Editor:—I enclose herewith a "form" letter and question blank which I received recently from St. Louis. I may be entirely too wary but I am suspicious that this is a collection of "statistics" to combat the work of the medical pro-

fession in educating the physician and the laity in the harmfulness of acetanilid and similar preparations.

G. H. BENTON, M.D., Chester, W. Va.

Sterling-Worth Sanitarium.

COMMENT: The letter which Dr. Benton encloses is in facsimile form and purports to come from Uriel S. Boone, M.D., of St. Louis, who states that he is "preparing an exhaustive article for publication in a leading medical journal" on the question, "Is acetanilid a habit-forming drug?" To obtain the necessary data Dr. Boone is "writing to every hospital and sanitarium in the United States." Examination of the question blank which accompanies the form letter discloses the fact that information is wanted regarding not acetanilid alone, but also antipyrin and acetphenetidin (phenacetin). The last question asked runs as follows:

"If your records [of cases of habitual use of these drugs] are incomplete, would you allow a reputable physician to investigate the above mentioned cases so that he could write with positiveness about them, and, if necessary, *make oath to the truth of his report?*" [Italics ours.—ED.]

Dr. Boone opines that the recipients of his queries "may hesitate to answer" the question just quoted, but he trusts that its importance will be evident when he explains that "it is currently reported that the manufacturers of acetanilid, phenacetin, etc., *have decided to prosecute all libelers of these drugs*" [Italics again ours.—ED.] and he wishes to make no statement that he "can not substantiate under oath." Surely the life of the collector of medical statistics is unusuallly hazardous.

For the purpose of aiding Dr. Boone in his arduous search for truth on the "much mooted question, 'Is acetanilid a habit-forming drug?'" we direct his attention to a work that should prove of invaluable assistance. We refer to Bulletin 126 of the Bureau of Chemistry, entitled "The Harmful Effects of Acetanilid, Antipyrin and Phenacetin." This interesting study to which we have previously (THE JOURNAL, July 24, 1909, p. 303) called attention, records 112 cases of the acetanilid-habit. Of this number, at least 50, or 44.6 per cent. of the cases were those of patients who took proprietary preparations of the drug. From this we would not wish to give any bias to Dr. Boone's statistics. We hardly expect, however, that such will be the case. Dr. Boone's name appears as the author of an article entitled "A Therapeutic Study of Antikamnia and Heroin Tablets"—an article that has been very extensively "quoted" and has been sent out in its entirety by the Antikamnia Chemical Company. Under these circumstances we

may be forgiven if we venture the opinion that Dr. Boone is not likely to be unduly prejudiced against "headache tablets" in general and fake "synthetic" coal-tar mixtures in particular. We await with breathless interest the appearance of Dr. Boone's "exhaustive article" and we must confess to some degree of curiosity regarding the name of the "leading medical journal" in which these invaluable data will appear.

"SHAC"

(From The Journal A. M. A., Oct. 19, 1907, 1381)

The campaign against the indiscriminate use of headache remedies certainly has done some good. But while newspaper reports indicate that there are fewer cases of poisoning and death from these preparations, some excerpts which we quote below from the *New Idea*, a monthly journal owned and published by Frederick Stearns & Co., and devoted to advertising Stearns' products to druggists, show that this firm, heedless of the warnings uttered by physicians against the indiscriminate use of headache remedies, is endeavoring to promote the sale of SHAC (Stearns' Head Ache Cure) in a most reckless—we might almost say criminal—manner. Shac is put up in wafers and each wafer is stated to contain 4 grains of acetanilid. While shac is sold and "pushed" by Frederick Stearns & Co., Detroit, it is stated on the package to be "prepared for Stearns & Curtius (Inc.), 5 Platt Street, New York."

SHAC ADVERTISED IN SUBWAY CARS

Stearns' Head Ache Cure (now called SHAC) is being extensively advertised in the subway cars in New York City. SHAC is becoming familiar to thousands of people every day. This benefits not only New York druggists, but all other druggists. SHAC costs you $1.50 a dozen. What other product advertised in this way allows you as great a profit?

SHAC—Stearns' Head Ache Cure—has been curing aching heads for sixteen years, and at the end of this long and meritorious service, everyone is satisfied. SHAC is sold and used in all parts of the civilized world. What test is better than the test of time? SHAC sells for 25 cents. You make 100 per cent. profit.

While the advertisement states that every one who uses SHAC is satisfied, we venture to suggest that the patient, the poisoning of whom was reported by Dr. Cassady, Bisbee, Ariz., in THE JOURNAL, Dec. 15, 1906, page 2012, was not entirely pleased with the effect of the preparation. In this case, the patient, a woman, took three wafers, an hour apart, though the directions on the package state that only two wafers are to be taken. It must be remembered, however, that most patients think that if a little is a good thing more

must be better, and take medicine on that principle. Here is another quotation from Stearns' *New Idea:*

SHAC FOR SHOPPERS

Shoppers and sightseers often have their pleasure spoiled by headache. This is unnecessary, as by carrying a box of SHAC in the pocket or shopping bag, an aching head may be relieved in a very short time. Wise travelers are learning this. Recommend SHAC to any one contemplating traveling and you will make a friend. SHAC costs you $1.50 a dozen.

Is it any wonder that reports of "heart failure" are so frequent?

Shac and Zymole Trokeys

(From The Journal A. M. A., July 18, 1908)

Physicians who attended the Chicago session of the American Medical Association doubtless noticed while riding on the street cars the blatant advertisements of the headache remedy SHAC (Stearns Head Ache Cure). This nostrum, which seems to have been responsible for at least two cases of poisoning,[1] is put on the market by Frederick Stearns & Co., Detroit—a fact that was noted in these pages a few months ago.[2] It was not unnaturally assumed that these Peruna-like advertising tactics had been adopted by an enterprising local representative anxious to make a "showing." The June issue of the *New Idea* —a monthly journal published by Frederick Stearns & Co. and devoted to advertising their products to retail druggists—shows that this assumption was not well founded. In their journal they inform the druggist that "a new series of SHAC street car cards are now ready for use in the large cities."

The evils of the indiscriminate use by the public of such powerful and insidious drugs as are contained in the various headache remedies need no further iteration. The question has long since ceased to be an academic one and no casuistic reasoning nor specious arguments can hide the fact that enormous harm is being done by the exploitation of these acetanilid-containing nostrums, and the medical profession has expressed itself in no uncertain tone regarding the matter.

SHAC, however, is not the only "patent medicine" put on the market by Frederick Stearns & Co. Just as extensively advertised—and in the same mediums, the street cars—are Zymole Trokeys "for husky throats." Then there is Pam for the dyspeptic, a "tiny tablet of wonderful power," of which the modest statement is made that "every ferment of the

1. THE JOURNAL A. M. A., Dec. 15, 1906, 2012, and Nov. 16, 1907, 1675.
2. THE JOURNAL A. M. A., Oct. 19, 1907, quoted above.

digestive tract that is available is used in these tablets, fitting them for use in all kinds of indigestion." Surely, with such drugs at their command, dyspepsia need give physicians no further cause for worry!

These are some of the products put on the market by Frederick Stearns & Co. and vigorously "pushed" by them in advertisements to the laity. A firm which, while soliciting the patronage of physicians through the pages of medical journals, is at the same time furthering the interests of self-drugging and dangerous nostrum-taking, will be looked on with distrust and suspicion by the medical profession.

HEALTH GRAINS

A Mixture of Sand, Syrup and Rock Candy as a Therapeutic Agent in Dyspepsia

(From The Journal A. M. A., Jan. 30, 1909)

One of the unique fakes examined in the Association laboratory is a conglomeration, sold under the name of "Health Grains," manufactured by "The Health Grains Co., Westchester, New York City."

The preparation is offered as "A remedy for Dyspepsia, Indigestion, Nervousness, etc." It is sold in round tin boxes, each wrapped in a circular bearing the name of the maker and the place of manufacture. It is guaranteed "that the contents of this package complies with the requirements of the Pure Food and Drugs Act." Inside the box is a small sheet of "directions" giving the following advice:

"Do not chew or grind Health Grains between the teeth, but roll them around slowly until they have become saturated with saliva, then swallow them."

"One scant teaspoonful constitutes a dose. Take one or two doses after a light meal, two or three after a heavy meal. Doses should be taken separately. If your stomach keeps you from sleeping, take from one to three doses.

"Do not overeat. Avoid eating what you knows disagrees with you."

The grains have the appearance of coarse sand covered with a sticky substance. They are odorless and when first taken into the mouth are sweet in taste. When ground between the teeth they exhibit unmistakable signs of hardness. Chemical analysis demonstrated that the nostrum contained 87.50 per cent. of coarse quartz sand and 12.50 per cent. of soluble matter. The soluble matter was found to be rock candy and syrup. The presence of heavy metals, iodids, bromids, alkaloids or acids could not be demonstrated. Health Grains, therefore, appear

to be nothing more than ordinary sand mixed with a little rock candy and syrup, showing an originality of composition, surpassed only by the credulity of the consumers of such a nostrum.

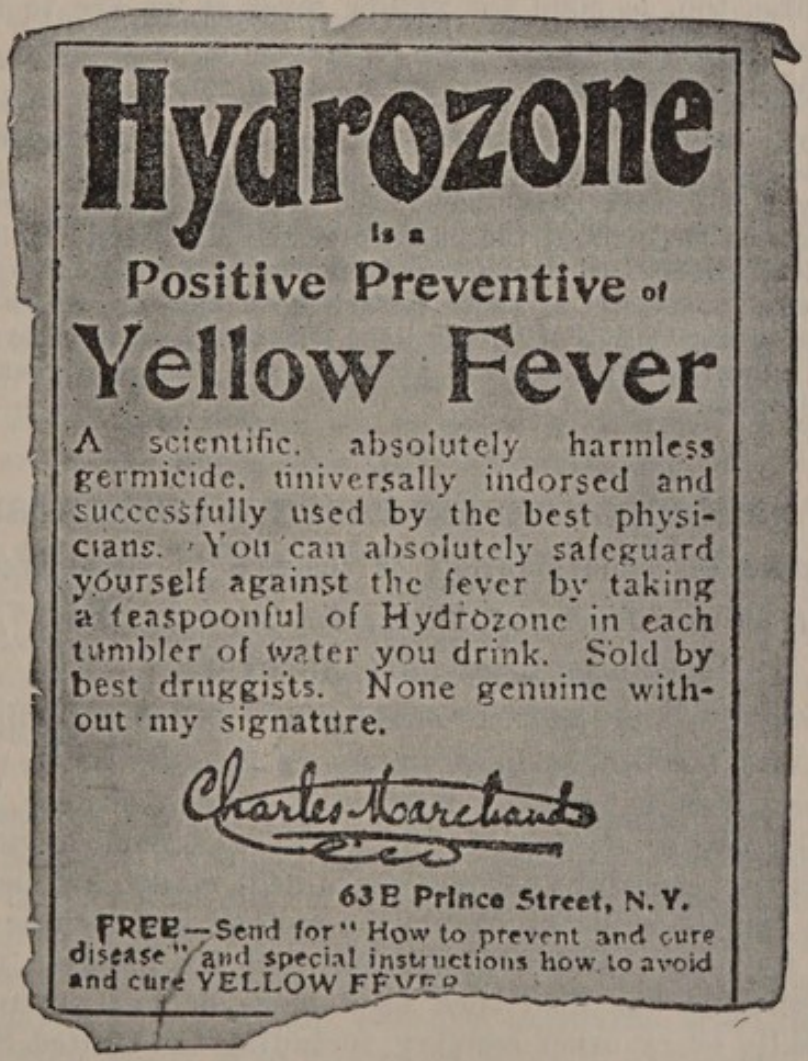
HYDROZONE AND TONGALINE

Preying on the Yellow Fever Victims

(From The Journal A. M. A., Sept. 23, 1906, 936)

HYDROZONE

The moral principle governing the action of secret proprietary and patent medicine men is an unknown quantity; sometimes it would seem to be a negative one. Just how much



lower in the scale of humanity a man can go than to prey on the fears of a people in the time of a terrible epidemic for the sake of a few dollars we do not know. There may be something more despicable, but what is it? Two weeks ago

we referred to the cold-blooded methods of the peruna people; this week we reproduce an advertisement from the New Orleans *States* that tells another story of man's inhumanity to man.

This brings up the problem that we are trying to solve, viz.: "What is the difference between a 'secret proprietary medicine' advertised in medical journals to physicians and a 'patent medicine' advertised in newspapers to the public?" Hydrozone is being advertised in nearly all medical journals, and at the same time in newspapers. Where shall we place it? And if hydrozone, with the methods recently adopted to exploit it, is tolerated in the medical press, why not peruna?

TONGALINE

Tongaline, too, is good for yellow fever if we are to believe the absurd claims made by its enterprising salesmen. Here is the advertisement from current medical journals:

> Stegomyia fasciata has produced an epidemic of yellow fever in certain sections of Louisiana and adjoining states.
>
> Stegomyia punctata has inoculated thousands with virulent malarial germs throughout the balance of the Mississippi Valley.
>
> Tongaline, Mellier, in one of its forms as indicated, antagonizes and destroys the effects of these parasites on account of its extraordinary eliminative action on the liver, the bowels, the kidneys and the pores, whereby the poison is promptly and thoroughly expelled. For full literature, etc.

THE "HYOSCIN-MORPHIN-CACTIN" ANESTHESIA

An Example of Subordination of Science to Commercialism

(From The Journal A. M. A., Dec. 21, 1907, 2103)

SCOPOLAMIN-MORPHIN ANESTHESIA

Some eight years ago, a combination of scopolamin and morphin was introduced in Germany as an anesthetic. Since then it has been extensively used in Germany, France, Italy, Russia, the United States and elsewhere, and medical periodicals—German especially—have contained many articles, reports, etc., on the subject. While the method and technic originated in Germany, and while it has had its greatest use in that country, it has also been used more or less extensively in practically every other country, including the United States, and reports both favorable and unfavorable have appeared in all these countries. Our readers, through abstracts in the Current Medical Literature department, have been kept informed of what has been published at home and abroad regarding this

method of producing anesthesia, but although the method has been used for over seven years it may be said to be still in an experimental stage.

HYOSCIN-MORPHIN-CACTIN ANESTHESIA

Over a year ago the Abbott Alkaloidal Company put on the market as a "new" anesthetic a tablet said to contain 1-100 grain of hyoscin, ¼ grain of morphin and 1-67 grain of a product called "cactin." During the past year this tablet has been exploited to an extent and in a manner as has no other medicinal preparation in this or in any other country. Full page advertisements and reading notices, all extravagantly laudatory of the preparation, have appeared in medical journals of all kinds. More original articles highly praising it have been published than have ever appeared in the same length of time on any other one medical subject. Extreme optimism has characterized the exploitation of the product from the very first.

What is this combination on the promotion of which so much money and energy have been spent? Is it something new and original, as the advertising literature would lead one to believe? Everything connected with its promotion has conveyed the impression that this method of producing anesthesia is entirely new. Dr. Emory Lanphear, who seems to be interested in its promotion, has repeatedly referred to it as new. Here are a few quotations from his writings:

"After exhaustive experimentation, the formula decided on by Dr. Abbott and adopted and extensively used by myself is:

"Chemically pure hyoscin hydrobromid.....1-100 gr.
"Chemically pure morphin hydrobromid.....1-4 gr.
"Cactin (from *Cactus grandiflorus*).....1-67 gr.

"The formula of the hypodermic tablet finally decided on by Dr. Abbott and myself, after many experiments, is:" and then follows the formula.

"The so-called Abbott-Lamphear anesthetic."

These are samples only; similar quotations could be made from Abbott's writings, and also from the literature in general. It is evident that it has been the intention of the manufacturers to convey the impression that this method of producing anesthesia originated with them. It is not strange, therefore, that many physicians who are unfamiliar with the subject are writing about it in a manner to show that they, too, consider it new. The majority of the reports carry this impression.

Dr. C. E. Case, Tacoma, Wash., in the Abbott Alkaloidal Company's journal—the *American Journal of Clinical Medi-*

cine—in an article entitled, "The New Anesthesia—Remarkable Results," says: "Dr. Spiro Sargentich . . . joins me in expressions of the profoundest regard and thankfulness to both yourself and Dr. Lanphear in giving to the profession and to humanity so potent a remedy for good."

"This remarkable combination of Abbott's" is the way E. G. Paxton, of Chicago, refers to it.

Dr. E. A. Hall, Vancouver, writes: "During the last few operations I have used Lanphear's formula as an anesthetic."

Dr. G. H. Stephens, Personville, Texas, writes: "Hurrah for the new anesthetic, hyoscin, morphin and cactin comp., Abbott. It's O. K."

Dr. F. H. Lukin, Pamplin City, Va., says: "I am using the Abbott-Lanphear anesthetic, hyoscin, morphin and cactin compound, and find it a great thing."

Dr. B. H. Kohler, Reedsville, Pa., says: "Your Abbott-Lanphear anesthetic tablet fully justifies all your claims."

And so on—the same idea is expressed by at least half of those who write or speak on the subject. But is it "new"? In one way, yes!

The combination of scopolamin-morphin has been on trial for the last eight years. It is non-proprietary, non-secret, no one firm has a monopoly on it, and there have been no commercial interests to exploit it for selfish gain. The "H-M-C-Abbott" combination, which, as we shall show, is simply scopolamin-morphin, is owned and controlled by one firm, so it is proprietary (the name has been registered); and on account of the "cactin" is secret; it has been and is being exploited for commercial gain. From this point of view alone it is "new" and the Abbott Alkaloidal Company is to that extent justified in calling it "new." But the Abbott Alkaloidal Company will not agree with this reason for calling it "new." They claim that it is new, first, because they use hyoscin, which is safe, instead of scopolamin, which is dangerous; second, because they have added to it "cactin," which makes it still safer. Let us take up these two differences.

ARE HYOSCIN AND SCOPOLAMIN THE SAME?

The conclusion that the alkaloid obtained from hyoscyamus and that obtained from *Scopolia atropoides* are identical chemically, physiologically and clinically was reached some years ago. The Abbott company, however, seems not to accept this conclusion, as these quotations show. First from an article by Abbott in the Abbott Alkaloidal Company's journal:

"It is now an established fact that hyoscin, when chemically pure, is not therapeutically identical with scopolamin, as some have claimed."

Dr. Abbott, in the *International Journal of Surgery*, March, 1907, says:

"My own views, as here and elsewhere expressed, are based on the use of the chemically pure alkaloids, hyoscin and morphin . . . but I am simply protesting against being held responsible for results accruing from the use of scopolamin by all sorts of operators, both at home and abroad."

From a communication to the *Fort Wayne Medical Journal-Magazine*, in which Dr. Abbott criticises the conclusions of an editorial that appeared in a previous number, which were to the effect that scopolamin-morphin is dangerous, and in which Wood's statistics are referred to, we quote:

"It will be noted that while Wood speaks of scopolamin *we talk of hyoscin* [italics in original]. He and others claim that these are identical; but whether this is correct or not (which we do not believe) we deem it wise to adhere to the true hyoscin derived from hyoscyamus. . . . Your statement that hyoscin-morphin has yielded a mortality of over four per thousand; and that 69 per cent. of its uses have been unsatisfactory is, of course, an error, your deductions being based on the assumption by Wood that scopolamin and hyoscin are one and the same thing; therefore that scopolamin-morphin and hyoscin, morphin and cactin are identical. The well-known obstacles in the way of the use of scopolamin-morphin, to which the writer long ago called attention, shall not be opposed to 'hyoscin, morphin and cactin,' which is quite another thing."

An editorial, presumably by Dr. Abbott, in the issue of his journal for December, 1906, under the title, "Another Death from Scopolamin," contains an abstract of a report of a death in Europe from the use of scopolamin-morphin, and closes by saying: "If Rys had employed pure hyoscin hydrobromid with morphin it is probable there would have been no fatality."

From a letter from Dr. Abbott, published in THE JOURNAL of the American Medical Association Jan. 26, 1907, we quote:

"I am perfectly well aware that scopolamin is claimed by some to be identical with hyoscin, but the fact remains that the same therapeutic results are not obtained from one that are obtained from the other."

The following quotations are from Lanphear:

"Knowing that hyoscin hydrobromid is a drug of known strength and especially valuing the fact that it is, apparently, perfectly safe —whereas scopolamin is notoriously unreliable, . . . I determined to give it a trial."

"There is on the market a good deal of 'scopolamin' which is *said* [italics in the original] to be identical with hyoscin, but—some of it contains atroscin, much of it has more or less apoatropin (which renders it dangerous). So the doctor should insist on having a tablet consisting of:"

Then follows the "H-M-C" formula.

"Dr. W. C. Abbott, of Chicago, called attention to the fact that the good results attributed to scopolamin depend entirely on the amount of hyoscin which 'scopolamin' contains—in other words, that the anesthesia is a hyoscin anesthesia and not a scopolamin anesthesia, plus morphin. This seemed to me to be a declaration of marvelous possibilities."

["Marvelous possibilities" is appropriate.]

"Dr. Abbott's position is well known; that only pure hydrobromid of hyoscin should be employed for making this anesthetic tablet; and that if scopolamin be substituted it should be with a full understanding that by reason of one impurity or another it may be either unreliable or dangerous—a danger for which the surgeon himself must be held responsible, since he can easily secure pure hyoscin instead."

The following is taken from the Abbott Alkaloidal Company's price list, and essentially the same paragraph appears in the advertising literature and in advertisements of the product in current medical journals:

"Scopolamin must not be substituted on this formula, neither so-called hyoscin derived from scopola. Regardless of alleged chemical identity, results are NOT the same. Neither should you underestimate the value in this formula of 'Cactin.' It's the synergistic whole that produces the results. There is no 'just as good.'"

These quotations—the "H-M-C" "literature" is full of similar statements—are sufficient to show the emphasis with which this firm insists that the hyoscin is pure and its uses safe, while the scopolamin which has been in use by others is not chemically pure or safe. The one thing emphasized on all occasions is that hyoscin and scopolamin are different, that the former is pure and safe, the latter impure and dangerous.

These statements now being made by the Abbott Company would have been excusable ten years ago when there was a controversy on the question; the German literature, until within recent years, furnished an abundance of material from which to quote to prove that the alkaloid as made from hyoscyamus is different from that made from scopola. These quotations, however, will not apply now. The question was settled long ago by those who were competent to settle it—by those recognized as authorities on the subject. There have been echoes of the old controversy until recently, but this is as much as can be said. In spite of this, the Abbott Alkaloidal Company denies the conclusions and is making statements to-day that are more dogmatic than any that were made by the most earnest advocates during the height of the controversy a decade ago.

To save going into the question whether or not there is a difference, therapeutically, between the alkaloid made from hyoscyamus—provided such an alkaloid were obtainable—and that made from scopola or from other of the *Solanaceæ*, we refer those interested to a "reply" to a letter from Dr. Abbott, published in THE JOURNAL of the American Medical Association, Jan. 26, 1907.

HYOSCIN AND SCOPOLAMIN SYNONYMOUS TERMS

'Assuming for a moment that the alkaloid made from hyoscyamus is safer and better than that made from *Scopolia atropoides* and other of the *Solanaceæ*, what evidence is there that the hyoscin on the market is made from hyoscyamus? As so much depends on this, so far at least as the Abbott Alkaloidal Company is concerned, let us look at the facts.

WHAT THE PHARMOCOPEIAS SAY

The pharmacopeia of a nation is the standard according to which drugs are manufactured and by which they are judged. In all countries these standards are recognized by law; they are the highest authority.

The alkaloid on the market as scopolamin hydrobromid or hyoscin hydrobromid is not made in the United States; so far as we are able to learn, it is made only in Germany—where the subject has been given more attention than elsewhere—and consequently is made according to the German Pharmacopeia. But the German Pharmacopeia recognizes the alkaloid only under the name scopolamin hydrobromid. Hyoscin hydrobromid was introduced into the German Pharmacopeia in 1891, but later the pharmacopeia commission adopted the name scopolamin-hydrobromid to replace hyoscin hydrobromid, since the identity of the alkaloid from the different sources had become established. Hence, the German Pharmacopeia no longer retains the name hyoscin hydrobromid, for to do so would be to give two names to the same article. As we shall see, one nation—the United States—does do this, and officially recognizes the same alkaloid by two different names.

The United States Pharmacopeia—eighth revision, which became official in 1905—adopted the new and more correct name, scopolamin hydrobromid, at the same time retaining the old name hyoscin hydrobromid. The definitions are as follows:

"Hyoscinæ Hydrobromidum. Hyoscin Hydrobromid. The hydrobromid ($HBr.C_{17}H_{21}NO_4+3H_2O$) of an alkaloid chemically identical with scopolamin, obtained from hyoscyamus and other plants of the *Solanaceæ*."

"Scopolaminæ Hydrobromidum. Scopolamin Hydrobromid. The hydrobromid ($HBr.C_{17}H_{21}NO_4+3H_2O$) of an alkaloid obtained from the plants of the *Solanaceæ;* chemically identical with hyoscin hydrobromid (see hyoscin hydrobromidum.)"

The British Pharmacopeia (issued nine years ago, 1898), describes the alkaloid under the definition hyoscin hydrobromid, but gives as a synonym scopolamin hydrobromid. It is described as follows:

"Hyoscinæ Hydrobromidium. Hyoscin Hydrobromid. Synonyms.—Hydrobromate of Hyoscin; Scopolamin Hydrobromid. The hydrobromid, $C_{17}H_{21}NO_4$, HBr, $3H_2O$, of an alkaloid contained in hyoscyamus leaves, different species of *Scopola* and possibly other solanaceous plants.

The Danish, the Swiss, the Netherlands and the Japanese pharmacopeias, all of which have been revised recently, describe the alkaloid under scopolamin hydrobromid, but do not mention hyoscin. Neither the French, the Italian nor the Austrian pharmacopeias mention the alkaloid under any name. Some of these, however, are not recent.

From the above it will be seen that the pharmacopeias that mention it at all recognize the alkaloid as identical, whether it is made from hyoscyamus or scopola; all, with the exception of the United States and British pharmacopeias, have discarded the name hyoscin hydrobromid; and these two—the United States and British—use the terms hyoscin hydrobromid and scopolamin hydrobromid as synonymous terms. Yet in spite of this the Abbott people have the effrontery and the colossal conceit to deny brazenly that which the scientific world has accepted as proved facts. Is this done through ignorance or for commercial gain?

WHAT THE MANUFACTURERS SAY

If we need further confirmation of the fact that the alkaloid sold under the two names is identical, let us turn to the manufacturers; they certainly ought to know what they are putting on the market.

As already stated, Germany supplies the world (including the Abbott Alkaloidal Company) with this drug, and investigation seems to show that most, if not all, of that which is imported into this country is made by E. Merck of Darmstadt, or by C. F. Boehringer & Soehne of Mannheim-Waldhof, and is imported by their respective representatives, Merck & Co., New York, and C. F. Boehringer & Soehne, New York.

Since Dr. Abbott is quoted as saying that his firm obtains its "hyoscin" from Merck & Co., let us first see what the latter say.

Merck & Co. issues a book called "Merck's Index," which is considered a reliable authority on alkaloids, etc. From the 1907 edition we quote:

"Hyoscin.—According to the latest investigations, it is chemically and physiologically identical with scopolamin (q. v.)."

"Scopolamin.—Salt of alkaloid from roots of various plants of *Solanaceæ*, chemically, physiologically and clinically identical with hyoscin."

In a letter to a member of the Council on Pharmacy and Chemistry, under the date of Aug. 14, 1907, Merck & Co. write:

"We may say that, as the fact of the identity of hyoscin and scopolamin has been absolutely established, hyoscyamus is no longer the sole source from which hyoscin is made. For this reason we have some time since discontinued the use of the expression "from hyoscyamus" on our labels and in our literature."

In the price-list issued by C. F. Boehringer & Soehne, hyoscin is given in its alphabetical order, followed by "see scopolamin." Referring to scopolamin, we find "Identical with hyoscin hydrobromid." In a description of scopolamin in another part of the price-list appears the following important statement:

"Scopolamin.—Hyoscin hydrobromate was admitted to the U. S. P. in 1890. The German Pharmacopeia of the same issue also made this product official, but in a supplement, issued a year later, the pharmacopeial commission adopted the name *scopolamin hydrobromate* to replace 'hyoscin.' The reason for this change is that nearly all the hyoscin supplied by manufacturing chemists is made from *Scopolia atropoides*, and hence 'scopolamin' more correctly indicates the source of the alkaloid. In this country the name hyoscin is, moreover, alleged to be a trade-mark, and as a consequence it is sold at an exceptionally high price. Taking these facts into consideration, we supply this product labeled thus: "Scopolamin hydrobromate, identical with hyoscin hydrobrom., U. S. P., in 5, 10 and 15 grain vials. We guarantee the identity of our product with the hyoscin hydrobromate of the U. S. Pharmacopeia."

After giving these ample facts, we do not think it necessary to enlarge on the argument by quoting from the statements of the leading authorities on pharmacognosy, pharmacology, etc.

CONCLUSIONS AS TO HYOSCIN AND SCOPOLAMIN

From the above facts we are compelled to make the following conclusions:

1. Hyoscin and scopolamin are synonymous terms for the same alkaloid.

2. The claim of the Abbott Alkaloidal Company to the effect that the alkaloid it uses, and which it calls "hyoscin," is purer and safer than scopolamin has no basis in fact, for that alkaloid is scopolamin.

3. No one connected with the Abbott Alkaloidal Company—or, for that matter, anyone else—is able to detect whether the alkaloid it buys is made from hyoscyamus or from some other plant of the same family. It may be chemically pure—or impure—whether marketed under the name hyoscin hydrobromid or scopolamin hydrobromid.

4. The Abbott Alkaloidal Company, therefore, has been misleading the medical profession of the United States regarding hyoscin in its "H-M-C" tablets, and has been doing this either deliberately, with the intention of deceiving for commercial gain, or from ignorance of well-known facts.

"CACTIN," WHAT IS IT?

We have shown that the "H-M-C" tablets of the Abbott Alkaloidal Company are simply scopolamin-morphin plus "cactin." What is "cactin"? There is no such drug in the Pharmacopeia of the United States or in any other Pharmacopeia; it is not in the National nor in the United States Dispensatory; neither have we been able to find it in the price-lists or catalogues of the leading pharmaceutical firms of this or of any other country. There is a proprietary remedy called "Cactina Pillets," but "cactin" is presumably a different thing. What is it? Originally, the Abbott Alkaloidal Company's price-list defined it as a glucosid. Now, however, it is classed as "a concentration." Presumably it is a tincture of *Cactus grandiflorus;* but just what it is we do not know.[1] Whatever it is, it is a secret, and is a product of, and controlled by, the Abbott Alkaloidal Company, can be obtained of no one else, and, therefore, is a nostrum.

"CACTIN," WHAT ARE ITS THERAPEUTIC PROPERTIES?

But under the present circumstances it is immaterial what it is. It is more important to know what it will do, and what its properties are. So far as we know, there is no reliable evidence of its having any virtue whatever. Dr. Abbott

1. "Concentration" applied to pharmaceutical preparations is a loose term, originating with the eclectics and used to indicate the class of preparations obtained by extracting drugs and concentrating the extract by precipitating it in water, or by some similar process. The terms "concentration" and "resinoid" were regarded as practically synonymous, indicating a more or less indefinite dry mixture of the proximate principles of the plant whence derived. The only preparation of cactus used by the eclectics, so far as we can learn, has always been the so-called "green" or "specific" tincture. According to the accepted nomenclature of the U. S. Pharmacopeia, the name "cactin" should mean a glucosid or some other active principle. As a matter of fact, however, no active principle has ever been isolated from *Cactus grandiflorus.*

recently was asked in a society meeting whether his firm had made any physiologic test with it; he acknowledged that it had not.

While the firm itself has not put "cactin" to a physiologic test, others have. As will be remembered, Prof. Robert A. Hatcher made some experiments in the Loomis Laboratory of Cornell Medical College, New York, and his report was published in THE JOURNAL, September 21. His conclusions are: "These two preparations (cactina pillets of the Sultan Drug Co. and Abbott's cactin) are not only devoid of a digitalis-like or a strychnin-like action, but they are inert when used on animals in doses that are hundreds, and even thousands of times as large as those recommended by their exploiters." It is now three months since Hatcher's article appeared, which is ample time for presentation of reliable evidence that his conclusions were wrong. No such evidence has yet been offered.

Prof. S. A. Mathews, of the Laboratory of Experimental Therapeutics of the University of Chicago, has been experimenting with the product and we have his report ready for publication. His conclusions, however, are the same as, and his work corroborates that of, Hatcher. The writer of these lines swallowed the pillets contained in a bottle labeled "Cardiac Tonic (cactin) (45) gr. 1-124. Gm. .0005," supposed to contain one hundred of the pillets. These were all taken within fifteen minutes, and the experiment was repeated at another time. No effect was appreciated; the pulse did not seem to be affected in the slightest, nor was there any change in the breathing. Possibly "cactin" has some mysterious power of acting only when the heart "wabbles." This experiment is not reported as a scientific one, but is given for what it is worth. Considering that there was taken at one time 100 times more than is contained in the smaller (No. 1) "H-M-C" tablet, one is prompted to conclude with those who performed the experiments on animals that *"cactin" is inert.* Our readers are asked to bear this in mind when reading the quotations below:

The following is not a "patent-medicine" advertisement, as some may think on reading it, but appears as a reading notice in the *New York Medical Journal* of Oct. 19, 1907:

"Whether the indication is a pulse which is too fast or too slow, too weak or too strong, if the cause is vasomotor instability, as in the tobacco heart, the heart of the drunkard, some cases of menopause, overwork, etc., no remedy in the proper condition will do just what cactin will; no remedy will so quickly restore the necessary equilibrium as this; continued as required in 'dose enough,' no remedy will serve better. Cactin is a balancer, and it is this

peculiar balancing action on the circulation, preventing regional dilatation, which accounts for the wonderful and otherwise inexplicable effect of hyoscin-morphin-cactin compound as compared with hyoscin and morphin alone."

"Cactin" has the remarkable power of slowing the pulse if too fast, and of increasing it if too slow; of making it stronger if too weak, or making it weaker if too strong! Think of it! No wonder it has "a wonderful and otherwise inexplicable effect!"

"The value of cardiac stimulant, cactin, which is added to obviate any possible depressant effect, is also ignored by Wood; yet one of the first surgeons of the midwest [Lanphear?] assured the writer that he looked on this addition as of the first importance in rendering the combination perfectly safe."—(W. C. Abbott, *Fort Wayne Medical Journal,* May, 1907.)

The literature on "cactin" is of the character of the above two quotations.

CONCLUSION AS TO "CACTIN"

Comparing the results of physiologic experiments with the claims made by the Abbott Alkaloidal Company concerning "cactin," we leave it to our readers to decide for themselves whether or not "cactin" is a fraud.

CONCLUSION AS TO "H-M-C—ABBOTT"

To sum up the facts concerning the "H-M-C" tablets, it may be said that this mixture is nothing but scopolamin-morphin to which has been added an inert secret article called "cactin," thus adding mystery to it all and making out of this well-known and important combination of scopolamin-morphin a proprietary nostrum.

JAYNE'S EXPECTORANT

Dangers of Using the Remedy

(From The Journal A. M. A., March 14, 1908)

Newspapers recently chronicled the death of a child in Cincinnati from an overdose of a "patent medicine." We communicated with the coroner, who kindly sent us a copy of the verdict. After recounting in the usual fashion the name, age, etc., of the deceased, the verdict goes on to state:

> The testimony shows that this child had been troubled with a cough for the past five years; that he had always been quite pale and had slept a great deal. The statement is also made that in this family JAYNE'S EXPECTORANT had been used for all the children.

This proprietary remedy has on its label the statement that each fluid ounce contains 15 per cent. of alcohol and one and one-fifth grains of opium. The single dose of this remedy given in this case could not have caused the child's death, but there is no doubt that the continued use of the remedy containing opium, even in a comparatively small dose, is harmful, and especially so to infants and children.

The pale color and the drowsiness can be accounted for by the prolonged use of opium, and the attention of parents can not be too strongly called to the danger of the use of such remedies for children as those that owe their efficacy to this drug. OTIS L. CAMERON, Coroner.

KARGON

A Diuretic Nostrum and Its Composition

(From The Journal A. M. A., March 16, 1907, 967)

In response to requests for information regarding the composition of Kargon, we had the preparation analyzed. From the reports of our chemists this nostrum appears to contain potassium acetate and buchu as the essential constituents. One chemist concludes his report as follows: "This wonderful remedy, then, seems to be acetate of potash, about 15 grains to each teaspoonful, and fluid extract of buchu." Another chemist states: "Kargon contains buchu, potassium acetate, glycerol and 18 per cent. alcohol."

The nostrum is put up by the Kargon Extracting Company of Cincinnati, the title "extracting" evidently referring to the process to which the gullible public's purse is subjected. The mixture is advertised as "being composed of common every-day vegetable (?) ingredients" as being better than "patent medicines" which are largely "alcoholic concoctions." The method of advertising is as ingenious as it is misleading. Appearing, in many cases, as solid reading matter, it discourses on the importance of the free action of the kidneys as an essential to health. A harmless-looking prescription is then given, consisting of Fluid Extract of Dandelion, Compound Kargon and Compound Syrup of Sarsaparilla, which can "be procured from any good pharmacist and mixed at home." The "Compound Kargon" is always carefully sandwiched between the two pharmacopeial preparations with but one evident object in view, that of leading the public to suppose that Kargon is but one of the numerous standard diuretics. Of course, a combination of acetate of potash and fluid extract of buchu with fluid extract of dandelion and compound syrup of sarsaparilla makes

an active diuretic. But it is a combination that in the majority of cases of kidney disease will do great harm. And no matter what the conditions, if used indiscriminately and "taken regularly," as the advertisements advocate, it can not be otherwise than dangerous.

KIDNEY PILLS AND SIMILAR NOSTRUMS

Analysis of Remedies for Kidney Diseases

(From The Journal A. M. A., Feb. 9, 1907, 534, and March 16, 1907, 959)

The *British Medical Journal*, Dec. 8, 1906, page 1645, gives the results of analysis of some of the chief proprietary remedies for kidney diseases. Several of these preparations are in the form of pills, while others are liquids.

The two principal drugs employed are oil of juniper and potassium nitrate, separately or together; in some cases aperients are added. Altogether extravagant claims are made for some of the articles, as is usual with proprietary medicines.

Analysis of Doan's Backache Kidney Pills gave results from which the following formula giving a similar pill was constructed:

Oil of juniper	1 drop.
Hemlock pitch	10 gr.
Potassium nitrate	5 gr.
Powdered fenugreek	17 gr.
Wheat flour	4 gr.
Maize starch	2 gr.

Divide in twenty pills.

Forty pills and four dinner pills sell for 2 shillings and 9 pence (66 cents); the estimated cost is one halfpenny (one cent).

The dinner pills were found to have approximately the following composition:

Oil of peppermint	1 drop.
Podophyllin	3.8 gr.
Aloin	6.9 gr.
Jalap resin	0.8 gr.
Powdered capsicum	0.5 gr.
Powdered licorice	0.6 gr.
Maize starch	0.5 gr.
Acacia gum	1.5 gr.
Extract of henbane	1.5 gr.

Divide in twenty pills.

Dodd's Kidney Pills, which are advertised as the "only remedy that has cured Bright's disease," were found to consist of extract of cascarilla, jalap, resin, hard soap, potassium nitrate,

sodium bicarbonate, hard paraffin, turmeric, and wheat flour. Var's American Kidney Pills are similar to Doan's, containing also oil of peppermint and powdered squill and extract of henbane. Fitch's Kidney and Liver Cooler, a liquid preparation, was found by the analyst to consist simply of a solution of potassium nitrate in water, 56 grains to the ounce—that is, 14 grains in a dose. The estimated cost of a bottle, containing rather under 4 ounces and selling for 2 shillings (48 cents), is one-eighth of a penny (¼ cent).

WARNER'S SAFE CURE

This preparation, according to the literature supplied by the manufacturers, is "purely vegetable," says the *British Medical Journal*, and this predilection on the part of the public for vegetable remedies is probably responsible for potassium nitrate being classed as a vegetable. Analysis of this remedy showed "the presence of potassium, nitrate, alcohol, glycerin, a trace of oil of wintergreen and vegetable extractive." No alkaloid or similar active principle was found and the extract had little distinctive taste or character, all its properties pointing strongly to its consisting largely of taraxacum, with some other extract containing a small quantity of tannin.

VENO'S SEAWEED TONIC

The label on this preparation, according to our contemporary, states that the remedy "contains in a pleasant and agreeable form the active principle of seaweed . . . is prepared on an entirely new principle and is free from poisonous and mineral drugs." Analysis shows that the mixture contains "a small proportion of undissolved sediment, which, when collected and examined, agrees in all respects with the insoluble portion of leptandrin. Glycerin, a little phosphate, alcohol and a trace of chloroform are present and vegetable extractive. Careful examination of the latter gave evidence of the presence of the constituents of cascara sagrada, senna and rhubarb."

MUNYON'S KIDNEY CURE

The label on this preparation is said to bear the words: "Cures Bright's disease, gravel, all urinary troubles, and pain in the back or groins from kidney diseases." It is stated that the pills were found to vary much in size, the average weight being 0.6 grain. Analysis showed them "to consist of ordinary white sugar; no trace could be detected of any alkaloid or

other active principle, or of any medication. The sugar was determined quantitatively and found to be just 100 per cent. of the weight of the pilules."

KUTNOW'S POWDER

Which Is It, a "Proprietary" or a "Patent" Medicine?

(From The Journal A. M. A., Aug. 31, 1907)

The term "patent medicine" has been applied, rather loosely, to those nostrums sold and exploited directly to the public, while the name "proprietary" has been given such preparations as are advertised only to the medical profession. As has been many times exemplified by reports in THE JOURNAL, the distinction is often a very fine one and the dividing line frequently reaches the vanishing point.

It is not unusual, for instance, for "proprietary" preparations to be foisted on the medical profession until a certain number of testimonials (of doubtful value, it is true, but still testimonials) have been ingeniously wheedled out of physicians and the product rather generously prescribed. When this objective point has been reached the manufacturer comes into the open and advertises the nostrum to the public direct and the testimonials previously given for the "proprietary" are used as advertising assets for the "patent medicine."

Then again there are certain preparations which are "proprietaries" or "patent medicines" according to the location. On one side of the Atlantic the product is advertised to physicians only, while on the other side it runs indiscriminately on the billboards and in the newspapers. One of the best examples of this last class is Kutnow's Powder. In England, where it originated, this preparation which "dissolves and eliminates uric acid," is consistently lined up with Beecham's Pills and Pink Pills for Pale People. Full-page newspaper advertisements announce the fact that free samples will be

.....

"SENT TO ALL APPLICANTS."

.....

In the United States, however, Kutnow's have learned from their wide advertising experience that a cheaper and surer way of introducing a nostrum to the public is to advertise it to the medical profession only. By means of advertisements

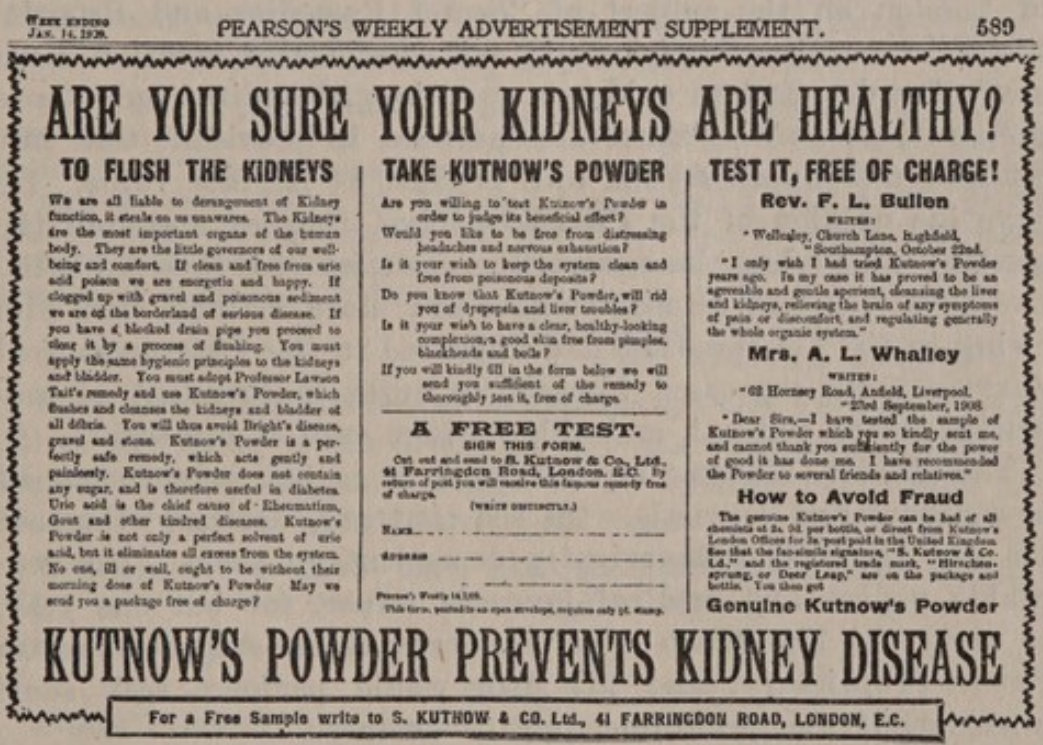
in medical journals (whose space is much less expensive than that of the daily papers) and the liberal distribution of samples

. . . . . .

"SENT FREE TO PHYSICIANS ONLY,"

. . . . . .

the medical profession becomes the unpaid "barker" for the nostrum manufacturer. At present, therefore, Kutnow's Powder is—in the United States—an ethical (!) "proprietary."



WEEK ENDING JAN. 14, 1909. PEARSON'S WEEKLY ADVERTISEMENT SUPPLEMENT. 589

ARE YOU SURE YOUR KIDNEYS ARE HEALTHY?

TO FLUSH THE KIDNEYS

We are all liable to derangement of Kidney function, it steals on us unawares. The Kidneys are the most important organs of the human body. They are the little governors of our well-being and comfort. If clean and free from uric acid poison we are energetic and happy. If clogged up with gravel and poisonous sediment we are on the borderland of serious disease. If you have a blocked drain pipe you proceed to clear it by a process of flushing. You must apply the same hygienic principles to the kidneys and bladder. You must adopt Professor Lawson Tait's remedy and use Kutnow's Powder, which flushes and cleanses the kidneys and bladder of all débris. You will thus avoid Bright's disease, gravel and stone. Kutnow's Powder is a perfectly safe remedy, which acts gently and painlessly. Kutnow's Powder does not contain any sugar, and is therefore useful in diabetes. Uric acid is the chief cause of Rheumatism, Gout and other kindred diseases. Kutnow's Powder is not only a perfect solvent of uric acid, but it eliminates all excess from the system. No one, ill or well, ought to be without their morning dose of Kutnow's Powder. May we send you a package free of charge?

TAKE KUTNOW'S POWDER

Are you willing to test Kutnow's Powder in order to judge its beneficial effect?

Would you like to be free from distressing headaches and nervous exhaustion?

Is it your wish to keep the system clean and free from poisonous deposits?

Do you know that Kutnow's Powder, will rid you of dyspepsia and liver troubles?

Is it your wish to have a clear, healthy-looking complexion, a good skin free from pimples, blackheads and boils?

If you will kindly fill in the form below we will send you sufficient of the remedy to thoroughly test it, free of charge.

A FREE TEST.

SIGN THIS FORM.

Cut out and send to S. Kutnow & Co., Ltd., 41 Farringdon Road, London, E.C. By return of post you will receive this famous remedy free of charge.

(WRITE DISTINCTLY.)

NAME. . . . . .

ADDRESS . . . . . .

. . . . . .

Pearson's Weekly 14.1.09.

This form, posted in an open envelope, requires only ½d. stamp.

TEST IT, FREE OF CHARGE!

Rev. F. L. Bullen

WRITES:

"Wellesley, Church Lane, Highfield, Southampton, October 22nd.

"I only wish I had tried Kutnow's Powder years ago. In my case it has proved to be an agreeable and gentle aperient, cleansing the liver and kidneys, relieving the brain of any symptoms of pain or discomfort, and regulating generally the whole organic system."

Mrs. A. L. Whalley

WRITES:

"62 Hornsey Road, Anfield, Liverpool.

"22nd September, 1908.

"Dear Sirs,—I have tested the sample of Kutnow's Powder which you so kindly sent me, and cannot thank you sufficiently for the power of good it has done me. I have recommended the Powder to several friends and relatives."

How to Avoid Fraud

The genuine Kutnow's Powder can be had of all chemists at 2s. 9d. per bottle, or direct from Kutnow's London Offices for 3s. post paid to the United Kingdom. See that the fac-simile signature, "S. Kutnow & Co. Ltd.," and the registered trade mark, "Hirschensprung, or Deer Leap," are on the package and bottle. You then get

Genuine Kutnow's Powder

KUTNOW'S POWDER PREVENTS KIDNEY DISEASE

For a Free Sample write to S. KUTNOW & CO. Ltd., 41 FARRINGDON ROAD, LONDON, E.C.

There exists in this country, as most of our readers know, an organization of "patent medicine" manufacturers whose "reason for being" is to get full value received for the $40,000,000 paid annually in advertising nostrums in the newspapers of the country. This organization is known as the Proprietary Association of America. The now familiar "red clause" in the advertising contracts by which the newspaper forfeits its contract if state laws are enacted that are inimical to the "patent medicine" interests, is a creation of this organization and has been most effective in making the newspapers the unpaid lobyists of the nostrum interests. The "silence clause" is another "joker" in the contracts by which the agreement is cancelled if matter detrimental to the nostrum "is permitted to appear in the reading columns" of the paper. It is little wonder that with such weapons the "patent medicine" manu-

facturer has assumed an arrogance that is as disgusting as it is serious.

Great Britain, too, has its "patent medicine" men's organization, which is known as the Proprietary Articles Trades Association. Of both these honorable bodies Mr. S. Kutnow of Kutnow Brothers, Ltd., is, or was, a conspicuous member. At a recent meeting of the British organization, Mr. Kutnow worked himself into a fine frenzy of indignation because of some articles that had appeared in the *Pharmaceutical Journal* of London on the subject of "Secret Remedies and Proprietaries." As these articles did not specifically mention Kutnow's Powder, and as evidence was directed against only those preparations as were most disreputable, it is evident that Mr. Kutnow now appraises his own product at its face value. He gave his opinion of the *Pharmaceutical Journal* and told the meeting that when the advertising man for that journal solicited advertising he refused to have any more dealings with him owing to the articles that had appeared in the *Pharmaceutical Journal*. He expressed himself as quite independent of any newspaper or journal, and able to take care of himself.

Therein Mr. Kutnow is mistaken; he is not independent of newspapers and journals. On the contrary, he, and others of his ilk, are most subserviently dependent on them. Let reputable papers and medical journals refuse, for but one year, to carry the high-flown advertisements of his Anglo-American Patent-Proprietary, and his firm would perforce seek some worthier, if less profitable, line of business.

The editor of the *Pharmaceutical Journal* resents Mr. Kutnow's "implied assumption that by inserting paid announcements in the advertising columns of a newspaper, he or any one else, can dictate the policy of that organ."

The *Pharmaceutical Journal*, it should be said, is the official organ of the Pharmaceutical Society of Great Britain, and is the most influential organ of the drug trade in the British Isles. It is refreshing to note, in these days of "canned" editorials and paid "write-ups" masquerading as original articles, that there is still to be found a journal that can not be bought.

One wonders whether a large experience in the advertising world, and especially his membership in the Proprietary Association of America, has unconsciously led Mr. Kutnow to assume that muzzling the press is one of the perquisites of the large purchasers of advertising space.

MANOLA

Physicians as Unpaid Peddlers of Nostrums

(From The Journal A. M. A., May 6, 1905, 1462)

Evidently there must be a considerable number of physicians in the United States who sell themselves cheaply. Last week we printed in this department a description of a scheme that a St. Louis chemical company had for getting the doctors to work for them for very small pay. This week we have to record another St. Louis firm in the same delightful business. This scheme comes in the form of a triple postal card arrangement, on which the following liberal offer is made:

Dear Doctor: In order to give you an opportunity to further test the properties of our MANOLA TONIC, we make you the following liberal propositions: Fill out the attached cards Nos. 1 and 2, mail No. 1 to US and hand Nos. 2 and 3 TO YOUR DRUGGIST. Upon receipt of the order for 1 dozen MANOLA TONIC from your druggist we will send with his order 3 full size bottles of MANOLA TONIC free of charge to YOU.

Yours truly,
THE MANOLA COMPANY.

Card No. 1 is directed to the company, and the doctor is to fill in the name of his druggist, sign his name and put on the stamp. (The company ought to be willing to furnish the stamp.) On this card is this statement:

Gentlemen:—I have this day accepted your offer through Mr.————————————Druggist.

Card No. 2 is as follows:

Mr.————————————, Druggist:

Please order of the Manola Company, St. Louis, Mo., 1 dozen MANOLA TONIC, all of which I agree to prescribe in my practice. By filling out the attached card No. 3 and forwarding it to the above company, they will forward me, with your order, 3 full-size bottles MANOLA TONIC free for clinical purposes.

Yours truly, ————————————M.D.

In this instance the poor doctor either has to put this card in an envelope and put on a two-cent stamp, or carry it to the druggist himself. As he will probably be a cheap doctor in any event, he will no doubt save the two cents.

Card No. 3 is as follows:

MANOLA COMPANY, St. Louis. Date————————19

Gentlemen:—Please ship (me us), as per your offer, 1 dozen MANOLA TONIC at $8.50 per dozen. ¼ dozen MANOLA TONIC free, for Dr. ————————————.

(Signed) ————————————Druggist.

Ship through my jobber.

Here we have the doctor not only used as an unpaid peddler for a secret remedy, but also as a club to make the druggist

fill up his shelves with the stuff. Of course, the three bottles the doctor gets for his labor are to be given to his patients, who will thus become acquainted with what the preparation is good for, and will then buy it direct.

Certainly, it can not get very much worse, unless the nostrum manufacturers get the doctor to go on the street and peddle their stuff on a percentage.

Manola Prescribing and Its Results

(From The Journal A. M. A., Aug. 8, 1908)

MUSCODA, WIS., July 31, 1908.

To the Editor:—Enclosed is a copy of a letter sent to Dr. X. of Y., and his reply in the form of a marked advertisement of Manola clipped from a medical (?) journal. The style of the advertisement sent would lead one to classify the product with "Peruna and the Bracers." The preparation was prescribed by Dr. X. for a Mr. Q. for a cough and "run-down" condition. Q. has been unable to do any work since he began taking it, but for three months he thought it benefited him, after which time he stopped taking it for three months and then took it again for five weeks. As he was emaciating rapidly and was troubled with high fever and night sweats, he came to me, and I found him in an advanced stage of pulmonary tuberculosis. The patient had wasted nearly eight months of precious time, closely housed and depending on the restorative virtues of Manola, instead of consulting a physician at a time when a properly regulated out-of-door life might have saved him. And all because Dr. X. prescribed Manola to be taken for several months.

Who is Dr. X. who did the prescribing? Polk's Register, 1906, records him as a graduate of a university in Germany; surgeon for the C., M. & St. P. Railway Company; member of the American Medical Association; member of the American Association of Railway Surgeons; member of the state historical society; medical examiner, etc. Shades of Æsculapius! This young man, now near death's door, asked me if Manola was not a good medicine, for, said he, "Dr. X., a very prominent physician, prescribed it to be taken continuously for a long time." And what could I, an insignificant doctor, reply? I said, "I don't know. I have not used it." And then I wished that I belonged to some other profession whose members are not "suckers" to bite at the bait of drug promoters and thus help them to fleece innocent persons while on the road to chronic invalidism and death. C. R. PICKERING, M.D.

COMMENT: The above is only one example—a typical one, however—of the results of nostrum prescribing. The physician who in the above instance prescribed Manola—an old practitioner, over 70 years of age—when asked by another practi-

tioner for information regarding it, has to fall back on an advertisement. This is what the advertisement says:

> New strength can be given to the failing heart, tissue changes arrested, and senile decay indefinitely postponed by the prescription of MANOLA which furnishes to the exhausted cell protoplasm the inorganic elements necessary for a renewed and increased activity, improves the quality and quantity of the blood, supports the heart, tones up the nerves, induces refreshing sleep, and checks the decline of mental and bodily vigor.
>
> Manola can be depended on in all cases of loss of strength and weight in old and young alike.

A wonderful remedy, truly, that will do all this. Evidently Ponce de Leon in his search for the fountain of eternal youth labored under the insuperable disadvantage of being born 400 years too soon. Had he but known, the fluid sought, which "indefinitely postpones senile decay" and "checks the decline of mental and bodily vigor" was to be found, not in the untrodden wilds of Florida early in the sixteenth century but in the "laboratory" of a nostrum manufacturer four centuries later.

Had this advertisement appeared in a newspaper and had one of Dr. X.'s patients consulted him regarding taking this "patent medicine"—for now it would be a "patent medicine"—he would most certainly have told the patient that it was foolish to believe such rubbish and not to waste his money on the stuff. And yet "Dr." Hartmann in his wildest flights of Perunaese oratory has never transcended in mendacious assertiveness the claims made for this "strictly ethical preparation."

Three years ago we exposed the methods by which this nostrum was exploited, and concluded: "Here we have the doctor not only used as an unpaid peddler for a secret remedy, but also as a club to make the druggist fill his shelves with the stuff . . . Certainly, it can not get much worse, unless the nostrum manufacturers get the doctor to go on the street and peddle their stuff on a percentage."

Manola illustrates another point: One of the curses connected with the nostrum business is the fact that many of the preparations are exploited by pseudo-pharmacal and pseudo-chemical companies. The Manola Company is reported as a side affair, and controlled by those who own the Luyties Homeopathic Pharmacy Company of St. Louis. What is the reason for creating a special company to exploit this nostrum? Is it because physicians might be prejudiced and not willing to buy from a homeopathic concern, or is it because the concern itself wishes to retain at least the outward semblance of decency?

The above case brings out another evil inseparable from nostrums. While the great majority are useless and most of them innocuous, they do harm in a negative way. The layman, depending upon the advertisements in the newspapers and believing what the advertisements state, takes a "patent medicine" and delays consulting a physician until too late. In the case of a physician, he, too, believes what the advertisement says, takes it for granted that he is doing what is right, neglects to study his case, to make a correct diagnosis, and to follow up the treatment by careful study of the case as it progresses.

In a case like the above nothing can relieve the physician of his responsibility; he can not fall back on the advertisement. In the case of the patient taking a "patent medicine," he depends on his own judgment. In the case in question, the patient depended on one whom he believed knew what should be done. And the physician was false to his trust!

MARIENBAD TABLETS

The Commercial Value of a Name

(From The Journal A. M. A., July 18, 1908)

What potentialities exist in a name! The great watering places and health resorts of Europe are household words and their names compel attention. Hence, when a physician receives in his mail a package bearing a foreign postmark and an unusual looking stamp, with the name "Marienbad" on the enclosure, he may possibly restrain his first impulse, born of experience, to throw the "sample" into the waste basket. He may be excused for expecting to find something of unusual merit in a medicine elaborated at such a world-renowned health resort as Marienbad. Especially is his enthusiastic expectancy pardonable when he learns that "Marienbad Tablets" are "prepared according to the prescription" of an individual with the imposing cognomen, "Prof. Dr. Med. Chevalier de Basch."

Then, too, accompanying the "sample" is a circular descriptive of the virtues of this great medicine, printed in parallel columns of massive German and picturesque English. In it he is informed that the "Marienbad Tablets act mildly, without pain on the bowels, and consequently effect their evacuation." Great stress is laid on the advantage of the "tablet-

shape" which makes possible the "offering of a perfectly equal dose of the efficacious ingredients" and simplifies the administration "on account of their compendious shape." "Marienbad Tablets," he is told, are unexcelled for the treatment of that condition recognized by all physicians as "sanguiness and its after-effects, such as vergitiousness," and they are highly recommended in cases of "arteriosclerose." As a sop to Cerberus, the circular suggests "the diagnosis should be made by the physician," the assumption being that the proprietors of "Marienbad Tablets" will take care of the treatment while the prognosis will naturally take care of itself.

And the composition of this "compendious" cure for "sanguiness" and "vertigiousness"? Well, if carefully looked for, the physician will find that "Marienbad Tablets" consist of extract of aloes, powdered rhubarb, podophyllin, extract of cascara sagrada and extract of belladonna. That is all; just a simple cathartic tablet such as physicians are prescribing for their patients daily. They do not even contain a picturesque, pharmacologic nonentity like cactin or "latalia rad." Wherein, then, lies the special virtue of their "efficacious ingredients"? We are forced to the conclusion that this must reside in the psychic effect produced by taking a silver-coated tablet from a gilt-trimmed box, labelled "Marienbad," rather than in the essential contents of the tablets themselves.

MAYATONE

A French Beauty's Japanese Prescription for American Use

(From The Journal A. M. A., Oct. 30, 1909)

The advertisement, reproduced on the next page, arranged as reading matter, has appeared recently in the daily papers.

Mayatone—which is, of course, the "joker" in this "prescription"—is put on the market by the May-a-tone Company of Detroit. It comes in small cardboard packages containing about 2½ ounces of a granular powder, pink in color, and smelling like cheap hair-oil. The price of the package is seventy-five cents. The preparation was examined in the Association's laboratory with the following results:

LABORATORY REPORT

Examination of Mayatone, a product prepared by the May-a-tone Company, Detroit, indicates that the preparation is composed essentially of magnesium sulphate and sodium borate in the following proportions:

Magnesium sulphate (Epsom salts).....90 per cent.
Sodium borate (borax).....10 per cent.

This analysis confirms the findings of the Kansas State Board of Health, which in its *Bulletin* for June, 1909, reports that Mayatone was "found to be largely magnesium sulphate, perfumed and tinted pink."

To Have a Clear, Velvety Complexion

By MADAME D'MILLE

Madame D'Millé, one of Paris' most famous beauties just passing through Chicago, gives us a few valuable ideas on skin treatment, as follows:

"Yes, I have just come from beautiful Japan, and I must say the Japanese women have many toilet formulas and ideas which American women should know.

"What do they use to make their skin so soft and velvety?

"Any American woman can use the same treatment if she desires. Dissolve a small original package of mayatone in about eight ounces of witchhazel. Massage the face, arms, and neck with this solution once or twice a day and you will shortly find you have a lovely, soft complexion, and then the best of it all is that this solution prevents the growth of hair and is absolutely harmless to the most delicate skin. Make the solution yourself.

"Why, yes—of course I use it. Just see how beautifully soft my arms and face are, and not a hair.

"No—you will never use powder again, and those stray hairs will soon be missing from your face."

The viciousness of such nostrums as Mayatone does not lie in their ingredients but in the dishonest method by which they are exploited. For it is dishonesty, trivial, perhaps, but none the less inherent dishonesty, to attempt by implication or otherwise to make the public believe that a colored and scented mixture of epsom salts and borax is responsible for the "soft and velvety" skin of the Japanese women, and further, that such a "formula" is given to the world through the medium of a Parisian beauty. But the greater dishonesty lies

in attempting to make the public believe that the "prescription" or "formula" is given as editorial information, and further that it is composed of non-proprietary articles to be had in any drug store. This form of deception is becoming increasingly common, a fact that reflects little credit on the daily press, whose cooperation makes the humbug possible. It is but fair to say, however, that newspapers of the better type will not lend their pages to this bald attempt to deceive their readers.

"MITCHELLA COMPOUND"

A Nostrum for "Women Who Dread Motherhood"

(From The Journal A. M. A., Feb. 27, 1909)

In the pages of those publications whose advertising ethics permits them to give publicity to fake cancer cures, to deaf-cure quacks or any other of the unsavory brood which Mr. Adams exposed in the "Great American Fraud" series, the advertisement of "Dr." J. H. Dye's "Medical Institute" may be found. Dye is one of the tribe that makes capital out of the fears of the expectant mother. After drawing lurid pictures of the "untold pains" to which the young mother may be a martyr, relief is promised if the sufferer will but use Dye's "Mitchella Compound." The value of "Dr." Dye's nostrum is testified to by a hypothetical Mrs. Dare, who relates how after losing her first child she had a vision. A "white-robed angel" appeared, who delivered a flowery speech, concluding with the following peroration:

"Go, sister, and seek freedom and peace in the use of *Mitchella Compound* and in following the teachings of that book."

The book referred to by the "white-robed angel" is a brochure put out by "Dr." Dye and sold for the nominal price of $2. The title is "Painless Childbirth," and needless to say, the author does not neglect to extol the use of Mitchella Compound.

"Dr." Dye's Mitchella Compound "speedily cures all derangements and irregularities of the menstrual function, congestion, inflammation, ulceration and displacement of the womb . . ." and other things too numerous to mention. This "heartease for weary women," we are told, "is composed of the purest and most carefully selected herbs which

can be obtained." Possibly! But if after a period of drought one went to the woods and raked up a double handful of dried leaves, pieces of bark and any other débris that happened to be handy, the average man would find it difficult to distinguish between such rakings and "Dr." Dye's Mitchella Compound at $1 a package.

A sample of Mitchella Compound was examined botanically for us by Prof. William Baker Day of the University of Illinois. Professor Day reports as follows:

BOTANIC EXAMINATION

"I have examined botanically a sample of 'Mitchella Compound.' The sample consists apparently of a mixture of vegetable material, chiefly fragments of leaves, roots and bark, among which I have been able to identify the following:

"*Mitchella repens*—herb—commonly known as Partridge-berry or Squaw-vine.

"*Chamælirium luteum*—rhizome and roots—(*Helonias dioica*), commonly known as Starwort or False Unicorn Root.

"*Cornus Florida*—bark of the root—commonly known as Flowering Dogwood.

"*Cypripedium pubescens* or *Cypripedium parviflorum*, commonly known as Ladies' Slipper."

None of these drugs is new; all have been used at one time or another as medicinal agents, but, with the exception of ladies' slipper, have long been practically discarded as useless. Ladies' slipper, while officially recognized, is so little esteemed as a remedy that few text-books even mention it. Mitchella Compound is, in short, but one more of the innumerable cure-alls on the market in which discarded, unrecognized or useless drugs are pressed into service and invested with miraculous virtues. What shall be said of men who prey on pregnant women? Who create in the mind of the expectant mother the fear of untold agonies and then offer immunity to these suppositious tortures at the price of their worthless nostrums? Who, with the help of such publications as will accept their lying advertisements, do more to encourage abortion than even the professional abortionists themselves. There seems to be but one remedy: Speed the time when in their acceptance of advertising those publishers who fail to recognize decency as a moral obligation may be forced by public opinion to recognize its value as a business proposition.

MUNYON'S PILE OINTMENT

Other Patent Remedies for Piles

(From The Journal A. M. A., Sept. 12, 1908)

The investigation by the *British Medical Journal* (July 11, 1908) of the nostrums most extensively advertised for piles shows that the manufacturers rely either on local applications, internal remedies or both. The local remedies generally contain an emollient base, but few ingredients of active properties. One contained calomel, zinc oxid, phenol, beeswax and soft paraffin, and another lead acetate, creosote, resinoid substance, vegetable tissue, hard paraffin and oil of theobroma. The former preparation is used as an ointment, the latter as suppositories.

The preparation of the greatest interest to us is Munyon's Pile Ointment. The label states: "Munyon's Pile Ointment permanently cures all forms of piles or hemorrhoids and immediately relieves pain, burning, itching and distress at the outlet of the bowels."

According to the *British Medical Journal:* "Analysis showed the ointment to consist of soft paraffin, with a trace of ichthyol sufficient to give a slight odor, but not enough to affect the appearance of the ointment. Experiments showed that 0.2 per cent. or over of ichthyol appreciably darkens the color of soft paraffin, and it appears, therefore, that less than this proportion is present. Estimated cost of one ounce of the ointment, one farthing" (half a cent). Its price in England is one shilling (24 cents) a package.

MURINE EYE REMEDY.

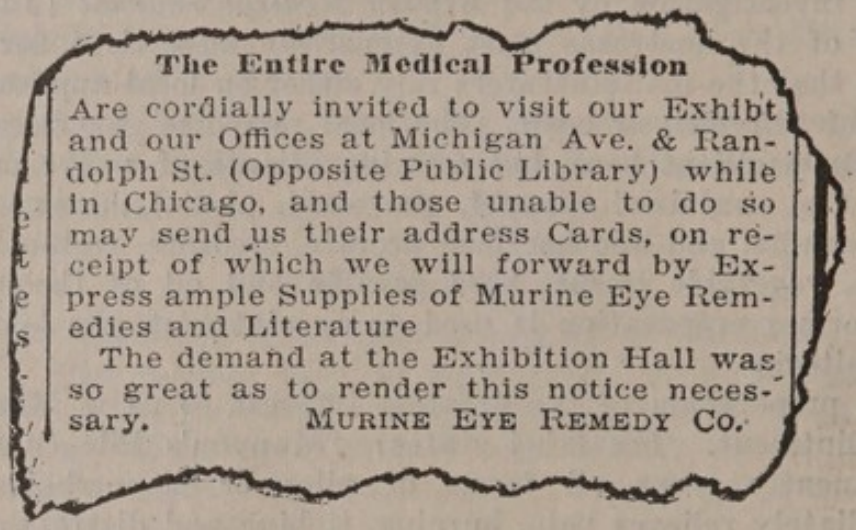
A Nostrum with an Alleged College of Ophthalmology for a Side Line.

(From The Journal A. M. A., Nov. 7, 1908)

To be all things to all men is the alpha and omega of successful advertising. An address to Bowery toughs in terms of Chesterfieldian elegance not only would fail to carry conviction, but might lead to mob violence on the part of the audience. This principle, which is recognized by all astute advertisers, is beautifully exemplified in what follows.

Murine Eye Remedy is an "eye lotion" advertised in street cars, on bill boards and fences and in the daily press. During the Chicago session of the American Medical Association the promoters of this nostrum conceived the idea that it might

as well work the medical profession in a way that has become classic among certain manufacturers. The following appeared in Chicago newspapers:



The Entire Medical Profession

Are cordially invited to visit our Exhibt and our Offices at Michigan Ave. & Randolph St. (Opposite Public Library) while in Chicago, and those unable to do so may send us their address Cards, on receipt of which we will forward by Express ample Supplies of Murine Eye Remedies and Literature

The demand at the Exhibition Hall was so great as to render this notice necessary. MURINE EYE REMEDY CO.

To lead the public to infer that this company had an exhibit at the American Medical Association meeting was a masterstroke of advertising mendacity. The fact that a large proportion of the laity has confidence in physicians is recognized by the Murine Eye Remedy Company in its advertising to the general public, and the approval which physicians accord their preparation is enlarged on.

To those unstable individuals, however, who embrace the various 'pathies and 'isms, and to whom a decent medical man is a *bête noire,* this company appeals through the various freak publications which pander to this class. In one of the best known of this type of periodicals is a three-quarter page advertisement of Murine—the balance of the page being taken up with quotations from Ernst Renan on religion, Wordsworth on nature and Swedenborg on love. The antimedical faddists are told that "a group of business and professional men in Chicago recently banded together to give an ailing public an eye lotion that will further the interests of humanity." How this altruistic spirit does pervade the "patent medicine" fraternity! Everything is done for "humanity"—providing "humanity" will pay the bill! "Of course," continue our eye remedy friends, "many of the Learned Guessers object to this lotion, saying 'things' about it whenever they get the chance—that's natural." Perfectly! "So let the Learned Guessers howl—to howl is an M.D.'s privilege."

WHAT MURINE WAS—AND IS.

Before the advent of that potent influence for commercial veracity, the Food and Drugs Act, the carton in which this "eye water" was sold read as follows:

MURINE
A POSITIVE CURE
FOR SORE EYES, RED, INFLAMED AND ITCHING LIDS.

Since that law has become operative and a lying label has become illegal instead of merely immoral, the carton bears this legend:

MURINE
A RELIABLE RELIEF
FOR SORE EYES, RED, INFLAMED AND ITCHING LIDS.

In the pamphlet which accompanies each bottle of the preparation, we are told that Murine is "compounded by Eye Specialists who have used it successfully in their private practice as Oculists for over twenty years." "Murine is Indicated in Cases of Weak Eyes, Inflamed Eyes, Tired Eyes, Strained Eyes, Children's Eyes, Itching Eyes, Blurring Eyes, Red Eyes" and numerous other kinds of eyes—in fact, Murine is "a Favorite Lotion for those who wear Artificial Eyes."

One is carried back to that delightful character of Mark Twain's, "Colonel Sellers," who was about to put on the market his "Infallible, Imperial, Oriental Optic Liniment and Salvation for Sore Eyes—the Medical Wonder of the Age! Small bottles fifty cents, large ones a dollar."

The composition of such a unique and universal remedy for all the ills the eye is heir to will naturally interest physicians. Analyses made in the Chemical Laboratory of the American Medical Association gave the following results:

CHEMISTS' REPORT ON MURINE.

Murine as found on the market to-day is an amber-colored liquid, practically odorless, having a slightly bitter taste, and giving an alkaline reaction to litmus. From the examination detailed below,[1] we conclude that Murine is essentially an

1. Qualitative tests of murine showed the presence of borax and some organic substance, responding to the general alkaloidal tests. Estimation by the method of Thomson (*Jour. Soc. Chem. Indust.*, xii, p. 432), in which the agreement between acidimetric and alkalimetric titrations showed that the solution contained borax as such, demonstrated the presence of 12 grs. to the fluid ounce, or 2.59 gm. per 100 c.c. of crystallized borax.

The color of the preparation suggested the possible presence of golden seal, which was tested for as follows: Twenty-five c.c. of

aqueous solution of borax (2.6 gm. per 100 c.c. or 12 grains to the fluid ounce), containing a trace of berberin or some golden seal preparation.

It is interesting to note that Murine is variable in composition. A sample examined Nov. 30, 1907, contained a carbonate and responded to alkaloidal tests very feebly; while the product to-day contains no carbonate and shows definite traces of alkaloids.

One wonders to what extent the therapeutic action of Murine is due to the price charged for it. If instead of paying $1.00 an ounce—the price charged—the public could buy it for 5 cents a gallon—the estimated cost—would the removal of such a potent psychic influence have any effect on the virtues of the preparation? The question is not one to be lightly disposed of or settled off-hand.

In all seriousness, however, the law which permits men engaged in such a business to continue the practice of medicine seems lamentably weak. It would seem that the medical profession, if not for its own self-respect, at least for the protection of the public, should have some means of making clear to that public the difference between ethical practitioners of medicine and those who, posing as such, conduct a business whose success lies in humbugging and deluding the innocent.

ITS PROMOTERS AND THEIR "COLLEGE."

The president of the Murine Eye Remedy Company is James B. McFatrich, M.S., M.D., an eclectic physician of Chicago; the treasurer is George W. McFatrich, M.D., also an eclectic practicing in Chicago. O. F. Hall is the secretary. These three men are also said to be the directors of the company. The McFatrichs are the originators and practical owners of the business.

In addition to their "patent-medicine" interests, the McFatrichs are, respectively, the president and secretary of a school

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Murine was acidified and then extracted with chloroform; it was then made alkaline and again extracted with chloroform. The second extraction, evaporated to dryness, left a yellow residue weighing 0.0046 gm. or 0.0183 gm. per 100 c.c. This residue was soluble in acidulated water, and the addition of an aqueous solution of potassium iodid to the solution a yellow flocculent precipitate was formed, a reaction very characteristic of berberin. The filtrate from this precipitate yielded a dark-brown precipitate with iodin, demonstrating the presence of an alkaloid. The precipitate was decomposed with sodium sulphite and again extracted with chloroform, and the chloroform extract evaporated to dryness. The residue thus left was slightly yellow and responded to alkaloidal tests. The reactions thus obtained indicate that Murine contains berberin or a preparation of golden seal.

of spectacle fitters rejoicing in the sonorous title of the "Northern Illinois College of Ophthalmology and Otology." This seat of learning confers no fewer than seven degrees, to-wit:

FELLOW OF OPTICS	BACHELOR OF OPHTHALMOLOGY
BACHELOR OF OPTICS	MASTER OF OPHTHALMOLOGY
DOCTOR OF OPTICS	DOCTOR OF OPHTHALMOLOGY
	HONORARY DEGREE

The diplomas issued are, it is needless to say, most ornate, and are well calculated to inspire the mere "layman" with a healthy respect for the erudition of their possessors. As the "college" catalogue states, most of the diplomas "frame handsomely 28 x 28 inches."

Why the term "otology" is added to the title of the "college" has not yet been determined. As far as can be learned, the eye is the only organ which is even supposed to be studied. Possibly "otology" is thrown in for good measure. Incidentally, we would suggest that as fitting of glasses is taught instead of ophthalmology, the latter term would seem to constitute misbranding—but, then, the Food and Drugs Act doesn't apply here.

The catalogue is profusely illustrated with reproductions of the diplomas, and full-page half-tones of the "professors" and of the class-rooms. The pictures show large advertisements of "Murine" on the walls of the class-rooms, the general office being particularly well supplied with these works of art.

The "college" itself is hardly as imposing as its name might indicate. The illustrated cover of the catalogue and the catalogue itself convey the impression that the "Northern Illinois College—", etc., is located in the Masonic Temple, one of the largest office buildings in Chicago. As a matter of fact, it is on the third floor of an old building in the wholesale grocery district, and the Murine Eye Remedy Company occupies the same floor. The "college," in fact, appears to be a sort of annex to the "patent-medicine" concern. The only apparent connection between the college and the Masonic Temple is that its "President and Professor of the Principles of Ophthalmology and Otology"—James B. McFatrich, M.S., M.D—and its "Secretary and Professor of Clinical and Didactic Ophthalmology and Otology"—George W. McFatrich, M.D.—have their offices in the latter building.

These gentlemen evidently believe that not only "to howl is an M.D.'s privilege," but also that to commercialize the profession of medicine is equally his privilege. Whether selling a "course" in optics with a "diploma" thrown in for $25.00,

or dispensing Murine Eye Remedy at $1.00 an ounce, or treating patients professionally—all is grist to their mill.

And the public? Well, P. T. Barnum is authority for the statement that it likes to be humbugged. The danger in the indiscriminate use of this eye water is probably a negative one in most cases. It may, however, by lulling the patient into a false sense of security, and by causing him to temporize, be a very real one. This is realized when we see its use recommended in ophthalmia neonatorum and other conditions equally serious. But "the law allows it," and, as our old friend Colonel Sellers remarked, "There's millions in it."

NARKINE

The Intangible Product of the Tilden Laboratory

(From The Journal A. M. A., Oct. 24, 1908)

A little book, published by the *Druggists Circular*, and called "Modern Materia Medica," gives in dictionary form the information regarding new remedies which that journal publishes in its monthly issues. Such information is not always acceptable to the manufacturers of various preparations of doubtful value. A case in point is brought to notice with reference to a remedy called Narkine, put out by the Tilden Company of St. Louis. In this little book the following appears:

> "Narkine is described as 'an opium preparation from which all deleterious qualities have been eliminated'; an unsupportable claim, as all opiates and other hypnotics are essentially deleterious."

The Tilden Company wrote to the *Druggists Circular*, stating that they guaranteed Narkine "to be absolutely free from coal-tar or opium derivatives," yet the "literature" of the company describes it as

> "a specially prepared product of opium devoid of the nauseating and disagreeable properties of this drug, yet possessing the anodyne and soporific principles of same in the highest degree."

To remove from opium all its derivatives and yet retain the anodyne and soporific principles attached to nothing in particular, indicates a degree of pharmaceutical skill seldom attained. One is irresistibly reminded of the Cheshire cat in "Alice in Wonderland," whose smile remained long after the cat had vanished.

The absurdity of the thing, however, has apparently not occurred to many physicians, for these disembodied spirits of the pharmacologic world are evidently being prescribed.

The *Druggists Circular* is to be congratulated on exposing this latest pharmaceutical freak. It does so in a rather striking manner by means of photographic reproductions of the claims of the Tilden Company.

NOSTRUMS CONTAINING HABIT-FORMING DRUGS

(From The Journal A. M. A., May 29, 1909)

We recently referred to the large amount of information of interest to physicians which appears in the "Report of the President's Homes Commission," and we quoted from the report a list of "patent medicines" which contained practically no medicinal agents except alcohol. In another part of the same report, Dr. Lyman F. Kebler, chief of division of drugs of U. S. Department of Agriculture, says: "There are on the market many medicinal preparations which contain as ingredients habit-forming drugs. Such drugs are: Alcohol; opium and its derivatives, notably morphin, codein and heroin; cocain; chloral; cannabis indica; acetanilid; etc." Some of these preparations containing habit-forming drugs other than alcohol are given in the "President's Homes Commission" report and are here arranged alphabetically under the habit-forming drug which they contain:

CANNABIS INDICA

One Day Cough Cure (also morphin)
Piso's Cure

CHLORAL

Captol
D. D. D. Remedy

COCAIN

Agnew's Powder
Anglo-American Catarrh Powder
Coco-Bola
Tucker's Asthma Cure

OPIUM AND ITS DERIVATIVES

Boschee's German Syrup (morphin)
Brou's Injection (morphin)
Carney Common Sense Cure (morphin)
Children's Comfort (morphin)
Colwell's Egyptian Oil (opium)
Crossman's Specific Mixture (opium)
Dr. Drake's German Croup Remedy (opium)
Dr. Fahrney's Teething Syrup (morphin)
Dr. James' Soothing Syrup (heroin)
Dr. Seth Arnold's Cough Killer (morphin)
Dr. Moffett's Teethina; Teething Powders (opium)
Godfrey's Cordial (opium)
Gowan's Pneumonia Cure (opium)
Habitina (morphin)

Harrison's Opium Elixir (opium)
Hooper's Anodyne, The Infant's Friend (morphin)
Jayne's Expectorant (opium)
Maguire's Compound Extract Benne (morphin)
Mexican Oil (opium)
Mrs. Winslow's Soothing Syrup (morphin)
One Day Cough Cure (morphin, also cannabis indica)
Petit's Eye Salve (morphin)
Pierce's Smart Weed (opium)
Rexal Cholera Cure (opium)
Shiloh's Cure (heroin)
Taylor's Sweet Gum and Mullein Compound (morphin)
Tousley's Sneezeless Snuff (morphin)
Tubercine (opium)
Victor Lung Syrup (opium)
Watkin's Anodyne (heroin)
Wright's Instant Relief (opium)

NOSTRUMS FOR DIABETES

(From The Journal A. M. A., Feb. 13, 1909)

According to the *British Medical Journal*, Dec. 26, 1908, not many preparations are advertised for the cure of diabetes. Two nostrums of this type were analyzed and, as is usual in such cases, were found to be mixtures of well-known ingredients, none of which can be supposed to produce the wonderful results claimed in the advertisements.

VIN URANÉ PESQUI'S (PESQUI'S URANIUM WINE)

This nostrum proved to be a very ordinary Bordeaux wine each 30 c.c. (1 fluidounce) of which contained uranium equivalent to 0.0055 gm. (1/12 grain) of the nitrate. Although the manufacturers claim that pepsin is added to the wine, no digestive power whatever on egg albumin could be detected.

DILL'S DIABETIC MIXTURE

Analysis of this preparation yielded results indicating the following formula: sodium bicarbonate, 7.4; extract of hydrastis, 1.5; resin, resinoid and other extractives, 2.2; alcohol, 35; water to 100. According to the advertisements this mixture is "the only known remedy for this deadly disease." "The remedy, it is needless to say, will have to be persevered with. These are deadly diseases and must have time." The price is $2 and the estimated cost, 22 cents.

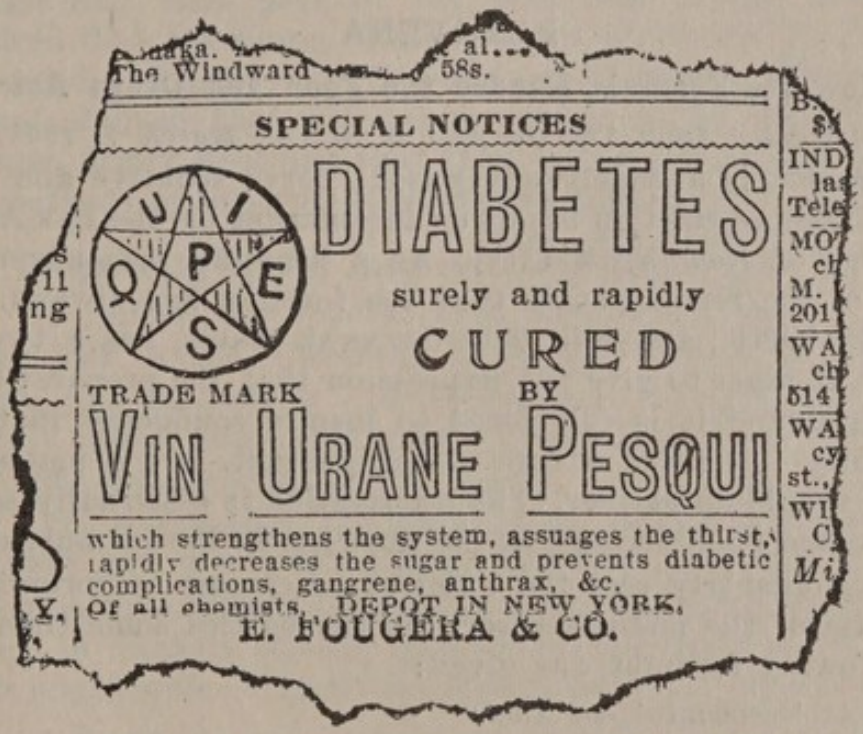
"Patent" versus "Ethical Proprietary" Medicines

(From the Journal A. M. A., Sept. 25, 1909)

To the Editor:—The enclosed clipping appears on page 11 of the *New York Herald* for Sept. 9, 1909. The ludicrousness of the paper appeals to my sense of humor. It assails so-called

vivisection with a venom equaled only by its ignorance of the facts of animal experimentation, yet it submits its readers to such obviously dangerous and untrue statements as appear in the enclosed advertisement. Such inconsistency makes one distrust the self-vaunting publication in which it appears.

HAROLD S. ARNOLD, M.D., New Haven, Conn.



COMMENT: The advertisement to which Dr. Arnold refers is here reproduced. It will be noticed that this particular nostrum is another of the "cures" handled by Messrs. E. Fougera & Co. Fougera & Co. was one of the firms that put themselves on record as being opposed to the work of the Council on Pharmacy and Chemistry when that body was first created. One of the preparations which this firm advertises to the public is "Santal Midy." "Cures in 48 hours," the advertisements used to read, but since THE JOURNAL called attention to the fact that promising to cure gonorrhea in two days was rather a large order, this has been modified—in American advertisements—to "relieved in 24 hours." We find in Australian newspapers, however, that "Santal Midy" still "cures in 48 hours."

OXIEN TABLETS

(From The Journal A. M. A., Oct. 12, 1907)

In a report of the work done by the German government at the institute for the examination of foods and drugs, recently published in the *Berichte der Deutschen Pharma-*

zeutischen Gesellschaft, 1907, page 276, it is stated that Oxien tablets were found to be a mixture of milk sugar, cane sugar, corn starch, oil of sassafras, oil of wintergreen and a bitter principle. The tablets were colored red with eosin.

PAS-AVENA

How Its Formula Evades the Food and Drugs Act

(Abstracted from The Journal A. M. A., March 7, 1908)

Pas-Avena is a widely advertised "nerve sedative and hypnotic." The preparation is put on the market by the Pas-Avena Company of New York City. As a headliner the advertisements of the remedy state that the formula has always been on every bottle, and this, THE JOURNAL states, has a twofold object: It aims to give the impression that the preparation is non-secret, and it is calculated to inspire confidence in the—apparently—scientific nature of the product. As a matter of fact, it should do neither. The preparation is essentially secret in its composition because of the presence in the formula of an unknown quantity and the liability to change of formula at the whim of the manufacturer. On the bottles some time ago the following formula was given:

Each tablesspoonful contains:

Passiflora	20 minims.
Avena sativa	10 minims.
Somnalgesine ($C_{30}H_{28}N_5O_6$)	2 grains.

The first two ingredients are plants in whose therapeutic value but little confidence is placed. Somnalgesine, the third constituent, is a secret preparation, the chemical formula of which the manufacturers were kind enough to add. To a chemist, however, the formula is absurd and impossible, and is included either because of the manufacturer's ignorance or because of an intent to deceive the profession. Since the Food and Drugs Act became law, the label of Pas-Avena has been changed to read:

Alcohol	8.37 per cent. by volume.
Anilipyrine	16.00 grains per fluid ounce.

Guaranteed under the Food and Drugs Act of June 30, 1906.

Substitution of anilpyrine for somnalgesine gives little more information. Chemists may recognize this as a name applied to a mixture said to be formed by the fusion of two molecules of antipyrin and one molecule of acetanilid. To physicians, however, the name carries with it the same mystery as did somnalgesine. Attention is directed to the fact that by

publishing the guarantee under the pure food laws the company presumes to disperse all doubt and criticism, assuming that the majority of physicians will be satisfied with the guarantee as it stands. Inasmuch as the preparation contains acetanilid and antipyrin, however, the manufacturers are disregarding that part of the Food and Drugs Act which requires that the name of the parent substance—in this case acetanilid and antipyrin—be put in parenthesis. The laws are so well defined that physicians appear to be content to do nothing, firmly believing that they are safe from the defrauding methods of unscrupulous manufacturers.

Proprietary House Insolvent—and Physicians Lose?

(From The Journal A. M. A., Oct. 17, 1908)

The Pas Avena Chemical Company, whose product, Pas Avena, was exposed in THE JOURNAL a few months ago, has recently failed, according to our pharmaceutical exchanges. In recording the fact, one journal says:

> "It is reported that considerable stock of this company had been sold to physicians."

At this time, when physicians are importuned daily to invest money in various wildcat pharmaceutical concerns, this sentence might well be used "to point a moral or adorn a tale."

PEPTO-MANGAN (GUDE)

Scientific Work Misrepresented and Commercialized

(Abstracted from The Journal A. M. A., Sept. 23, 1905, and April 6, 1907)

In this article the misuse by the exploiters of pepto-mangan of the government report on anemia in Porto Rico is exposed. The conclusion of the government commission, which investigated the anemia prevalent in Porto Rico, was that iron was of subsidiary importance in treatment, and that the carbonate, as represented by Blaud's pills, seemed to give the best results. Immediately Messrs. M. J. Breitenbach & Co. used this report to exploit their preparation (pepto-mangan)—first in advertisements and reading notices and later in a garbled extract of the report printed in pamphlet form and scattered broadcast among physicians. This pamphlet conveyed the idea that pepto-mangan had been endorsed by the government as superior to any other iron preparation, and that it had proved most efficacious in the treatment of anemia; that "this report alone would suffice to establish pepto-mangan at once as the

foremost hematinic known." The commission later published a denial, stating that pepto-mangan was used by them only for a little while, because it was found to be of even less value than other iron preparations. In another pamphlet sent out by the same company which controls pepto-mangan in this country are statements regarding the treatment of infantile anemia at the Infant's Hospital on Randall's Island, New York City. THE JOURNAL sent its own representative to examine the books of the hospital, who found conditions quite different from those represented in the pamphlet. Just as the Porto Rico commission furnished no evidence of such exaggerated value of pepto-mangan, but expressed their opinion that anthelmintic and not reconstructive treatment is needed in uncinariasis, and that iron in other forms was of more advantage as far as it went, so in the case of the Infant's Hospital the records and daily charts of the cases show a remarkable difference between the results of treatment and the claims of the pepto-mangan pamphlet. Two things are illustrated by these pamphlets and their refutation. The first is that so-called scientific reports are only of value in proportion to the veracity and reliability of the writer, and the second and equally deplorable fact is that firms composed of men who are personally honorable are willing to obtain business by such unjustifiable methods. If it is said in their defense that they depend on the truthfulness of their writers, it does not relieve them from responsibility. There is too much apparent tendency on the part of proprietary houses to accept any report, statement or testimonial that is favorable to their business without question and to suppress apparently unfavorable reports or facts. This tendency has helped to produce the present deplorable condition in the proprietary medicine business.

PERSPIRO

How a Nostrum was Born

(From The Journal A. M. A., Dec. 26, 1908)

DETROIT, Oct. 18, 1908.

To the Editor:—A medical friend wrote a prescription for one of his patients for excessive sweating of the feet, the formula being that of the well-known Thiersche's powder:

℞.	gm.		
Salicylic acid	1	or	gr. xv
Boric acid	10		ʒiiss

The patient discovered he had a "good thing" and has placed it on the market under the euphonius name of "Perspiro." He sells with the powder twelve 1-grain tablets of permanganate of potash with instructions to soak the feet each night in hot water in which is dissolved one of the permanganate tablets. The salicylic acid in the powder attacks the socks so that they are soon full of holes.

E. T. MILLIGAN, M.D.

PHENALGIN—A TYPICAL EXAMPLE

(From The Journal A. M. A., Jan. 13, 1906, 134 and Jan. 27, 1906, 290)

Last June[1] we devoted considerable space to the extravagant therapeutic claims made for "Phenalgin" by its vendors. At this time we propose to refer to the misinformation—to use a conservative term—that the Etna Chemical Company has promulgated regarding the composition of their preparation.

Last June the Council on Pharmacy and Chemistry officially published to the medical profession of the United States the information that repeated examinations showed that "Phenalgin" is a simple mixture of acetanilid and sodium bicarb. or ammonium carb. So far as we know, no direct denial of the truth of this has been made. There has appeared what we presume is meant as an answer; it is couched in this sentence,

> Phenalgin is just what we have always said it to be.

From this expression—which has been repeated in bold, black letters in practically all the advertisements since last June—we presume that we are to understand that in the past they have stated what it is.

It would have been just as easy and more satisfactory if the Phenalgin people, instead of saying: "Phenalgin is just what we have always said it to be," had said what it is, since the average physician has neither the time nor the inclination to look up their literature.

For the benefit of those who desire to know what the vendors of Phenalgin "have said it to be," we have gone over their advertising literature of the past, with the following results, which are in the form of quotations from their advertisements:

> An American Coal-Tar Product—Phenalgin—the only synthetic stimulant, non-toxic, antipyretic, analgesic and hypnotic.
>
> Phenalgin is the ONLY ammoniated Synthetic Coal-Tar Product made from Chemically Pure Materials. [What have the Ammonol people to say to this?—Ed.]

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1. See THE JOURNAL A. M. A., June 24, 1905, p. 1997.

A synthetic Coal-Tar Product of the Amido-Benzine series, containing Nascent Ammonia.

These two chemicals ["stimulant ammonia of coal-tar origin" and "chemically pure phenylacetamide"] combine under certain conditions so as to obtain a produce which he [Dr. Cyrus Edson] named Phenalgin or Ammoniated Phenylacetamide.

Phenalgin is a compound of peculiar character which can not be extemporaneously made into tablets from the powdered drug, without seriously changing and impairing its medicinal qualities.

We believe these quotations are sufficient to show what the Etna Chemical Company has "always said it to be." In going over the literature for several years past we find the above stated in the same, or similar, words in nearly all of it. From the above four statements may be deduced: 1. They have stated that Phenalgin is a synthetic[1] preparation; 2, they have conveyed the impression that Phenalgin is a chemical compound; 3, they have announced repeatedly that it is the "only" preparation of the kind, and 4, they have claimed that Phenalgin is non-toxic.

We believe that these four statements represent in plain English what the above quotations mean. They are all absosolutely false. Phenalgin is not synthetic; it is not a chemcal compound; it is not the only ammoniated phenylacetamide, or the only acetanilid mixture containing carbonate of ammonia—and it is most positively toxic.

In one place it is stated that Dr. Cyrus Edson

Employed his great facilities for chemical research and opportunities for chemical experiment for the purpose of producing a formula for a combination of stimulant ammonia of coal-tar origin (sic) and chemically pure phenylacetamide, also a coal-tar product . . . which he named phenalgin, or ammoniated phenylacetamide.

In another place we read that Phenalgin is made

Under the immediate personal supervision of the original inventor of ammoniated coal-tar products.

By comparing this last quotation—which is from a current—1905—advertisement—with the preceding one it will be noticed that we are asked to believe that Phenalgin is made "under the immediate supervision of" Dr. Cyrus Edson—and yet Dr. Cyrus Edson died Dec. 2, 1903. This is equal to Lydia Pinkham's prescribing for the suffering women of America when the dear old soul had been dead for over twenty years.

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1. Dunglison's Dictionary: "Synthetic—In chemistry the formation of a more complex body by the union of simpler bodies." Dorland's Dictionary: "Synthesis—The artificial building up of a chemic compound by the union of its elements." "Union" is not mixing.

We have before us a full-page advertisement taken from a recent number of a weekly medical journal, which possibly is meant as an answer to the announcement of the Council on Pharmacy and Chemistry that Phenalgin is a simple acetanilid mixture. The advertisement is divided into two parts; the first part is as follows:

FACTS ABOUT ACETANILIDUM (ANCIENT HISTORY)

It has long been recognized that Acetanilidum and most other coal-tar products are apt to exert a depressing influence upon the heart, but there has never been any doubt about its great value as a pain reliever and temperature reducer. Its therapeutic value as however, been practically nullified by the danger of cyanosis and other evils caused by its well-known depressant action and the difficulty of obtaining it in a pure state. It being known that certain deleterious substances are often to be found in Commercial Acetanilidum and that much of the injurious effect attributed to this drug is entirely traceable to these impurities.[3]

The above are also falsehoods. The therapeutic value of acetanilid is not "practically nullified . . . by the difficulty of obtaining it in a pure state." Neither is it true that "much of the injurious effect attributed to this drug is entirely traceable to these impurities." While deleterious substances may be found in *commercial* acetanilid, they are not found in the substance offered as medicinally pure acetanilid by reputable firms. Pure medicinal acetanilid is a chēap article, costing less than 30 cents a pound, for it is a substance that is easily and cheaply purified. It is a fact that the injurious effects are in the acetanilid itself and not in the impurities it may occasionally contain.

The second half of the advertisement in part is as follows:

FACTS ABOUT PHENALGIN (MODERN SCIENCE)

More than a decade ago the late Dr. Cyrus Edson, then Health Commissioner for New York City and New York State, recognizing the value of chemically pure Acetanilidum as a therapeutic agent, if it could be deprived of its depressant quality, employed his great facilities for chemical research and opportunities for chemical experiment, for the purpose of producing a formula for a combination of Stimulant Ammonia of coal-tar origin and chemically pure Phenylacetamide, also a coal-tar product. These two chemicals combine under certain conditions so as to obtain a produce which he named Phenalgin or Ammoniated Phenylacetamide.

There is more of the same character. In the first place, we call attention to the fact that "Phenylacetamide" is substituted for "Acetanilidum" when it is to go into Phenalgin. To mystify is one of the "tricks of the trade." Few physicians keep up with chemical terms and, therefore, are not supposed to

3. This sentence is not complete, but, of course, this is immaterial. Little things like an incomplete sentence do not count.

know that Phenylacetamide is one of the chemical names for Acetanilid.

The reference here to Dr. Cyrus Edson brings up another fact, and that is that the Etna Chemical Company tries to convey the idea that Dr. Edson was the originator of Phenalgin. We have always understood that Dr. Cyrus Edson had something to do with pushing Ammonol and, if we remember rightly, got into some trouble thereby. We do not know the exact facts, but the following letter shows that he had a leaning toward another "ammoniated phenylacetamid." The letter is dated "New York, Oct. 6, 1894," and is addressed to the "Ammonol Chemical Company."

"During the past six or eight months I have used Ammonol extensively in my private practice. I have found it excellent in the treatment of neuralgias and for rheumatism. I have also verified your statement in two cases that were suffering from alcoholism. My experience justifies me in saying that it is the safest and best of the analgesic coal-tar derivatives. "Very truly yours.

CYRUS EDSON, M.D."

It may be of interest to know that the principal member of the firm of the Etna Chemical Company was at one time a member of the Ammonol Company, and it is usually understood, we believe, that Phenalgin is practically the same as Ammonol—in fact, the analyses published regarding the two preparations show this to be a fact.

We must make one more quotation:

It makes little difference to a physician whether Phenalgin is a mixture or a compound or a synthetic, with a name that would destroy the orthographic balance of the universe, provided it is just what he has always found it to be.

Very complimentary to the intelligence and common sense of physicians, is it not?

Suppose some fellow should get up a scheme to exploit a mixture of quinin and some cheap, harmless substance, say, starch—equal parts of each. Suppose he gives it a fanciful name, puts it on the market at a high price, say $1.25 an ounce, and announces it as a new synthetic with wonderful therapeutic qualities. Suppose that the schemer then adopts the nostrum vendor's methods of fooling physicians into using his product by getting some to give testimonials, others to furnish write-ups, and then subsidizes medical journals through liberal advertising to print both the testimonials and the write-ups. The preparation would, of course, prove to be a good thing if it were used in liberal quantities where quinin would ordinarily be used, and some patients using it would get well even if quinin were not indicated. Then with the psycho-

logic effect of the testimonials, the write-ups, and good, strong claims rightly pushed, unthinking physicians would do the rest. And then, after a while, when the schemer had gotten to the point where, each year, he was making a fortune out of his preparation, suppose some "self-appointed chemists" should examine into the preparation and discover that it was nothing but quinin and starch, and so announce to the doctors of the country; what would the doctors say? That it makes little difference "provided it is just what he has always found it to be!"

This analogy is not far-fetched, for it is practically what has been done with Phenalgin. One difference is that since quinin costs as much per ounce as acetanilid does per pound, the profits on the acetanilid mixture would be sixteen times greater than that of our imaginary preparation. Another difference is that acetanilid is really a dangerous drug, unless used with care, both in its immediate and in its remote effects; quinin is far less so.

"Little difference" indeed, whether we are being buncoed or not! Evidently!

In conclusion, we charge the Etna Chemical Company with intentionally misleading and deceiving the members of the medical profession, in that the said company has in its literature and its advertisements conveyed the impression (whether directly stated or not): First, that its preparation, Phenalgin, is a synthetic compound; second, that Phenalgin requires special skill in its preparation; third, that Phenalgin has therapeutic values which it does not possess; and, fourth, that Phenalgin is non-toxic.

We also charge that on account of these and other misrepresentations, this company has inveigled physicians into prescribing and using a simple mechanical mixture of common well-known cheap drugs—for which an extravagantly high price is charged—under the supposition that this combination of cheap drugs is a chemical compound of special and peculiar merit as a therapeutic agent, and, therefore, worthy of their confidence.

Our object in again giving space to this preparation—and practically all we have said applies to the other acetanilid mixtures that are exploited under fictitious names or as chemical compounds (such as ammonol, antikamnia and salacetin or sal-codeia—Bell)—is to impress on physicians, by a typical example, the shamefulness of the deceptions practiced on them by nostrum manufacturers to the great injury of the public and of the medical profession.

A PHARMACEUTICAL SECRET WHICH SHOULD NOT BE LOST

Dr. Gregory Costigan, New York City, writes under date of Janary 21, as follows:

"I have been carefully reading and enthusiastically approving your articles on the nostrum evil, and have been impressed more than usual on the existence of quack advertising in medical journals as set forth in last paragraph and quotation on page 206, bottom of first column, of your issue of Jan. 20, 1906.

"In *Merck's Archives*, page 11, we are told in an advertisement on 'Phenalgin' that it 'is a compound of peculiar character which can not be extemporaneously made from powdered drug' and 'our process of manufacturing tablets is coincident with the manufacture of Phenalgin and is the result of a long series of careful experiments by which we are able to produce tablets of Phenalgin in a friable condition without losing any of its *volatile* constituents or undergoing chemical changes from heat or moisture'! Inasmuch as Phenalgin tablets are not covered with a waterproof coating I think this is a remarkable statement to make, and the manufacturing of a drug coincident with the manufacture of a tablet must be a very remarkable performance, especially because it 'retains the full therapeutic value of the drug unimpaired' while the advertisement asserts that no other manufacturer is cognizant of this wonderful method. This ad. is for the perusal of physicians only. The Etna Chemical Company owes it to the medical and pharmaceutical world not to let this secret die with the company's dissolution. It owes it as a duty to the coming generations of science immediately to jot down the full data of this wonderful performance, to put it away in an age-proof safe and not allow it to be lost to humanity as were a great many other arts that were well known to the ancients. Let them keep it secret now and profit by it, but do not let it be lost to posterity."

PHENO-BROMATE

(Abstracted from The Journal A. M. A., July 14, 1906, and April 18, 1908)

An analysis of this preparation made at the instance of the New Haven Medical Association, by its chemist, and sent by Dr. Charles J. Foote of New Haven to THE JOURNAL is in part as follows:

The package was marked "Sample package, Pheno-Bromate. The Pheno-Bromate Company, New York, U. S. A." The box contained a number of tablets and a package of

powders in papers marked, "Physicians' 10 grain powders, pheno-bromate." The substance in the papers was a white crystalline powder not homogeneous. It was completely soluble in hot water. The hot water solution on cooling yielded a mass of thin crystalline plates. This material was found to melt at 113.5 C. It gave no color with ferric chlorid and a positive isonitril test. The portion insoluble in ether amounted to 49.8 per cent. of the powder and consisted of potassium bromid. Quantitative determinations of potassium and bromin in the original solution confirmed this result. In my opinion, the powder consists of approximately equal quantities of acetanilid and potassium bromid. Qualitative tests of the tablets indicated that they had the same composition except for a small quantity of some incipient not entirely soluble in water. Yours truly, HERBERT E. SMITH,
Chemist New Haven Medical Association.

Before the Food and Drugs Act pheno-bromate was advertised as "a synthetic combination of the phenetidin and bromid groups, and not, as is the case with many analgesics and antipyretics, a mixture of various coal-tar derivatives" and as "the safest and best of all sedatives." The dose recommended in most cases is 20 grains — equal to 10 grains each of acetanilid and potassium bromid. Since the Food and Drugs Act has gone into effect its label states that it is "a perfect combination of a phenol and bromin derivative containing 282 grains of acetphenetidin, U. S. P., per ounce." What a boon it was to mendacious manufacturers that the patent rights on phenacetin expired before the Food and Drugs Act went into effect.

MRS. POTTER'S WALNUT JUICE HAIR STAIN

(From The Journal A. M. A. of various dates, with additions)

This preparation is manufactured by the Mrs. Potter Hygienic Supply Company, Cincinnati, Ohio. It was analyzed by the chemists of the North Dakota Agriculture Experiment Station, who found it to consist of two liquids called No. 1 and No. 2, respectively, which according to directions were to be mixed before the dye was applied to the hair. Analyses showed bottle No. 1 to contain 1.86 per cent. absolute hydrogen peroxid; bottle No. 2 contained "a strong alcoholic liquid of a light brown color containing 54.45 per cent. absolute alcohol by volume." No lead, bismuth or mercury compounds were detected. The report goes on to state that "the active principle of the dye appears to be a phenolic compound, and conforms to

the tests, etc., for paraphenylene diamin, an anilin derivative which by oxidation becomes black or brown." The poisonous qualities of paraphenylene diamin have long been known. Eighteen cases of poisoning have been reported by Cathelineau. Brocq described a severe form of dermatitis due to this chemical; Balso reports a case of poisoning due to wearing hose which had been dyed with the chlorate of paraphenylene diamin, and Mewborn reported a case of dermatitis from the use of a hair dye having this chemical for its base.

A number of cases of poisoning due to the use of Mrs. Potter's Walnut Juice Hair Stain have been reported to THE JOURNAL. They are as follows:

February 13, 1909, Dr. A. Schalek, Omaha, Neb., 1 case.
March 6, 1909, Dr. W. W. Barker, Dorchester, Mass., 1 case.
March 15, 1909, Dr. W. W. Harrington, Spokane, Wash., 1 case.
March, 17, 1909, Dr. J. D. Gold, Bridgeport, Conn., 1 case.
April 7, 1909, Dr. E. N. Ewer, Oakland, Cal., 1 case.
May 15, 1909, Dr. J. H. Mackay, Norfolk, Neb., 1 case.
Aug. 13, 1909, Dr. E. A. Hannum, Cleveland, Ohio, 1 case.
Aug. 18, 1909, Dr. J. G. Burke, Pittsburg, Pa., 1 case.
Aug. 18, 1909, Dr. W. W. Wood, Jamestown, N. D., 1 case.
Sept. 6, 1909, Dr. P. S. Roy, Washington, D. C, 1 case
Sept. 8, 1909, Dr. D. V. Traver, Steelton, Pa., 1 case.
Sept. 13, 1909, Dr. M. L. Emerson, Oakland, Cal., 1 case.
Sept. 14, 1909, Dr. A. S. Storey, Cleveland, Ohio, 4 cases.
Sept. 21, 1909, Dr. B. Stanton, Cincinnati, Ohio, 5 cases.
Oct. 22, 1909, Dr. A. P. Good, Philadelphia, Pa., 2 cases.

As this dye does not depend for its action on walnut juice, the name would seem to constitute misbranding within the meaning of the national Food and Drugs Act. This may account for the change that has been made in the name of the preparation. We now find it labeled not "Walnut Juice" hair stain, but "Walnut Tint." In the newspaper advertisements, however, we still (October, 1909), find it advertised as "Walnut Juice" Hair Stain, and the deception is carried still further in some cases by an accompanying picture of a woman with a basket on her arm with the legend under it "Gathering Walnuts."

PURGEN

Phenolphthalein Now Being Exploited in This Country

(From The Journal A. M. A., Sept. 14, 1907, 954)

The physicians of the United States are receiving a neat package containing samples of a German proprietary—Purgen. The container is an ingenious one and, besides the tablets, includes a circular in English, although mailed in Europe, describing the remarkable virtues of this "new synthetic aperi-

ent." It has been considered strange that this proprietary, which has been advertised so thoroughly in Europe, Australia, etc., should not have made its appearance in this country. Now it is here, and it is well that physicians should know what Purgen is and not be mystified and misled by the literature that they may receive regarding the preparation.

The following appeared in THE JOURNAL, Jan. 5, 1907, page 64, and is reprinted now as being especially timely:

> The report of a case of poisoning by purgen (phenolphthalein) is the occasion for some pertinent observations by Dr. G. Brasch as to the proper introduction of such remedies to the medical profession (*Zeitschrift für Medizinalbeamte,* Abst. in *Apotheker-Zeitung,* No. 59, 1906). He agrees with Best that all such remedies should first receive a thorough trial in an institution subject to state supervision, before they are advertised to the medical profession, so that their harmlessness in appropriate doses may be ascertained by a method free from liability to error. The manner in which the manufacturers introduced purgen to the profession and the laity is to be condemned, and probably led to the symptoms of poisoning exhibited in the case of Dr. Best and tends to discredit a remedy which is harmless and efficient if used in proper doses. The manufacturer of such a preparation is inclined, for obvious reasons, to put the dose of his preparation much too high. The most important point, however, is the objectionable character of the names given to such articles. The organic compound phenolphthalein has been known for a long time and has been widely used as an indicator. Accidentally it was discovered that phenolphthalein possessed laxative properties and thereon it was proposed (1901) as a medicine under the name "purgen." It is sold in tablets containing 0.05, 0.1 and 0.5 grain phenolphthalein mixed with sugar and flavored with vanilla. The author says: "But it is very desirable —and I regard this as the most important part of my communication—that phenolphthalein should be received into the materia medica under its own name. The addition of vanilla and sugar is to the highest degree superfluous and the arbitrary dosage in three strengths with the ridiculous designations, 'baby,' 'for adults,' 'for patients confined to bed,' are merely calculated to prejudice the physician who is accustomed to individualize in his prescriptions, against a remedy which is in itself an excellent one."

As explanatory to the last sentence, it should be stated that in Europe purgen is put up in three dosage forms, "infant purgen for children," containing ¾ of a grain; "adult purgen

for chronic constipation," containing 1½ grains, and "strong purgen for invalids," containing 7½ grains. The form in which it is being sampled in this country is in the medium dose, 1½ grains.

Physicians should remember that the promoters of purgen are simply introducing a chemical well known to laboratory workers for the last twenty years, which has been recognized as an aperient for at least seven years, and which can be purchased for 40 cents an ounce, whereas an ounce of phenolphthalein in the form of purgen will cost $3.20 wholesale. The enthusiastic praise of the remedy, found in the advertising circulars, should be subjected to critical judgment on account of its source and motives.

It is undoubtedly true, however, as we have previously stated, that phenolphthalein is worthy of a trial. In the *British Medical Journal*, Oct. 18, 1902, F. W. Tunnicliffe speaks of the virtues of phenolphthalein, and the conclusions reached by him were that it is a useful aperient, without irritating action on the kidneys, and is especially valuable in jaundice, its depressing action on the circulation being less than sulphate of magnesia.

Phenolphthalein is not in the Pharmacopeia, but has been included in "New and Nonofficial Remedies" by the Council on Pharmacy and Chemistry. From this we quote:

Actions and Uses.—Phenolphthalein acts as a purgative, but appears to possess no further physiologic action. A case of poisoning from taking 1 gm. (15 grains) is reported.

Dosage.—For adults the average dose is 0.1 to 0.2 gm. (1.5 to 3 grains) given as powder, in cachets, capsules or pills. It may be given with safety in doses of 0.5 gm. (8 grains), and these doses seem to be necessary to secure its effects in bedridden patients or in obstinate cases.

We have gone into this matter again so that our readers may have some knowledge of this remedy, and we hope that if they conclude to try it they will use the chemical itself and under its own name.

RESINOL

(From The Journal A. M. A., Nov. 6, 1909)

To the Editor:—Please publish the ingredients and proportions of each, used in making Resinol.

E. E. C., Manila, P. I.

ANSWER: Resinol has not been examined in the Association's laboratory, and we are unable to obtain from other sources any detailed information regarding its composition.

The Philadelphia branch of the American Pharmaceutical Association issued a pamphlet some two years ago in which the following appeared relative to this and similar products:

"Within recent years there have been introduced a number of compound ointments that in their supposed range of therapeutic usefulness are scarcely equalled and certainly not excelled by the magic unguents of the quacks and charlatans of continental Europe, who, several centuries ago, essayed to cure all manner of disease by inunction or the simple application of compound ointments of secret composition.

"As typical of this modern class of panaceas we may mention Resinol. This preparation is being widely advertised at the present time in the daily papers as a valuable adjunct to Resinol Soap in the treatment of all kinds and varieties of diseases of the skin. The makers of this particular mixture, in the form of an ointment, modestly assert that it will cure all skin diseases, and is also 'A Specific for Pruritus Ani, Itching Piles, and Pruritus Vulvæ.'

"An equally efficient ointment, so far as the ointment itself and not the misleading claims made in connection with it may be concerned, is to be found in the Unguentum Resorcini Compositum, N. F. This ointment represents:

Resorcinol	6 parts
Zinc Oxid	6 parts
Bismuth Subnitrate	6 parts
Oil of Cade	12 parts
Paraffin	10 parts
Petrolatum	25 parts
Hydrous wool fat	35 parts"

ROCHE'S EMBROCATION

(From The Journal A. M. A., Aug. 17, 1907)

To the Editor:—Can you give me the approximate composition of a preparation called "Roche's Herbal Embrocation," widely exploited for whooping-cough and many other conditions, and put on the market by E. Fougera & Co., of New York?

DAVID H. LUDLOW.

ANSWER.—Roche's Embrocation is a nostrum and its exact composition is not known. From published formulas it appears that it is prepared by digesting a fatty oil with asafetida. The following formula for a similar preparation has been published: Coarsely powdered asafetida and alkanet, each 5.0 gm. (75 grains), are digested, with olive oil, 180 gms. (6 fluidounces), during eight days and then filtered. To the

clear filtrate are added oil of caraway, oil of turpentine, each 9.0 gm. (2.25 fluidrams), oil of pine needles, 1.2 gm. (18 minims), and oil of bergamot, 0.8 gm. (12 minims). Another published formula directs that 2.5 gm. (38 grains) asafetida be digested for a few hours with 60 gm. (2 ounces) olive oil; the clear oil is decanted and mixed with 2 gm. (30 minims) each of oil of caraway and oil of turpentine, and a few drops of oil of bergamot.

SALACETIN

(From The Journal A. M. A., July 1, 1905, 55)

Some time ago we wrote to Messrs. Bell & Co., calling their attention to the fact that we had made an examination[1] of their product, salacetin, and that as a result of such examination it was found to be a mixture, which did not coincide exactly with their description of it. They replied: "Our description of salacetin is correct and we have nothing more to impart except that any one publishing any different formula from that given in our circulars will be held responsible by us."

The description they give is as follows:

> Prepared by the interaction, with heat, of salicylic acid, glacial acetic acid, and purified phenylamine.

This sounds very scientific, but when we remember that acetanilid is a result of the action of glacial acetic acid on phenylamine (anilin) their description is cute, to say the least. Of course, there is "interaction with heat" when salicylic acid is combining with bicarbonate of sodium to form salicylate of sodium. Further, there is, no doubt, some "interaction with heat" when the substances are rubbed together in mixing them and when they are going through the mill to form tablets, not to mention the heated imagination of the promoters of this "synthetic."

The following taken from the advertising literature furnished by the manufacturers and distributed by them, is quoted to show the claims made for this preparation:

> Salacetin is free from Toluodine and produces no harmful cyanosis. In the treatment of Acute Bronchitis, Grippe, Influenza, Tonsilitis, Lithemic Headaches, Rheumatism and Neuralgias, it relieves pain, reduces inflammation and abnormal temperature, and eliminates uric acid more quickly and thoroughly than the salicylates, and without causing depression or stomachic or renal irritation.

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1. The Journal A. M. A., June 3, 1905, reproduced on p. 9 of this pamphlet.

Have personally interviewed thousands of physicians, including every prominent one in the East, and can honestly state that we have never known of anything at once so efficient and so unobjectionable in the removal of rheumatic and neuralgic pain and other symptoms of the uric-acid accumulation. . . . La Grippe and Acute Bronchitis it relieves pain and coughing, reduces inflammation and temperature, makes the patient comfortable, and checks the progress of the disease. In Tonsillitis its action is specific. . . . In Acid Cystitis, it neutralizes acidity, reduces inflammation and removes irritation. . . . In Dysmenorrhea it relieves pain and congestion with no hallucinations, constipation or danger of a drug habit.

In Dysmenorrhea and Ovarian Neuralgias try Sal-Codeia—Bell. It will relieve the pain as well as morphia. It will not check any secretions, induce any habit, cause any depression or inconvenience of any kind.

Of course, it is well understood that acetanilid is a valuable remedy in many instances, if used with caution and when indicated. It certainly has some therapeutic value. There is no doubt that it relieves pain of various kinds. It is to be presumed that combining salicylate of sodium with it will have certain beneficial effects in certain rheumatic conditions, on the supposition that salicylate of sodium and acetanilid are both used with more or less success in certain of these conditions. Also, the combining of bicarbonate of sodium, carbonate of ammonia, caffein, citric acid, one or several of these, may result in a fairly good combination, but these combinations can be found in the list of preparations of all our large manufacturing pharmaceutical houses, which supply them at one-tenth of the cost of these secret remedies. The physician in using these preparations put out by reputable recognized manufacturing pharmaceutical houses, not only is prescribing preparations that are non-secret, but is using remedies that cost one-tenth as much as the secret preparations, which are exploited under fanciful names and pushed by ridiculous claims.

SAL-CODEIA—BELL

(From The Journal A. M. A., Nov. 4, 1905)

According to the advertisements "Salacetin":

Is a combination with heat of salicylic and glacial acetic acids with phenylamine, the irritating, depressing and blood corpuscle destroying elements removed.

According to the Committee on Chemistry of the Council on Pharmacy and Chemistry of the American Medical Association, whose report was published in THE JOURNAL of the American Medical Association June 3, 1905, p. 1791, "Salacetin" is a mixture of acetanilid, salicylate of sodium and bicar-

bonate of sodium. Sal-Codeia (Salacetin-Codein), therefore would be the same as the above with codein added. Of course, acetanilid and codein will relieve pain (it could not do otherwise) and consequently make a very good combination in certain conditions, if not used too often and if used with care. While the continued use of codein is not likely to produce a drug habit, it, as well as acetanilid, does so sometimes, and it must be remembered that codein is a motor paralysant, and is not the best combination to be used with acetanilid. For those who wish to give a combination of acetanilid, salicylate of sodium and codein, the following prescription is suggested:

℞. Acetanilid	3i	4|
Sodii bicarbonatis	3ss	2|
Sodii salicylatis	3ss	2|
Codein sulph.	gr. vi	|4

M. et div. chart No. xxiv.

This will make five-grain powders which may be put in papers, capsules, cachets or tablets. Each will contain 2½ grains (0.15) of acetanilid and 1¼ grains (0.075) each of sodium salicylate and sodium bicarbonate, with ¼ grain (0.015) of codein.

The doses of acetanilid and of codein approximate the average adult doses, but the sodium salicylate, to have any appreciable effect, must be increased, for 1¼ grains of salicylate of sodium in a dose is insignificantly small. Sodium salicylate with acetanilid makes a fairly good combination in certain rheumatic troubles, but it is not indicated by any means as a cure-all, as one would judge from the literature sent out by the Sal-Codeia—Bell people.

SOMNOS

A Disguised Chloral Preparation

(Abstracted from The Journal A. M. A., Sept. 1, 15 and 29, 1906)

Somnos, a product marketed by H. K. Mulford Company, is a chloral preparation, yet the literature stated that Somnos was free from chloral and could be used without danger of the depressing action of chloral hydrate on the heart and respiratory system. The following is a sample:

> Somnos contains no chloral nor paraldehyde and is absolutely free from any depressing action upon the heart or circulation, and has no destructive influences on the red corpuscles of the blood, nor does it cause gastric disturbances by continued use.

Mulford also stated that somnos is "trichlor-ethidene-propenyl ether," a statement which is unintelligible to the average

physician. The product was investigated by the Council and extensive experiments were undertaken to compare the effects of somnos with those of chloral hydrate. The Council concluded from these experiments that it was completely unable to verify the claims of the manufacturers that somnos is less toxic than hydrated chloral or that it has a less depressing effect on temperature, respiration or circulation. On the contrary, it was found that the physiologic effects are not distinguishable from those of chloral hydrate, doubtless because the action of somnos is simply the action of hydrate of chloral and that somnos is simply glycerate of chloral.

The H. K. Mulford Company took exception to the Council's report and complained that the honor and integrity of the firm had been attacked and seriously injured by it. The Council was asked to retract the statements that the H. K. Mulford Company had stooped to dishonest or unfair practices in marketing this preparation; that somnos is not a definite chemical product, and that somnos contains free or uncombined chloral. The Council replied to this request by quotations from the advertising literature issued by the firm, showing that the accusations were well founded. The Council also suggested that physicians who are in the habit of using somnos compare its action with that of chloral hydrate, remembering that 15 c.c. (one tablespoonful) of somnos contains the equivalent of 0.75 gm. (12 gr.) of chloral hydrate.

SOOTHING SYRUPS—FATALITIES AND POISONINGS

Kopp's Baby's Friend

(From The Journal A. M. A., Various Dates)

In response to a request for information from a physician who had a case of poisoning from the preparation, we had Kopp's Baby's Friend analyzed. According to this analysis, published in THE JOURNAL, Nov. 25, 1905, p. 1678, Kopp's Baby's Friend contains in 100 c.c. 0.0719 gm. morphin sulphate; approximately ⅓ of a grain in one fluid ounce.

The following deaths and poisonings have been reported from this preparation:

C. F. Jones, coroner, Baltimore, reported the death of a child, aged 3 months.—THE JOURNAL, Jan. 6, 1906, p. 55.

Dr. R. E. Eskildson, Omaha, reports two cases of poisoning occurring in infants.—THE JOURNAL, Nov. 25, 1905, p. 1678, and Feb. 10, 1906, p. 447.

R. Dodd, coroner of Oneida county (N. Y.), reported the deaths of twin children, aged 1 month, in Utica, N. Y.—THE JOURNAL, March 3, 1906, p. 666.

Dr. J. J. Deshler, Gliddon, Iowa, reported the case of a child, aged 14 months, who suffered from chronic opium poisoning from the habitual administration of Kopp's Baby's Friend.—THE JOURNAL, May 19, 1906, p. 1541.

Dr. L. E. Siegelstein, Cleveland, coroner of Cuyahoga county, reports the death of one infant, aged 2 months, and of another aged 5 weeks.—THE JOURNAL, July 14, 1906, p. 127.

Dr. A. J. Braden, Duluth, Minn., reports the death of a child, aged 6 months.—THE JOURNAL, Oct. 27, 1906, p. 1393.

Dr. Jesse Cooper, Newcastle, Pa., reports the deaths of twin children, aged 6 weeks.—THE JOURNAL, Feb. 9. 1907, p. 535.

Dr. Siegelstein, of Cleveland, in addition to taking testimony and investigating the cases, did some private experimental work with "Kopp's Baby's Friend." First, he gave a 6-days-old puppy 30 drops of the preparation. The pup never wakened from the deep sleep that overcame him at once. He gave a 2-weeks-old kitten 20 drops. She promptly went to sleep and slept four hours. The next day he gave her 30 drops, which put her to sleep forever. He also tried the preparation on two kittens 6 weeks old. Each slept for from four to eight hours after doses of from 15 to 20 drops.—THE JOURNAL, July 14,, 1906, p. 127.

Bull's Cough Syrup

Dr. J. W. Shafer, Morocco, Ind., reported the death of a child, aged 23 months, who had drunk about an ounce of "Dr. Bull's Cough Syrup." A bottle of this preparation was analyzed, and, according to the analysis, Bull's Cough Syrup contains in 100 c.c. 0.0534 gm. of morphin sulphate; approximately ¼ of a grain in one fluid ounce.

Mrs. Winslow's Soothing Syrup

Dr. G. M. Cummins, Hamilton, Ohio, reported a case of poisoning from Mrs. Winslow's Soothing Syrup in a child, aged 3½ months.—THE JOURNAL, March 3, 1906, p. 666.

Dr. J. E. Campbell, South St. Paul, Minn., reported the death of a child, aged 10 months, from Mrs. Winslow's Soothing Syrup.—THE JOURNAL, Feb. 9, 1907, p. 535.

Dr. J. M. Edwards, Commissioner of Health, Mankato,

Minn., reported the death of a child, aged 18 months, from an overdose of Mrs., Winslow's Soothing Syrup.—THE JOURNAL, March 30, 1907, p. 1123.

Rex Cough Syrup

Dr. T. C. Buxton, Decatur, Ill., reported the death of a child from Rex Cough Syrup.—THE JOURNAL, Feb. 9, 1907, p. 535.

Monell's Teething Syrup

Dr. J. E. Dorn, Brooklyn, N. Y., reported the death of an infant from the effects of Monell's teething syrup.—THE JOURNAL, Feb. 9, 1907, p. 535.

TARTARLITHINE

(Abstracted from The Journal A. M. A., April 13, 1907, p. 1284.)

Tartarlithine was examined by two chemists whose reports indicate that it is an effervescing preparation composed approximately of 20 per cent. of carbonate of lithium and about 80 per cent. of tartaric acid. Thus it is simply another of the hundreds of lithia preparations on the market offered for the cure of rheumatism. This in spite of the fact that scientific investigation and clinical experience have demonstrated that lithia is of very little use in the treatment of that disease. While the advertisement carries the idea that tartarlithine is a product of the Tartarlithine Company, and that McKesson and Robbins are simply selling agents, we are informed that the business is owned by McKesson and Robbins, who under this style manufacture a remedy for rheumatism.

TUBERCULOIDS

(Abstracted from The Journal A. M. A., Feb. 29, 1908, p. 704)

The following card is sent out to the public by the Columbus Pharmacal Company, Columbus, Ohio, and a copy was sent to THE JOURNAL office by Dr. N. S. Davis:

PHTHISIS PULMONALIS CURABLE

By the Germicidal, Antiseptic (non-irritating), Alterative, Reconstructive and Restorative Properties of TUBERCULOIDS TREATMENT for TUBERCULOSIS. The medicinal factor being TUBERCULOIDS TABLETS, a chemical production proven efficacious by bacteriological tests, substantiated by practical use by physicians under all kinds of climatic any systemic conditions. Full size package ($1.50 size, 200 tablets) furnished free to accredited practicing physicians on return of the attached card. Ample information furnished by personal letter for intelligent administration. Originated and manufactured only by COLUMBUS PHARMACAL COMPANY, COLUMBUS, OHIO. Serial No. 3219, Guaranteed under the Food and Drugs Act, June 30, 1906.

Some of the literature and a sample of the preparation were submitted to the chemical laboratory of the Association and the chemists were asked for an opinion and a report. The chemists declared that the statements made were typical of those made for the average "patent medicine." While pretending to give exact information regarding the composition of the remedy, the literature contains only mystifying phrases. The formulas given are criticised, and it is stated that they are evidently intended to mislead. Apparently, the tablets contain bismuth, possibly a nitrate of bismuth, a compound of guaiacol and a salt of cinnamic acid. There is no class of patients whom the nostrum maker can influence more easily than consumptives; they are always hopeful and ever ready to praise any remedy they happen to use. This is undoubtedly the reason why the "consumption cure" promoters succeed in getting so many testimonials. Attention is directed to the fact that the statement "guaranteed under the Food and Drugs Act" does not carry with it any guarantee of the purity of the preparation or of its efficacy in the class of cases for the cure of which it is advertised.

TUBERCULOZYNE

(From The Journal A. M. A., Sept. 26, 1908)

Our London correspondent refers[1] to a coroner's inquest recently held in England on a boy who died while taking the nostrum Tuberculozyne. This cruel fake is a product of this country — for which we should blush — being put on the market by "Dr." Derk P. Yonkerman of Kalamazoo, Mich. It was exposed by Dr. Kebler in THE JOURNAL[2] about two years ago. Later Samuel Hopkins Adams in *Collier's*[3] paid his respects to it and its exploiter, and last year the *Sydney* (N. S. W.) *Bulletin*[4] had the following to say regarding the nostrum:

> "The blastiferous 'Tuberculozyne' seems to be a mixture of many things and whether a patient strikes one bottle or the other there appears every reason to consider that he is a swindled consumptive. Possibly the hash is harmless—the *Bulletin* does not know—but a harmless mixture may amount to the cold-blooded murder of a con-

1. THE JOURNAL A. M. A., Sept. 26, 1908.
2. Nov. 10, 1906, p. 1549.
3. The Great American Fraud, 4th Ed., p. 73.
4. Report of the Royal Commission, Australia, i, 1907.

sumptive just as much as a keg of prussic acid. A patient who is capable of being cured under proper treatment may waste his time over the bottles of rubbish manufactured by shameless and grasping quacks till he becomes incurable, and in that case the quack has killed him just as much as if he beheaded him with an axe. In this case the bottled slush was manufactured by a Yankee person or company and imported here in drums (carboys)."

An analysis of the nostrum and its method of exploitation was published in the *British Medical Journal*[5] recently. This analysis compared with those published in THE JOURNAL two years ago, those made in Sydney, N. S. W., and others made by the public analyst for the coroner in the case described, show that like most remedies of that ilk—from antikamnia to peruna—one is never sure how long the "formula" will remain stationary.

It is to be hoped that more coroners on both sides of the Atlantic will force inquiries in cases of death occurring in patients who are taking these "sure cures." The awakening on the part of the British public to the worthlessness and danger of nostrums of the type of Tubercolozyne will indirectly help to abolish the Great American Fraud. It has become increasingly common since the American public has been aroused to the viciousness of "patent medicines" for the promoters of such to seek new victims in other English-speaking nations. Object lessons such as coroners' inquests will inevitably tend to eliminate those human scavengers who wring money from the incurably sick under the guise of "cure."

TUCKER'S ASTHMA CURE

(From The Journal A. M. A., March 16, 1907)

This nostrum, which is applied by a special atomizer, is discussed by O. Anselmino (*Pharmaceutische Centralhalle*, Dec. 6, 1906), who states that he has determined by experiment the amount of fluid which is delivered by various instruments. His experiments show that at a single inhalation comprising 100 compressions of a rubber bulb about 0.15 gm (2.5 minims) would be sprayed from the Tucker apparatus. Professor Strübing has shown that the amount may reach 0.40 gm. (6 minims), an amount which is of no small moment considering the composition of the remedy. The two analyses of

5. Aug. 22, 1905, p. 505.

Tucker's liquid for inhalation which have been made differ materially. That of Aufrecht, made in 1903, gives the following composition:

Cocain hydrochlorate	1 per cent.
Potassium nitrate	5 per cent.
Glycerin	35 per cent.
Bitter almond water	35 per cent.
Water	25 per cent.
Vegetable extractives (probably from stramonium)	4 per cent.

Bertram in 1905, on the other hand, found:

Atropin sulphate	1 per cent.
Sodium nitrate	4 per cent.
Vegetable extractives dissolved in water with some glycerin	0.52 per cent.

Anselmino found at one examination that hydrocyanic acid was present, but a second sample contained none. The former sample also contained a nitrite, but no potassium nitrate. The amount of alkaloid was 1 per cent., the greater part of which was cocain.

The inconsistencies in the analyses, they say, are partly due to the fact that proprietary remedies often vary in their composition from time to time and partly to difficulties inherent in the analysis of complex mixture. While atropin and cocain can be identified by characteristic qualitative tests, their quantitative determination is very difficult and, when the quantities are so small, it is practically impossible.

Bertram has proposed the following formula as a substitute for the inhalation liquid:

Atropin sulphate	gr. ii	15
Sodium nitrite	gr. viii	6
Glycerin	gr. xxx	2
Distilled water, to make	ʒss	15

Mix and dispense in a bottle of dark glass. To be sprayed from an atomizer and inhaled for three minutes.

Anselmino thinks, however, that a 1 per cent, solution of atropin is not safe for frequent inhalation, as atropin poisoning may occur.

VAPO-CRESOLENE

Results of Examination in the Association's Laboratory

(From The Journal A. M. A., April 4, 1908, 1135)

HUMBOLDT, TENN., Feb. 10, 1908.

To the Editor:—What can you tell me about Vapo-Cresolene? G. W. PENN.

ANSWER:—Vapo-Cresolene has been examined in the American Medical Association's laboratory and the chemists' report follows:

According to the statements on the trade package, Vapo-Cresolene "is a product of coal-tar possessing far greater power than carbolic acid in destroying germs of disease." It is recommended as a remedy for a number of diseases, including croup, catarrh and diphtheria. According to the manufacturers, it should be used only in "the Cresolene vaporizer," which makes it "unequaled for the disinfection of sick rooms" and the "safest and simplest method of destroying infection and purifying the air." From the examination we conclude that Vapo-Cresolene is essentially cresol and corresponds in every respect to cresol U. S. P. (Physician's Manual, page 36).

This report indicates that Vapo-Cresolene is a member of that class of proprietaries in which an ordinary product is endowed, by the manufacturer, with extraordinary virtues. The type is so common and has been referred to so frequently that but for the dangers attendant on the inhalation of any of the phenols, this particular product need not have been mentioned.

VASOGEN AND IODOVASOGEN

Another Case in Which Independent Analyses and Manufacturers' Labels Disagree

(From The Journal A. M. A., Feb. 13, 1909)

Vasogen, a product of Pearson & Company, Hamburg, Germany, has been put on the market under the various designations, "oxygenated vaseline," "water-soluble hydrocarbon" and "oxygenated hydrocarbon." The manufacturers, and also their American agents, Lehn & Fink, claim that by a special process the apparent impossibility of saponifying petrolatum has been overcome with vasogen as the result. Disinterested chemists who have analyzed vasogen find that the product consists essentially of an ammonium soap and petrolatum—practically an ammonia liniment mixed with petrolatum.

Just as petrolatum under its various trade names was at one time recommended as a universal ointment base, so vasogen is recommended promiscuously as a vehicle for remedies applied externally and even for internal medication—needless to say in many cases in which it is directly contraindicated.

Iodovasogen, recommended for external application as a substitute for tincture of iodin, was examined by Zernik in 1905, who found that the iodin existed not as a free iodin, but chiefly as ammonium iodid. The therapeutic char-

acter of the preparation is thus entirely different from that to be inferred from the labels and elsewhere, since the counter-irritant effects of free iodin are of course absent in ammonium iodid. Pearson & Co. now claim that when Zernik's findings were published they immediately modified their statements on the label in accordance with the truth. This is denied by Dr. Lungwitz, the editor of the *Therapeutische Rundschau* (*Apotheker Zeitung*, 1908, p. 900), who vigorously criticizes the misrepresentation made by Pearson & Co. in regard to iodovasogen. He calls attention to the fact that, while Zernik's results were published over three years ago, the labels which are in use to-day still bear the statement that iodovasogen consists of vasogen 90 parts and resublimed iodin 10 parts, and vasogen 94 parts and resublimed iodin 6 parts, respectively.

As iodovasogen and vasogen in various combinations, are being advertised to the physicians in the United States, the above information from our German exchanges is worthy of consideration.

VIAVI

A California Exposure of a California Nostrum and Its Graft

(From The Journal A. M. A., April 27, 1907, 1445, and June 15, 1907, 2041)

Yet one more of what Samuel Hopkins Adams, in "The Great American Fraud," calls the "fundamental fakes" has been exposed. The *California State Journal of Medicine* devotes six pages in its April issue to showing up "Viavi"; and it is well done. It appears that two astute and, since they have made their millions, highly respected, men on the Pacific Coast conceived the idea some years ago of instituting a "treatment" for the ills peculiar to women. This "treatment" practically consisted—and, in great part, still consists—of prescribing vaginal douches. But, of course, as our contemporary says, "no large paying business could be built up by simply selling a little good advice and a trifle of common sense. There must be something definite to take, some wonderful secret and very costly remedy that will work the result, to secure which the douche is but the merest preliminary. Hence the 'capsules' and the 'cerate' and the 'liquid' and the 'royal,' and the rest of the wonderful remedies which, collectively, leave little uncured or uncurable by Viavi."

So Viavi is bought and the douche is taken. "The immediate increase of personal comfort, and many times the quick

relief from some annoying minor ailment, which follows this exercise of cleanliness and common sense, might so hypnotize the average woman who accepts the Viavi preachments and takes the Viavi 'treatment,' that she would be ready to believe almost anything the promoters care to tell her."

Inquiry was made as to whether the Viavi remedies contained morphin, opium or any habit-producing drug. Nothing of this sort was found, in fact, as our contemporary says: "It was unnecessary to put an expensive article like morphin, and one liable to bring about trouble in the future, into their 'remedies' when they do not need to."

Then the question was put: Are the Viavi remedies used for the prevention of conception? This query was answered by a most emphatic denial. The manufacturers were horrified at the thought of their remedy being put to such repulsive and frightful misuse. The questioners wondered in the face of such evident righteousness on the part of the makers of Viavi how they could have been led to think of such a thing. The thought may have been suggested by a paragraph in a booklet put out by these people, called "Viavi Hygiene." Here we find that " . . . the remarkable effectiveness of the Viavi system of treatment . . . places it in the power of healthy wives to LIMIT THE NUMBER of their offspring for proper reasons, and women who are not fit for maternity to AVOID it by natural means." [The small capitals are inserted for emphasis by the California journal.]

An inability to correctly interpret what appears to be simple English is the only excuse that the enquirers have to offer for their unjust suspicions.

Naturally after two such rebuffs the question arose: What is Viavi? In the language of its makers—who ought to know—it "is a purely vegetable compound—more a food than a medicine, and is prepared in a predigested manner, so that it can be easily absorbed by the tissues of the body with which it comes in contact." But on the other hand analytical chemists reported: "So far as we are able to determine, they contain nothing but the extract of hydrastis and cocoa butter."

But why quarrel about what this wonderful remedy *is* when we know what it will *do?* Gynecology, after the universal adoption of the Viavi treatment, will become a lost art and the gynecologist, who is referred to in Viavi literature as a "body carpenter," will have to cease his sacrilegious "carpentry," for "a very large proportion of women's diseases were

really incurable until the Viavi system of treatment was introduced."

But it is on the subject of etiology, pathology and treatment of tumors that Viavi literature really distinguishes itself, Could the cancer commission be but persuaded to read this enlightening treatise it would adjourn *sine die.* Like all great discoveries, this one is remarkable for its simpleness. With the ingenuousness characteristic of great scientists the vexed problem of tumor causation is explained as follows: "The cause of these growths (tumors), which by inspiring terror drive so many women to a premature death by way of the operating table, is so simple a thing as a poor circulation of the blood. Tumors are caused by a stagnation of the venous blood. . . . This important discovery on our part has swept away the mist that has always surrounded this subject and enabled us to accomplish the most remarkable cures . . . "

But not only will Viavi cause a diminution in the size of tissues not wanted, but, *mirabile dictu,* it will bring about an increase in bulk in those tissues which are desired. For, say its exploiters, "we recall particularly the case of a man suffering with wasting of the testicles, who secured perfect recovery from the Viavi cerate applied to the scrotum." The delightful ambiguity of this sentence, by the way, is an illustration of the shrewdness of their literature generally. It will be noticed that they do not say that the patient recovered from the condition for which he was treated, but that he made a "perfect recovery from the Viavi cerate"!

Where statements are made claiming more for the remedy than even the gullible laity would be willing to swallow, the verbiage is so changed as to present the "truth" in the form of a syllogism. To say, point blank, that Viavi would cure appendicitis, paralysis, locomotor ataxia, *et al.,* would possibly arouse a healthy skepticism which would prove unhealthy for Viavi. We are told, therefore, in one part of the literature that all these diseases "and many more, proceed from a depletion of nervous force—*from nervous debility,*" while elsewhere we are informed that Viavi *cures nervous debility.*

Such, as our western contemporary says, is the "business which has made two men, starting with practically nothing, affluent. Their patrons consist of confiding sick and suffering women, to whom, not skilled in medicine, their literature appeals."

We regret that we have not the space to quote the complete article. It is also to be regretted that a reprint of it cannot be placed in the hands of those who are being humbugged so effectively by this California fraud.

THE VIAVI "TREATMENT"

ELMIRA, N. Y., May 27, 1907.

To the Editor:—The enclosed letter was written to a woman who had paid the Viavi representative $175 cash in advance for a "course of Viavi." The female representative had diagnosed a "tumor" (!) and had warned the woman to steer clear of any or all physicians, or take her chance on being ordered to the hospital for an operation (horrors!). After having used the "three-fold Viavi cure" for some eight or ten months and feeling somewhat worse, she visited a physician, who failed to find a tumor, but did find a retrodisplacement without adhesions. The symptoms, which had been severe backache, some headache and irritable bladder, were permanently relieved by replacing the uterus and using large tampons for about one week. While no further treatment was given or advised, the patient to-day (May 27, 1907), is in excellent health and laughs at the suggestion of examination or further treatment. The Viavi representative had the patient examined by the Viavi (female) "doctor," who corroborated the diagnosis of a "tumor" and urged another six months' course ($75 worth) of the "remedies." The Watkins (Schuyler County) Medical Society brought an action against this Viavi representative for illegal practice, which was discontinued without prosecution, I believe.

Viavi is successful financially—I am ready to swear to that.

WILLIAM BRADY, M.D.

[The letter Dr. Brady encloses is too long for publication. It is poorly written and shows that the writer, although able to work the dear women, is not blessed with too much education.—ED.]

VIRGIN OIL OF PINE

A Food Law Development

(From The Journal A. M. A., April 20, 1907, 1366)

In THE JOURNAL, March 16, 1907, page 967, we called attention to an alleged prescription which is shrewdly advertised in newspapers as a "simple home mixture which any druggist can put up." One of the ingredients, however, is a nostrum.

This method of advertising is one way of evading the Food and Drugs Act.

A recent number of *Printer's Ink* directs attention to a similar case. The preparation in this instance has been widely exploited in the lay press, largely in advertisements made to appear as though they were reading matter, and is advertised as "Virgin Oil of Pine." *Printer's Ink* says:

> The preparation is put up in half-ounce bottles and is recommended in connection with glycerin and whisky, in a stated formula as a remedy for coughs and colds, lung trouble, etc. Under the pure food law, a cough remedy containing two and a half ounces of simple ingredients suspended in eight ounces of whisky would have to be marked with a label stating the percentage of alcohol. In such a case the percentage would be large. Eight ounces of whisky would be entirely truthful and not at all alarming to the purchaser, but the law prohibits such a statement and the percentage of alcohol, if stated, would appear so high as probably to cancel a good many sales where purchasers read the truthful label. To overcome this disadvantage in marketing, the company advertises its preparation alone and the reader is given a formula whereby he can compound his remedy himself. As the formula may be advertised without any statement of percentage of alcohol, and as only whisky is mentioned, the remedy is divested of what under other circumstances might appear to be a dangerous remedy. Whether or not this concern has evaded the law is a question for others to decide. It has certainly got around what would have been in its case a serious commercial drawback.

VITÆ-ORE

Theophilus Noel, The "Transatlantic Quack"

(From the Journal A. M. A., Feb. 16, 1907, with modifications)

Strikingly apropos of the article on "Nostrum Advertising in Religious Papers," in THE JOURNAL, February 2, comes a voice from across the Atlantic in the form of an article in the *British Medical Journal*, January 26. The article is headed "The Transatlantic Quack." Surely every loyal American citizen must feel a glow of honest pride on reading the opinion, held in British professional circles, of American business methods. The writer says:

> Many hard things have been said about American business ways, but nothing puts them in a more despicable light than the letters addressed by so-called companies

carrying on a medical business in this country in the name of American quacks. One of the most repulsive of these purports to be sent out by the Theo. Noel Company, Limited, dating from 29 Ludgate Hill, London, E. C., whose vice-chairman is said to be J. R. Noel, M.D., and is addressed to clergymen. The merits of the company's nostrum called Vitæ-Ore are heralded in this style: "Is it not a fact that sickness among the members of your congregation is a great hindrance to your plan and work? Do you not often wish that, like the Great Physician, you could heal the body as well as minister to the soul? You may be tempted to throw this letter down and conclude that we are talking cant for business purposes. [The writer of this circular anticipates, with marvelous clearness, the effect produced on any intelligent reader by his composition.] "We admit we are talking business, but what is the use of preaching that Christianity is applicable to all conditions of business life, if as soon as a Christian business man refers to Divine things, he is set down as a charlatan talking cant?"

Then follows an offer to supply, gratis, packets of "Nature's tonic and healer," to be paid for one month from receipt, only if benefit has been derived from them, "in the hope to benefit some of these poor persons and thus set them talking about Vitæ-Ore." The writer boasts of the number of church ministers who have availed themselves of this offer and of the "editors of the leading medical and religious newspapers who have endorsed the claims of the company's remedy."

The cut here reproduced is from the *Cumberland Presbyterian*, Nov. 22, 1906. The English branch of the Theo. Noel Company asks English clergymen to use its nostrum, so that "like the Great Physician, you can heal the body as well as minister to the soul," and when a minister of the Cumberland Presbyterian church remonstrates against the prostitution of the pages of his paper, the Rev. James E. Clarke, editor, replies that it is "hardly the function of such a paper as the *Cumberland Presbyterian* to decide questions in accordance with any professional code of ethics," while the manager writes that "the very papers which, with axes to grind which other papers understand, are leading the crusade against 'patent medicines' are carrying in their columns at the same time lies galore, setting forth other wares."

Is one to conclude, from this specimen of ecclesiastical logic, that the argument of the management of the *Cumberland Presbyterian* is that since all advertising is founded on fraud, there is no reason why their paper should not derive as much

profit as possible from such conditions? As mere laymen, we are led to remark that such a conclusion savors quite as little of early Christian ethics as it does of any known code of professional ethics, however much it may be in accord with the commercialism of modern religious journalism.

Would the Rev. Mr. Clarke wish his readers to believe that, if the Great Physician were to-day walking the earth among men, he would distribute advertising circulars and sample packages of Vitæ-Ore, instead of loaves and fishes to the multitude that hung on his words, and thus "heal the body as well as minister to the soul?"

Can one imagine Paul of Tarsus, who fought with beasts at Ephesus and who died a martyr for his faith, or the beloved John on the Isle of Patmos, taking the position that it was "hardly his function to decide questions in accordance with any professional code of ethics?"

Would the advertising manager of the *Cumberland Presbyterian* have been willing to certify that Luke, the beloved physician, was "personally known to the publishers of this paper as a reliable and competent physician" unless he had entered the office of this religious journal with a fat advertising contract in his hand?

Can the whole filthy, disreputable nostrum business boast of a more disgraceful piece of literature than this blasphemous and sacrilegious attempt — shown in the *British Medical Journal*—to use the personality of Jesus Christ to boom the sales of a nostrum and to make advance agents out of weak-minded Christian clergymen? And can any honest member—either lay or clerical—of the Cumberland Presbyterian church, or any other church, look without shame on an editor and a paper which, while claiming to advocate the purity of the church have no better defense to offer than that all advertising is lying anyhow, and that other papers do the same thing? Yet much time has been spent in discussing the reasons why the church of to-day lacks the vigor and energy of apostolic times. A glance into some of our religious journals will supply at least a partial solution of the problem.

HISTORICAL

The interesting nostrum mentioned above has been exploited for the past fifteen years by its owner and "discoverer" (?) Theophilus Noel. This gentleman was formerly engaged in the newspaper business and later in mining and is said to lay claims to special knowledge as a geologist and mineralogist.

We are informed that he came to Chicago in 1891 and engaged in the "patent medicine" business, advertising and selling Vitæ-Ore, which he claimed to be a mineral which he had discovered somewhere in Florida or Mexico. This preparation is sold in the form of a powder put up in envelopes which retail at $1.00 each. It is supposed to be dissolved in water and drunk. The advertisements, which appear mainly in religious papers, state: "It is a mineral remedy, a combination of substances from which many of the world's noted curative springs derive medicinal power and healing virtue. These properties of the springs come from the natural deposits of mineral in the earth through which water forces its way, only a very small proportion of the medicinal substance being taken up by the liquid."

An analysis published in Bulletin No. 69 of the North Dakota Agricultural College Experiment Station states that Vitæ-Ore is simply ferric subsulphate (Monsel's salt), to which a little magnesium sulphate (Epsom salt), has been added. Our readers can readily choose the more reliable of these two statements. One can also readily understand how exceedingly beneficial Monsel's salts and Epsom salts would be in cases of rheumatism, diabetes, Bright's disease, gout, "stomach trouble," diphtheria and the other diseases for which Vitæ-Ore is recommended.

This nostrum is also interesting as showing the profits to be derived from such a business. In 1891 Mr. Noel is said to have been compelled to peddle his nostrum in person in order to obtain sufficient means to start his business. In 1893, only fourteen years ago, he is reported to have had in his employ two girls and three men. The extent of the establishment was three or four rooms and a basement. The business now occupies a three story building covering three building lots. The owner has a summer home in Michigan, a winter home in California, a permanent residence in Chicago and spends most of his time in travel. It is alleged that one of his recent trips to Germany was for the purpose of being treated for chronic rheumatism, which evidently Vitæ-Ore had failed to relieve. It is claimed that the present assets of the company amount to over $200,000.

As has been said, most of the advertising of this firm has been carried on in the religious papers. Here we have further evidence that piety, properly exploited, is a valuable asset in the "patent medicine" business.

However, the founder of this edifying mixture of faith and works is no longer the dominant factor in the business. One is led to wonder whether rheumatism has had anything to do with his retirement. Surely not, since the advertisement states that "Thousands of people testify to the efficacy of Vitæ-Ore in relieving and curing rheumatism," and that "This medicine cures, whether the sufferer believes it or not." The principal factor in the business is now Dr. Joseph R. Noel, who was graduated in 1894 from Jefferson Medical College, practiced three years at Ogden and Harrison streets, Chicago, and taught therapeutics for a time at one of the night medical schools of Chicago. Did he advise his students, we wonder,

LETTERS FOR RENT

300,000 Jas. Wm. Kidd medical file cards, representing all kinds of diseases (will sort) 1904.
180,000 men's matrimonial, 35,000 women's '04, 1st.
200,000 agents and canvassers.
50,000 Dr. Pierce order blanks, '02, '03.
20,000 Ozomulson order blanks, '03.
30,280 Theo. Noel, '02, '03, medical file cards.
59,000 Agents' directory, '03, '04, '05.
250,000 Home work, '03, '04, '05.
27,500 Rosebud trust, firsts, '03, '04.
19,500 Bond Jewelry payups, trust. '04, envelopes.
52,000 10c song orders, Star Music Co., '04, '05.
17,500 Dr. May & Friar. ladies' regulator, '03, '04.
6,000 Nervous debility, '03, '04, Appliance Co.

Over 1,000,000 letters on hand, all kinds. Call or write me for samples and ads. Letters bought.

C. A. Davis, 1634 W. Ohio Street, Chicago.

The above is reproduced from the *Ladies' Home Journal*. Editors of religious papers will no doubt be pleased to learn that Brother Noel, in selling the names of those sufferers who have written him in hopes of obtaining relief, is following the scriptural injunction not to let his right hand know what his left hand doeth.

to prescribe Vitæ-Ore for rheumatism? Did he learn his present therapy at Jefferson? He has recently opened a bank, possibly as an outlet for the money sent him by readers of religious papers. It is possible that he foresees the coming end of the nostrum business, and wishes to "make to himself friends of the mammon of unrighteousness." We are informed that he is the J. R. Noel, M.D., alluded to in the extract from the *Lancet*.

Isn't this a delectable mixture? To make a (financially) successful nostrum, take one pious but ignorant man who

has dabbled in many things and who talks glibly of all, no money but unlimited nerve, a mixture of any ridiculous stuff, a pinch of mystery, and a plentiful supply of quackery. Put on to boil in a religious weekly, season heavily and *ad nauseam* with piety and cant of the celebrated Chadband variety and serve hot to an ignorant and gullible public on a Sunday School lesson leaf.

WHEELER'S NERVE VITALIZER

An Analysis of the Nostrum

(From The Journal A. M. A., April 11, 1908)

To the Editor:—I have been much interested in the work that you are doing in exposing the danger lurking in the many well-advertised "nerve tonics" and "headache cures." I want to thank you for your exposure of Harper's "Brain Food." I needed such information. About nine months ago I learned that two women of my acquaintance were taking this preparation and that they had been inducing others to take it. I soon noticed that these women, whose daily duties were exacting, began to show purple lips and presented symptoms of general depression, and I warned them that they were probably taking a dangerous mixture containing acetanilid, and they heeded my warning.

I wish to call attention to "Dr. Wheeler's Nerve Vitalizer" which is sold to the public. The label states that the adult dose is from "one to four teaspoonfuls, or even more." It is recommended for "all nervous diseases , , , sleeplessness . . . sick or nervous headache . . . epilepsy, fits, spasms, St. Vitus' dance, nervous prostration and other severe and chronic cases."

I know two extremely delicate, educated, middle-aged women who have been taking this mixture pretty freely. They are in a pitiable condition of neurasthenia, suffering from gloomy forebodings in regard to the hopelessness of their health, and yet they claim that the medicine has surely saved their lives when all else had failed. I want to know what, if any, are the harmful ingredients of this nostrum. Can the Council on Pharmacy and Chemistry of the American Medical Association help me out, and in so doing help others?

M. R. MORDEN, Adrian, Mich.

COMMENT:—Wheeler's Nerve Vitalizer has been analyzed in the laboratory of the American Medical Association, and the chemists' report follows:

Wheeler's Nerve Vitalizer was packed in a carton bearing the name of the preparation, its manufacturers, "The J. W. Brant Co., Ltd., Albion, Mich.," and an exhaustive list of the diseases for which the product is intended, beside the general statement that it is a cure for "all nervous diseases." The "Vitalizer" is a brown, syrupy liquid having a peculiar salty taste partially masked by licorice. Qualitative tests showed the presence of sodium, potassium and bromin. Quantitative determinations indicated the presence of 12.61 gm. of potassium bromid and 6.30 gm. of sodium bromid in each 100 c.c. of the "Vitalizer." This is equivalent to 9.73 grains of potassium bromid and 4.86 grains of sodium bromid to the fluid dram; a quantity of bromids equivalent to 15.35 grains of potassium bromid.

It would seem from the above report that the label, "Nerve Vitalizer," is a misnomer and constitutes a misbranding very similar to, if not legally identical with, that for which Harper was convicted of violating the Food and Drugs Act. It is certainly not a matter of indifference that delicate women should drug themselves with large doses of depressing agents like the bromids in the supposition that they are toning up an exhausted nervous system with a vitalizer.

The danger of the recommended dose equivalent to over sixty grains of potassium bromid, to be taken indiscriminately by the laity, is evident. Equally vicious is the suggestion that in certain conditions the drug should be used four times daily "for at least one year;" should such advice be followed bromism will inevitably result. The question arises in this connection whether the law ought not to take cognizance of substances as potent for harm as are the bromids, as well as of those drugs which are now included in the list.

PART IV.

MISCELLANEOUS MATTER.

AICSOL*

J. Q. Lloyd's Consumption Cure

(Abstracted from The Journal A. M. A., Nov. 21, 1908, and Dec. 5, 1908)

This nostrum was originally marked as "Lloyd's Specific" by the J. Q. Lloyd Chemical Company of St. Louis. For exploiting the product the National Fraternal Sanitarium at Fraternal City, N. M., was used. Letters written on its stationery and signed by its president were sent out, notifying the tuberculous public that the institution would not be open for patients for some months, and suggesting that in the meantime Lloyd's Specific should be used. When this plan had been sufficiently worked, another method was adopted, the time-honored standby of the nostrum dispenser—testimonials. The name of the preparation was changed to Sol. Anti-Phthisis (Lloyd), and advertisements appeared in the medical journals. As an interesting sidelight on the workings of testimonial factories, THE JOURNAL mentions the receipt from a correspondent of a sheet of paper, over a yard long and two feet wide, on which was printed a "proof" of more than 100 typical testimonials of Lloyd's preparation. With it was received by the correspondent a letter referring to the proof sent and asking whether objection was made to the addition of date and town to his testimonial. As a matter of fact, the correspondent had never written any letter to the company. About the time Lloyd's Specific was rechristened Sol. Anti-Phthisis (Lloyd), the preparation was submitted to the Council on Pharmacy and Chemistry for admission to the list of New and Nonofficial Remedies. The reasons for its rejection were numerous and evident, but the one given the J. Q. Lloyd Chemical Company was that it conflicts with the rule barring an article "whose label . . . contains the names of diseases in the treatment of which the article is indicated." The name was then again changed to Aic-sol (Lloyd). A letter was sent out to physicians asking them to buy stock

* The matter here abstracted may be had in full in pamphlet form, price four cents.

in a company that was to advertise Aic-sol under still another name, selling direct to consumptives at so much per monthly treatment, on the mail-order plan.

The new mail-order direct-to-the-public name of Aic-sol was to be Re-Stor-All. A sample testimonial that was to be sent to the public stated that Re-Stor-All not only had cured consumption, but had also cured paralysis. A St. Louis physician who visited Lloyd's "headquarters" gave some interesting details of the inner working of such concerns. One hundred thousand copies of a St. Louis newspaper which published a "write-up" of Lloyd's great "cure" were being sent broadcast—a "write-up" which Lloyd emphasized was furnished gratis. Investigation of some of the cases published as testimonials showed in every instance the alleged "cure" was a failure.

The "Discoverer" Is Awarded a Diploma of Merit by a Learned (?) Society

(From the Journal A. M. A., May 29, 1909)

On two occasions[1] we have given space to a "consumption cure" fake known at various stages of its career as "Lloyd's Specific," "Sol. Anti-Phthisis (Lloyd)," "Aicsol," and finally "Re-Stor-All," the promoter being one Judd Q. Lloyd of St. Louis. Under the first three names it was advertised as an "ethical" remedy; the last name was given it when a company was organized by its promoter to place it on the market as a "patent medicine." This, at least, was the avowed intention. We find, however, in the daily papers that the nostrum is advertised not under its "patent medicine" name, "Re-Stor-All," but under its "ethical" name, "Aicsol." One advertisement which starts out with what is alleged to be a testimonial from a physician, contains in addition the following statement:

> "On Dec. 15, 1908, the London Society of Science, Letters and Art, of London, England, which was established in 1881 for the purpose of determining the highest scientific and literary achievements of each year, awarded a diploma of merit to Judd Q. Lloyd in recognition of his valuable services to mankind in discovering 'Aicsol,' the only successful treatment for consumption, and was elected an honorary member of that well-known society. Only one such diploma is issued each year in any country."

It seemed strange that a "well-known society" should award a "diploma of merit" to Judd Q. Lloyd for having "discovered"

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1. THE JOURNAL, Nov. 21, 1908 and Dec. 5, 1908; reprinted in pamphlet form.

a fake consumption cure and especially that this "society" should rank the "discovery" as the "highest scientific and literary achievement" in the United States for that year. We tried to find out, therefore, something about the society, but were unable to get any trace of it in the various lists of scientific organizations in London. To obtain light on the subject, the editor of London *Truth*, who has shown up so many fake "societies," was written to. He replied as follows:

"The Society of Science, Letters and Art, of London, is a swindle to which at one time we devoted a great deal of attention, and it figured for a time in the *Truth* 'Cautionary List,' but it has lapsed into obscurity in recent years, and we have not referred to it for some time. The concern was started by a man named Albert Sturman who at one time kept a private school for boys in London and also acted as an agent for the sale of various bogus degrees produced on your side of the Atlantic. He then started a degree factory of his own under the above title. He took a house in Kensington and got together a serio-comic literary society, the members of which were entitled to attend *conversaziones*, concerts, etc., in his front parlor, and to dub themselves 'F.S.Sc. (Lond.)' if they paid the fellows' subscription. He also sold them hoods and gowns, specially designed for the benefit of church organists, and generally practiced all the tricks of the trade. He also did very good business by instituting a system of examining small private schools in the provinces and giving the pupils certificates. As he styled his examinations the "Kensington Locals"—which suggested that they were in some way connected with the Government Science and Art Department at South Kensington—country schoolmasters and schoolmistresses patronized these examinations extensively; and I need not tell you that Sturman gave them good value for their money by always passing a fair proportion of pupils.

"In an evil moment for himself, Sturman, who was a stupid and illiterate man, came here to see us, and we published the interview, which made very funny reading. After this the concern went down hill and Sturman himself died six or seven years ago. His wife, however, who was really the active partner in the business, carried it on afterward with some success, but, as I have said, it has dropped out of sight recently, though one occasionally comes across people who display the 'F.S.Sc. (Lond.).'"

THE ALPHA MEDICAL INSTITUTE

Another Fraudulent Concern Closes Its Doors

(From The Journal A. M. A., Dec. 26, 1908)

The Alpha Medical Institute of Cincinnati, a "consumption cure" fake has gone out of business. This concern, which was one of the Great American Frauds exposed by Samuel Hopkins Adams, was founded by the late Dr. Thomas W. Graydon, who "amassed a fortune from his understanding of the financial possibilities of tuberculosis." In its advertising pamphlet the "institute" is pictured as a large and commodious building bearing its sign; no such building ever existed outside of the imagination of the advertising agent. The "treatment" itself was "a combination of worthless inhalation with worse than worthless medicines." In discussing this concern and detailing the result of his personal interview with its manager, Mr. Adams says of the latter: "His one argument was that he could produce testimonials, and his one plea, that the institute ought not to be 'pounded' as it was going out of business in a few months, anyway. This means that the field is exhausted; that, as invariably will happen, the accumulated force of experience, proving the Alpha Medical Institute to be a fraud, has finally overcome the counter-force of its advertising. Probably its proprietors (I understand that Dr. Graydon's sons have got rid of the business as a baneful influence on their social aspirations) will presently start up under some other name."

While the Alpha Medical Institute was doubtless in a sickly condition, it was the United States government which gave it the *coup de grâce.* After considerable evidence had been collected, the Postoffice Department cited the company to show cause why a fraud order should not be issued. Instead, a representative of the company pleaded guilty—and that is Omega of Alpha.

THE AMERICAN COLLEGE OF MECHANO-THERAPY

"Manual Manipulation" and "Curative Mechanics" Taught by Mail

(From The Journal A. M. A., Aug. 28, 1909)

In the realm of the new "drugless" quackery probably no field has been more thoroughly worked than that of "manipulation." The absence of laws in many states and the inadequacy of such laws as do exist makes the "treatment" of disease by mechanical means a veritable gold mine for the unscrupulous

and incompetent. The rise of osteopathy and its latest freak offshoot—kiropractic—is but one illustration of what has been done in the way of commercializing manual manipulation as a therapeutic agent.

In his "Great American Fraud" series Samuel Hopkins Adams calls attention to the absurdity of the proposition put forward by numerous quacks that it is possible to treat diseases by correspondence. As Mr. Adams says, it is "like mending chimneys by mail." On a par with this is the teaching of "manual manipulation" by correspondence. This feat is accomplished (?) by an institution calling itself the "American College of Mechano-Therapy" having its headquarters in Chicago.

The advertisements of this concern put the "science of mechano-therapy" as taught by it on a frankly commercial basis. The important and much-emphasized point is that by studying mechano-therapy you can "earn from $3,000 to $5,000 a year."

WHAT IS A "MECHANO-THERAPIST?"

The individual who, attracted by this get-rich-quick proposition, is anxious to learn something about the general principles of the cult, is told:

> "His [the mechano-therapist] medicines . . . . . are not drugs but scientific combinations of food, circumstance, idea, water and motion."

After mentally digesting this somewhat abstruse proposition, descriptive of the fundamental principles of mechano-therapy, the reader learns further, that:

> "His instruments are not knives and saws, but his own deft hands and the vital processes of the body itself, the circulation, respiration, secretion, etc., which he manipulates as he sees fit and his judgment dictates."

In other words the graduate of the American College of Mechano-Therapy "manipulates as he sees fit" his patient's "secretion" by "scientific combinations of food, circumstance, idea, water and motion." It would surely be hard to find a more meaningless jargon of words outside of Mrs. Eddy's "Science and Health."

The dean of this "college" is W. C. Schulz, M.D., who, we are told, "has had a thorough European training, and so *combines all the learning of the great schools of the world.*" [Italics ours.—Ed.] The subjects taught at this institution of learning are, according to the catalogue, the following:

> "Anatomy, Physiology, Diagnosis, Hygiene, Dietetics, Hydrotherapy, Manual Manipulation, Swedish Movements, Vibration, Oscillation, Mechanics (curative), Suggestive Therapeutics . . . Ethics, Establishment, Promotion and Business Methods."

In addition to these numerous subjects, "Osteopathy" is thrown in for good measure; and all this is taught by correspondence! Apparently there is no limit to human credulity when cupidity beckons. In referring to the time required to complete the "course" and thus receive the diploma, which is "handsomely executed on art parchment," we are told:

"In six months you can begin practicing mechano-therapy."

Of course the acquirement of the *tactus eruditus* is all-essential, "but it is no more difficult than learning to ride a bicycle." And incidentally that suggests the commercial possibilities of teaching bicycle riding or even equestrianism by mail!

THE "BUSINESS SIDE"

In addition to the various subjects from anatomy to suggestive therapeutics that are taught by this "college" the curriculum includes "The Business Side of Mechano-Therapy." This important subject deals with such problems as:

"How to approach a Patient."
"How to get the Fees at once."
"The Business talk that will make the Patient willing to pay the fee."
"How to handle the Question of the size of a Fee."
"Real Money Talk."
"Always get Cash down."

The "business side," too, is particularly emphasized in the advertisements of the college:

"Opportunities to make money in Mechano-Therapy are everywhere. You need not leave home to make your fortune."
" . . . . we guarantee success . . . . . "
"We fit you in a few months so you may become successful and earn from $3,000 to $5,000 a year."
"Unlimited income to graduates."
"We know of no other calling . . . which promises the same financial returns that Mechano-Therapy does."

Such is the bait, which, judging from the amount spent in advertising, is so productive of results in catching the ignorant and avaricious.

The "instructor" in "business methods" is one S. J. Tinthoff, who also is treasurer of the "college." We learn from the prospectus that as instructor, he "is eminently well qualified for this position." In fact:

"His knowledge of the proper methods a physician, specialist or Mechano-Therapist may pursue in order to build up a large practice, is perhaps unsurpassed by that of any other man in the United States."

We are told, too, that F. S. Tinthoff, brother of S. J. Tinthoff, and "Director of the Correspondent Department, is also a trained business man and expert correspondence instructor." We understand that F. S. and S. J. Tinthoff operate the

"Aurum Company," which does a mail-order business in "Vestro," which is modestly claimed to be "the only true Bust Developer on the market to-day." If we are not mis-

Reproduction of a full-page advertisement from the *Boston American*, March 31, 1909.

taken, too, F. S. Tinthoff was president and treasurer of the now defunct "Physician's Institute" of Chicago. The question arises: Does an experience in operating a "physician's in-

stitute" and filling mail-orders for the "only reliable bust developer" qualify a man for the position of "instructor" in a correspondence "college of Mechano-Therapy?"

LEGAL STATUS OF MECHANO-THERAPY

The American College of Mechano-Therapy advertises: "We Teach You How to Treat Disease Without Drugs." A prospective student who wished to know what legal restrictions there might be to the practice of this method of "treating" disease, wrote as follows: "If I should take your course and receive a diploma could I practice Mechano-Therapy in *any* of the states? I understand that the different states have different laws regarding the practice of medicine and I would like to know if there are any restrictions in regard to Mechano-Therapy?"

The reply he received may well be pondered over by those who believe that medical practice acts exist for the benefit of the public:

> Dear Friend:—There are no laws on the statute books regarding Mechano-Therapy. In Illinois for instance, there is the so-called "Drugless Healing Act" applying to all such methods as Mechano-Therapy, Osteopathy, etc. Some of our graduates have qualified under this law by examination, while *others carry on their work under the advice and consent of a friendly M.D. We recommend the latter method* [Italics ours.—Ed.] until such time as Mechano-Therapy is regulated by legislative enactment in the various states.
>
> Yours truly,
> American College of Mechano-Therapy,
> W. C. Schultze, M.D.

METHOD OF INTERESTING "STUDENTS"

The individual who writes to this college for information receives a three-page letter and a "prospectus." The latter is entitled, "How to Become a Mechano-Therapist," and the first page is taken up with a full-page picture of the "home of the American College of Mechano-Therapy." This "home" is pictured as a nine-story building, across the top of which appears in large letters, the legend: "American College of Mechano-Therapy." The natural inference to one not conversant with the facts would be that the "college" occupied the entire building. In reality, however, it occupies some rooms on the sixth floor of the building in which it is located, and the building carries no such legend as is shown in the picture.

VARIABLE TUITION RATES

The form letter, after expatiating on the virtues and money-making possibilities of the "course" winds up by calling attention to the fact that the tuition is $100 cash "for the complete course." The tuition rates, however, seem to vary. One person

who inquired about the course was told in the first letter that it cost $100; in the second letter he was told that "we expect shortly to advance our fees to $200"—but they would still accept this particular individual at the $100 rate; in the fourth letter he was told that the advance had been made "and our present terms are $200 cash," but as a special proposition he would be accepted "at the old special reduced rate;" in the fifth letter he was offered the "complete course" for $60, but the "college" insisted that he must "hold this special reduced price strictly confidential." As a (presumably) final "confidential price" he was offered the "regular $100 correspondence course in Mechano-Therapy for only $25 cash."

Another individual was offered the course for $50—and this, too, within a few days of the time that the first person received notice that the fees had been "advanced" to $200. Other persons have been offered a 50 per cent. discount ($50 cash) with the first letter. It should be said that all the "enrollment blanks" which we have seen—and they are many—give the cost of the course as $100.

The extensive advertising done by this concern would seem to demonstrate its profitableness. On both sides of the Atlantic the public has been advised through the daily and weekly press of the commercial possibilities of "mechano-therapy" as taught by this "college." In commenting on the part that the press plays in making such concerns as this profitable, London *Truth* says:

"It passes my understanding how wealthy newspaper proprietors . . . can condescend to take money for foisting this sort of bunkum on their readers; but as long as they do so, cheap postage to America will certainly put money into some pockets."

Elsewhere the same publication, in describing the "college," calls it "a concern which proposes to give postal tuition in quackery to British fools"—a description which can only be improved by the substitution of "English-speaking" for "British."

BATTLE AND FOUGERA COMPANIES OPPOSED TO THE COUNCIL

(From The Journal A. M. A., May 6, 1905, and Feb. 17, 1906)

Battle & Co.

We have printed abstracts of letters received from some of the leading manufacturing pharmaceutical houses which favored the movement recently undertaken to separate the good

preparations, as far as possible, from the fraudulent and secret nostrums with which physicians are flooded and which they are expected to prescribe for the sick under their care. Under the circumstances we think it is only fair to give the other side. We are especially constrained to give physicians a chance to read what Battle & Co. have to say, because they have sent the correspondence to various manufacturing pharmaceutical firms, and our readers should have the same favor shown them. With the correspondence they say to the manufacturers:

We commend the above correspondence to your attention as showing the position we take in regard to the Council on Pharmacy and Chemistry of the A. M. A. We would like to hear any comments you have to make.

The correspondence is as follows:

AMERICAN MEDICAL ASSOCIATION.

COUNCIL ON PHARMACY AND CHEMISTRY.

CHICAGO, April 22, 1905.

MESSRS. BATTLE & CO., St. Louis, Mo.

GENTLEMEN:—The Council on Pharmacy and Chemistry is now ready to take up "Bromidia," provided you wish to submit it to that body. We take it for granted that you received the announcement which we sent on February 28, and consequently know the functions of this council.

If you desire to submit the preparation, will you kindly forward five original packages, and also any information you may desire to submit to the council for its guidance? By referring to the tentative rules, as set forth in the announcement, you will readily see the scope of the information desired. If you send printed matter, kindly supply us with fifteen sets of each.

We shall be pleased to hear from you at your earliest convenience.

Very truly yours,

GEORGE H. SIMMONS, Chairman.

ST. LOUIS, April 25, 1905.

DR. GEORGE H. SIMMONS, Chairman.

103 Dearborn Ave., Chicago, Ill.

DEAR SIR:—Yours of the 22d instant received and contents noted. In answer would say that we read very carefully the circular sent by the Council on Pharmacy and Chemistry, February 28. In regard to that and your request, will say: In the northern district of New York, United States Circuit Court, held in the court house at Utica, N. Y., May 3, 1887, Judge Alfred C. Coxe granted a temporary injunction restraining Byron Fenner of Westfield, N. Y., to "desist from printing, publishing or circu-

lating in any book or formula hereafter to be issued by the defendant, his agents, etc., the word Bromidia or Bromidio in connection with the receipt now appearing in Fenner's Formulary, etc., etc." This injunction was made permanent June 7, 1887, the same judge presiding.

We don't recognize the right of any man or set of men to interfere with our property. We do not propose to submit any of our preparations to the so-called Council on Pharmacy and Chemistry. Furthermore, if we learn that the said Council on Pharmacy and Chemistry attempts to incorporate any of our preparations in the book referred to we will ask for an injunction restraining any interference with our property.

Yours respectfully,

BATTLE & CO., *Chemists' Corporation.*
C. A. BATTLE, President.

We wish to assure Messrs. Battle and Company that it will not be necessary for them, under the circumstances, to get out an injunction to prevent the council from incorporating Bromidia in the proposed book. Indeed, the underlying principle on which the council is working is that until there is something more than the unsatisfying statement of the manufacturer concerning the composition of his "property," physicians ought not to "interfere" with that "property" by using it on an innocent public.

Fougera & Co.

W. J. MORRISON, JR., COUNSELOR AT LAW,
43 BROAD STREET, NEW YORK, Jan. 20, 1906.

GEORGE H. SIMMONS, M.D.,
Council on Chemistry and Pharmacy, American Medical Association, Chicago, Ill.:

Dear Sir:—Messrs. E. Fougera & Co., of 90 Beekman street, New York City, as agents for several preparations intended solely for the use of the medical profession, and to which certain registered trademark names have been given, inform me that in the literature relating to these preparations they have given the full qualitative formulæ, and in many cases the full quantitative formulæ and even the *modus operandi* of manufacture.

They have also informed me that your Association proposes to make analyses of these preparations, which together with certain comment and criticism, are to be published by the said Association.

My clients request me to state that they do not desire the publication in the proposed pharmacopeia of "New and Nonofficial Remedies" of any formulæ to which are added synonymous terms, stated to be identical with the preparations sold under the trade-mark names of the

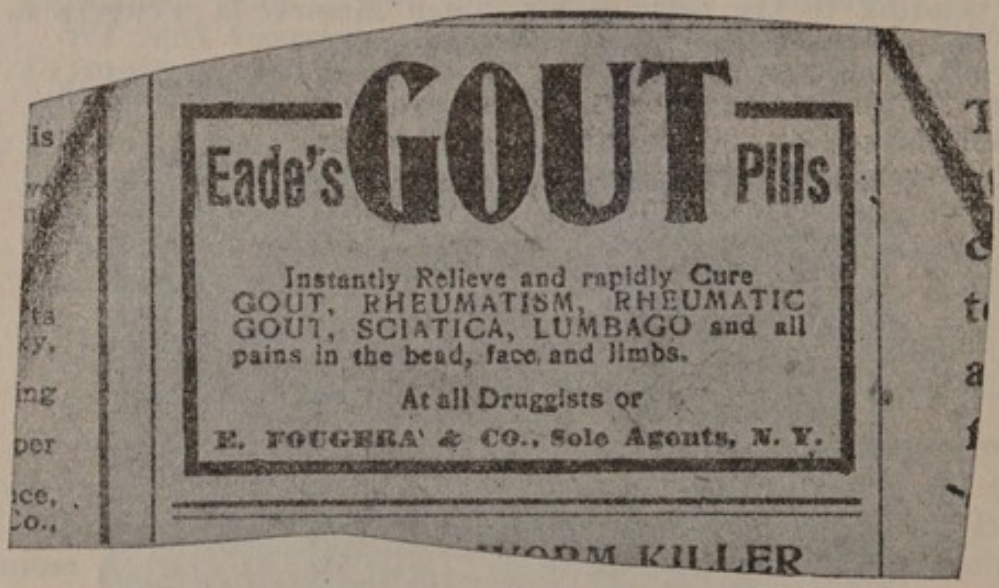
firms they represent as agents; and as counsel for the above firm I wish to warn you against the publication by the American Medical Association or the Council on Chemistry and Pharmacy of any false or inaccurate statements relating to the articles for which Messrs. E. Fougera & Co. are the selling agents. Yours truly,

W. J. Morrison, Jr.

Santal Midy is one of the preparations which Fougera & Co., are advertising to the public. This advertisement is from the *Chicago American* of Sunday, Feb. 11, 1906. Gonorrhea cured in two days! And this is an "ethical proprietary" advertised in reputable medical journals! ! !

It is a pleasure to give publicity to the above letter, that our readers may know the attitude taken by E. Fougera & Co. toward the work of the American Medical Association through its Council on Pharmacy and Chemistry. Since a number of the products for which this firm is the selling agent are already advertised directly to the laity, this action is not to be wondered at. We wish to state again that the annual to be known as "'New and Nonofficial Remedies" is presumed to con-

tain, as nearly as possible, only those preparations intended solely for physicians' use. E. Fougera & Co., therefore, need have no fear regarding the listing of their preparations.



This advertisements, taken from the *Chicago Record-Herald,* Feb. 14, 1906, shows another one; there are others, but we have no more space to spare at this time.

BUCHANAN CANCER CURE

(From The Journal A. M. A., Aug. 28, 1909)

A correspondent submitted for analysis a "cancer paste" that had been manufactured and sold by the Buchanan Medical Co. of New York City. The only information available concerning the composition of the paste was that contained in a booklet formerly published by the manufacturer, in which it is stated:

"Chlorid of Chromium (ozonized; the cancer antidote). The liquid chlorid of chromium is added to pulverized bloodroot, or some other inert powder; is made into a paste of the consistency of tar . . ."

ANALYSIS

The sample was submitted to the Association laboratory, which reported as follows:

"The sample of Buchanan's Cancer Cure was a dark, brownish-red, pasty mass of about the consistency of tar. Its odor was not characteristic. Examination showed that chromium salts were not present. The active ingredient was found to be zinc chlorid. With this was mixed a finely ground vegetable powder and some mucilaginous substance. Glycerin, sugar, alkaloids, resins and fats were not found. The vegetable tissue

possessed the general structures of rhizomes and in some characters resembled bloodroot, but could not be identified positively. There was considerable starch present, but its identity could not be made out, since the structure of the starch grains had been destroyed, probably by the zinc chlorid. A red coloring matter was present. Further than a quantitative determination of zinc chlorid, an exhaustive chemical examination was not undertaken, although tests were made for a considerable number of substances which the nature of the remedy suggested. The analytical results are given herewith:

Anhydrous zinc chlorid	46.3 per cent.
Vegetable tissue, dry	9.2 per cent.
Mucilaginous matter	12.2 per cent.
Moisture	19.1 per cent.
Undetermined (starch, loss, etc.)	13.2 per cent."

Zinc chlorid mixed with an absorbent, such as flour, starch, powdered galangal, powdered althea, gypsum, etc., has been employed in the treatment of cancer for many years. The Buchanan remedy, therefore, evidently contains nothing new. It belongs to that great army of "wonderful new discoveries" which examination usually shows to be well-known remedies. The statement that the cancer antidote is "chlorid of chromium ozonized" is not only false but meaningless, no such product being known. It is evidently intended to mislead the unwary physician by the use of the term "ozonized."

THE BYE CANCER CURE*

(Abstracted from The Journal A. M. A., Oct. 16, 1909)

The B. F. Bye "cancer cure" has recently been put out of business by the postal authorities. Bye has been engaged in treating persons afflicted with cancer through the mails. When his methods were investigated it was found that the sanitarium he was supposed to have was purely imaginary. Bye is said to be a graduate of an extinct Indianapolis medical school and has never had any private practice. His entire medical experience has been gained in the mail order "cancer cure" business. In his advertisements, Bye led his victims to believe that he had discovered a combination of vegetable oils which would cure practically every case of cancer. For his "treatments" he asked $25, which if not accepted was later reduced to $12.50. The "cure" when analyzed by the govern-

* A description of this concern together with that of the Curry and Leach "cures" is reprinted in pamphlet form as it appeared in full in THE JOURNAL: "A Trio of Cancer Fakes," price four cents.

ment chemists was found to consist, essentially, of cotton seed oil and some ordinary tonics. To determine the percentage of "cures," the postoffice authorities investigated some 20 cases in which Bye's treatment had been used. It was found that but one of these patients claimed to have been cured, and in this one case a surgeon had removed the growth before the Bye treatment was undertaken, and the surgeon reported that the growth he removed was not cancerous. In recommending that a fraud order be issued against Bye, the assistant attorney-general summed up the case as follows: "According to the evidence submitted the medical profession knows of no drug or combination of drugs which can be relied on to cure cancer. That Dr. Bye has not succeeded where the profession has failed and that he is not honestly endeavoring to cure patients, but that his pretensions to have discovered a cure for this disease are false and fraudulent and asserted merely to deceive and defraud suffering humanity, is revealed by the analysis of his medicines and the finding that they are merely cotton seed oil and some ordinary tonics." The recommendation of the assistant attorney-general was followed and the fraud order issued.

COD-LIVER OIL PREPARATIONS

(Abstracted from The Journal A. M. A., Oct. 13, 1906, 1207)

The oily nature of cod-liver oil, imperfectly concealed in the more or less useful emulsions, is unpalatable to many, and this has given rise to other preparations that still more disguise the disagreeable character. The attempt has been carried to the extreme that in many of the preparations now on the market the oil has been entirely eliminated and nothing but the name left. On the whole we must conclude with Cushny that cod-liver oil has not been shown to have any action apart from that of an easily digested food, and the amount of fat a preparation contains will determine its worth or worthlessness. Any preparation which does not show fat or fatty acids is valueless as food. The preparations claiming to "represent" cod-liver oil are in liquid form, and if they contain oil it must be one of the following forms:

1. An emulsion of the oil which may be miscible with water, but from which the fat tends to separate and rise to the top. In this form the fat can be seen as globules under the microscope.

2. A solution, resulting from the saponification of the oil, containing a soap which usually will be alkaline in reaction, especially when mixed with water, and from which fatty acids are separated as a precipitate when the solution is acidified.

3. A solution of fatty acids. This will be acid in reaction and will be precipitated by the addition of water, in which the fatty acids are not soluble.

The term "metabolized" in Waterbury's Metabolized Cod-Liver Oil Compound is used by a manufacturer's license and does not correspond to the definition of the physiologists or the dictionaries. Hence the claim that it contains the metabolized product as obtained by the action of the pancreatic juice is misleading and the article is valueless for nutrition. Hagee's Cordial of Cod-Liver Oil Compound is said to "represent thirty-three per cent. of pure Norwegian cod-liver oil with other ingredients in perfect solution." The manufacturer unwittingly admits that it contains no oil when he says "it contains everything of value except the grease." Whatever there is in cod-liver oil of value except the grease is unknown to scientific medicine. There are other preparations called extracts of cod-liver oil, made not from the oil but from the cod livers instead. So far as is known, no satisfactory evidence exists to indicate that such extractives have any therapeutic value and they do not contain the fat which is the known active constituent of cod-liver oil.

THE CONFIDENCE OF QUACKS

Letters Sent Confidentially to Medical Fakers and How They Are Used

(From The Journal A. M. A., March 28, 1908)

We here reproduce a page from a pamphlet issued by the Guild Company, letter brokers, Nassau street, New York City. Says the circular:

> We conduct the largest letter brokerage business in the world, deal only in original letters, handle no lists, hence can guarantee that every letter we offer was written in response to an advertisement, and therefore gives the name, address and other valuable information regarding a person accustomed to dealing through the mails.
>
> In the case of medical letters you are immediately in possession of the names and addresses of sufferers from a particular disease or ailment and do not waste time and money aiming promiscuously at thousands of people of whom only a few are likely to be receptive of your proposition.

Medical Letters

AS we have millions of medical letters we can fill orders for any quantity from 1,000 up. Following is a list of some of the different classes of these letters that we can furnish promptly:

Asthma.	General Medical.
Blood Poison.	Hair Preparations.
Bust Developer.	Heart.
Cancer.	Kidney.
Catarrh.	Morphine.
Constipation.	Nervous Debility.
Consumption.	Obesity.
Deafness.	Paralysis.
Drunkenness.	Piles.
Dyspepsia.	Rheumatism.
Eczema.	Rupture.
Eye Troubles.	Syphilis.
Epilepsy.	Stomach.
Female Complaints.	Skin Disease.

Etc., Etc., Etc.

These letters were all written to well known and successful medical advertisers, and are a very profitable class of letters for anyone with a legitimate medical proposition to use.

If you have a medical proposition to get before the people it is most important that you should use original letters. By this plan you can avoid all waste of time and money, addressing only people who are interested in what you have to offer.

Write us for particulars and prices regarding the class of letters you are interested in.

Samuel Hopkins Adams, writing in *Collier's Weekly*, wisely said, referring to a similar list:

"If you have ever been foolish enough to write to any of the quacks and frauds in that list, you may know that your letter is now for sale. You may know that all the things you have said about your health and your person—intimate details which you carefully conceal from your friends and neighbors—are the property of any person who cares to pay four or five dollars for the letters of yourself and others like you."

DR. CURRY CANCER CURE COMPANY*

(Abstracted from The Journal A. M. A., Oct. 9, 1909)

This company was engaged in treating, through the mails, patients afflicted with cancer. R. W. Ramsey was its secretary and manager and the advertisements informed prospective patients that their letters might be sent to him if they preferred, in order to insure secrecy. The concern advertised to cure cancer in 10 days by means of "a discovery that has startled the medical world." It had, it claimed, "a sure cure for cancer, so sure that it can be absolutely guaranteed." When a victim answered an advertisement, pamphlets and testimonials were sent to him, together with a question blank, on which he was to indicate the symptoms of his disease. He was informed that by answering the questions on the blanks sent him the company would be able to study his case "from the standpoint of successful specialists." If no reply was received to this letter, the company sent a series of "follow-up" letters urging the prospective victim not to delay. In those cases in which the question blank was filled out, the company sent a victim a letter in which it stated that it could cure him permanently by its treatment in from ten to twenty days at a cost of $25. At its hearing the company submitted samples of the "remedies" by which these marvelous results were purported to be brought about. They were analyzed in the Department of Agriculture and found to consist of ordinary antiseptics, escharotics, tonics and laxatives. The assistant attorney-general in summing up his opinion of the whole matter said that the Dr. Curry Cancer Cure Company had not succeeded where the profession had failed and they were

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* A description of this concern together with that of the Bye and Leach "cures" is reprinted in pamphlet form as it appeared in full in THE JOURNAL: "A Trio of Cancer Fakes," price four cents.

not honestly endeavoring to cure patients. On the contrary, their pretensions to have discovered a cure for cancer were false and fraudulent. He recommended, therefore, that a fraud order be issued against the company and its manager, a recommendation which the postmaster-general accepted and the order was issued.

DIGITALIS AND ITS STANDARDIZATION

(Abstracted from The Journal A. M. A., June 12, 1909)

A bulletin from the Hygienic Laboratory of the Public Health and Marine-Hospital Service by C. W. Edmunds and Worth Hale deals with "The Physiologic Standardization of Digitalis." That different digitalis preparations of the same name vary greatly in strength is familar to all physicians who have used the drugs, and by physiologic methods these differences have been shown in both this country and Europe to be from 100 to 400 per cent. After discussing the causes of these differences in strength, the authors take up, from the historical standpoint, the subject of the physiologic testing of members of the digitalis series. They give a complete history of the development of this movement from the earliest writings on the subject down to the present time.

The second part of the bulletin takes up the examination into the accuracy of the various methods which are in vogue to-day for the standardization of members of the series. All of these methods with their different modifications are grouped into three classes. Preparations may be compared (1) by ascertaining the minimum fatal dose on animals; (2) by a comparison of their relative activity on the frog's heart, and (3) by their relative effects on the blood pressure of the higher animals. In all, eight methods of assay were employed illustrating these different groups. The specimens of digitalis, twelve in all, which were assayed by these different methods, were obtained in the open market and were made according to the United States Pharmacopeial directions, while others might be classed together as non-pharmacopeial or as proprietary preparations. The final section of the bulletin and that part which will perhaps interest the practicing physicians most, is concerned with the report on the various preparations of digitalis which were examined. To permit a comparison, these were all figured to uniform tincture or 10 per cent. strength.

A table is reproduced from the bulletin, which was prepared by adding together the rankings of each preparation as determined by each method of assay, and then dividing the sum by the number of assays. In the first place, no two methods of assay gave the same results—preparations which by one method might appear to be of the same strength, by a second method were shown to differ 100 per cent. A superficial comparison of all the tables seemed to demonstrate the apparent worthlessness of physiologic assay, but on closer examination the outlook did not appear so hopeless. Two of the preparations, "Digitol" and a "Concentrated" tincture, stood at the head of the list in practically every table. Four U. S. P. fluid extracts were found to be of quite uniform strength by several of the methods, and finally two preparations, Lloyd's "Specific medicine" and "Digitalone" stood at the foot of the list in practically every table, so that there was in general an agreement between the different methods.

THE HIBBARD CASE*

The Bellevue Medical Institute and the Boston Medical Institute

(Abstracted from The Journal A. M. A., Oct. 17, 1908)

Edward R. Hibbard of Oak Park, Ill., a suburb of Chicago, was found guilty of obtaining money through the mails by means of fraudulent pretenses. Hibbard conducted a so-called medical institute which had two names because it had two doors, each of which opened on a different street. One door was the entrance to the "Boston Medical Institute," the other the entrance to the "Bellevue Medical Institute," both occupying the same suite of rooms and carrying on the same business under the same set of employes and managers. Their object was advertised as the "medical treatment of the private diseases of men." The methods employed were those of other similar concerns; pamphlets with titles such as "The Army and Navy," "Vim of Life," "Perfect Manhood," etc., were scattered broadcast where they would be most likely to attract the attention of boys and young men. The first of these was the most adroit; it purports to give statistics comparing the army and navy of the United States with those of other powers, but contains articles on "Unnatural Habits," "Insane Asy-

* The matter here abstracted may be had in full in pamphlet form, price four cents.

lums," "Lost Manhood," "Spermatorrhea," etc., and a lot of "sworn testimonials" (unsigned) from grateful patients of the institute. In his correspondence with patients, Hibbard represented that he had a medical staff of eleven members, "including some of the most eminent physicians of America and Europe," but the testimony revealed a medical staff of two, one of them Dr. Edmondson, "shown by the investigations of the inspectors to be a man of mediocre ability, who is not recognized as a specialist and is without standing in his profession," and the other a Dr. Koehn, who would not allow his name to be publicly used in connection with the business and who gave not over half of each day to analyzing such specimens of urine as might be submitted by the patients. The report of the postmaster shows that the mail received averaged 250 letters a day, and the testimony of the clerks and stenographers shows that the instructions for the answers to those letters, and therefore the treatment of all the patients, were received from Dr. Edmondson. The compounding of the medicines sent out appears to have been largely, if not wholly, entrusted to an ex-sailor, without any special qualifications for the work, but who mixed up the medicines by the numbers or marks on the boxes. The patients were guaranteed a cure or return of their money, and encouraged to keep up the treatment as long as possible, but if they became dissatisfied and demanded their money back they were threatened with prosecution for defamation of character or blackmail. In order to secure the return of compromising correspondence the institute had forms printed on the backs of their letters for the patient to fill out, reporting progress, and to return. When Hibbard was asked to cite instances in which the patient's money was returned, according to the promises, he refused and gave as his reasons that the names of patients were held confidential. The government exhibit of letters threatening patients with public exposure is in startling contrast to this assertion. Some rather remarkable testimony of physicians for the defense is quoted. One of these, who claimed to have held prominent positions, said that most nervous specialists became insane and nervous wrecks, and cited several well-known physicians as instances of the truth of his assertion. One of those mentioned by him as now insane happens to have been dead several years. He himself claims to have treated as many nerve patients as any nerve specialist in Chicago.

Hibbard Pleads Guilty

(From The Journal A. M. A., Nov. 13, 1909)

The Boston Medical Institute and the Bellevue Medical Institute were two names used on separate entrances to a single quack concern in Chicago. The institute purported to treat the "private diseases of men," but a federal court decided that the busines was a scheme for obtaining money through the mails by means of fraudulent pretenses. E. R. Hibbard—who seemed to be the owner—was sentenced to two years' imprisonment and to pay a fine of $1,500 and costs. He, of course, appealed, and his case was remanded for a new trial. Recent issues of Chicago papers state that, rather than undergo the new trial, Hibbard has pleaded guilty. The government has decided that payment of the fine of $1,500 and costs would be sufficient punishment. Details of this concern appeared in THE JOURNAL, Oct. 17, 1908, and the matter has been reprinted in phamplet form.

HYDROCINE

Odoriferous Sugar as a Cure for Consumption

(Abstracted from The Journal A. M. A., Aug. 17, 1907, and Feb. 15, 1908)

This preparation is claimed to be a hyper-oxidized hydro-carbon (vegetable)." What "hyper-oxidized hydro-carbon (vegetable)" is, is hard to say. The analysis made for the American Medical Association by its chemists is as follows:

> "We have made a careful examination of the original package of Hydrocine and find that the average weight of the tablets is 29.5 grains. Of this, 95 per cent., or 28 grains, of the total of 29.5 grains, is cane sugar. Each tablet contains an average of 0.3 of a grain of a substance, insoluble in alcohol, containing nitrogenous matter. The indications are that this substance may be very impure pancreatin, that is, that this 0.3 of a grain may contain the 1/20 grain of pancreatin claimed to be present by the manufacturers. It also contains very small quantities of aromatic oils, and it is probably due to the fact that these oils, like turpentine, react with oxygen that it is claimed that the vegetable matter is 'hyper-oxidized.' The formula, however, mentions 'hyper-oxidized hydro-carbon.' Perhaps the manufacturers have reference to the rock sugar and mean carbohydrate, for there is probably no oxidation of the sugar, though it is probable that the aromatic oils present may be partially oxidized and changed in other ways after a time, but the

'hyper-oxidized hydro-carbon (vegetable) 28 grains' of the formula is an absurdity, particularly as the analysis shows that the tablet contains 28 grains of sugar. We do not believe that it is possible for such a substance as turpentine, for instance, when in contact with sucrose (cane sugar) to act as an oxidizing agent."

To sum up we have: A preparation, shown by analysis to be 95 per cent. cane sugar, put on the market to be retailed at a cost of $8 a pound (avoirdupois). The claim is made that by giving the preparation in 30-grain doses to the extent of one and a quarter ounces daily, tuberculosis can be "permanently cured" in "from six to sixteen weeks." To impress the unthinking, the main constituent in the formula is given a quasi-scientific name, meaningless in import. The exploiter of this "remedy" claims to have given up a practice yielding $10,000 annually "to spread the truth regarding this preparation"—and incidentally, we suspect, to reap the benefits that must accrue from selling sugar at over $5 a pound, wholesale.

Our chemist having translated for us into simpler language the statements as to the composition of the article, we, as physicians, should not find it difficult to interpret correctly the evidence on which the claims are based.

Oleozone—Oxydase—Cowles Institute

(From The Journal A. M. A., March 20, 1909)

A little over a year ago[1] we gave space to a fake cure for tuberculosis called Hydrocine, a product promoted by a Dr. C. S. Roberts. Hydrocine was advertised to be a "hyper-oxidized hydro-carbon," whatever that may be. An imposing analytic report of the product by a New York chemist was given, which, as we said at the time, read more like "a testimonial prepared at the request of the manufacturer."

HYDROCINE NINETY-FIVE PER CENT. SUGAR

As will be remembered, when examined in the laboratory of the American Medical Association, this "hyper-oxidized hydrocarbon" was found to be 95 per cent. *sugar!* To quote from the Association's laboratory report: "Each 29.5 grain Hydrocine tablet contains 28 grains of cane sugar and small quantities of volatile oils and a trace of pancreatin."

Hydrocine is no more, but the commercial possibilities in sugar as a therapeutic agent are still recognized. Phoenix-like,

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1. THE JOURNAL A. M. A., Aug. 17, 1907, and Feb. 15, 1908.

there have arisen from the ashes of Hydrocine two other "hyper-oxidized hydro-carbons"—Oxydase and Oleozone. In fact, there seems to be at present no fewer than three concerns which are "curing" tuberculosis by means of sugar *plus* various incidentals.

HYDROCINE—OLEOZONE—OXYDASE

Before Dr. Roberts "gave up a practice that was yielding . . . [him] an income of over $10,000.00 a year" to sell odoriferous sugar at $8.00 a pound, Hydrocine seems to have been manufactured by a Mr. E. C. Getsinger. It now seems that Getsinger and Roberts have parted company, for the country is being flooded with letters from Roberts in which he says:

> "In view of the fact that the party [Getsinger?] who formerly manufactured the old product for me . . . is now attempting to market it himself, I wish to avoid the danger arising from anyone confusing it with my improved treatment. For this reason I have adopted a new name, Oleozone (oil and oxygen), and under this title my new and vastly improved product will be marketed."

On the other hand Mr. Getsinger, who signs himself proprietor of the "Oxydase Company," and who, apparently, *is* the Oxydase Company, has attempted to checkmate Dr. Roberts by means of post-cards and other advertising matter. He says:

> "The chemical name of the compound is 'oxydized hydro-carbon' and later it was named 'Hydrocine.' In the present perfected form we present it to the profession under the name 'Oxydase'."

That there may be no mistake, the Oxydase Company sends out a printed post-card which begins:

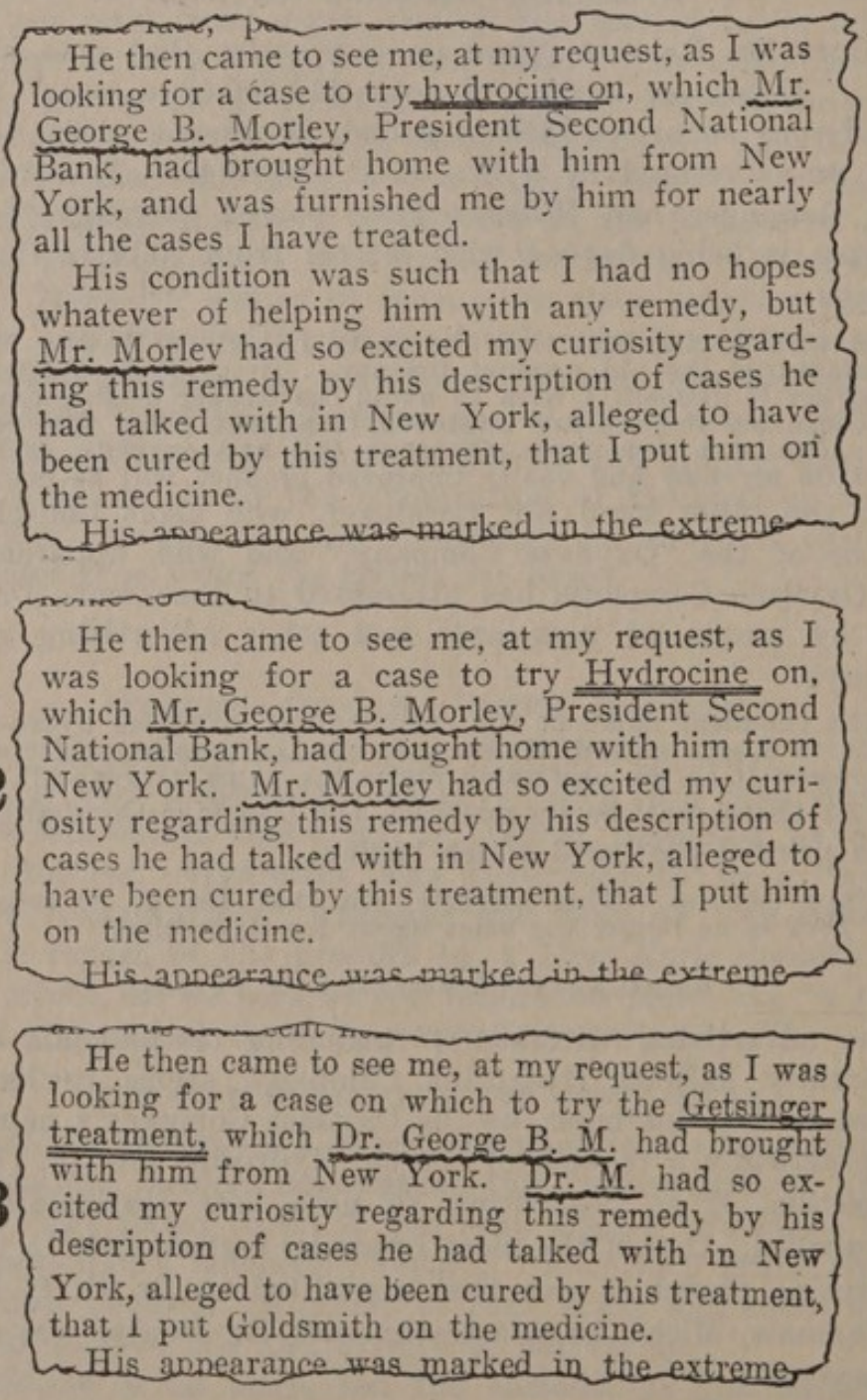
> "DEAR DOCTOR:—This informs you that Dr. C. S. Roberts of New York is no longer the sales agent for Hydrocine."

BRINGING TESTIMONIALS UP TO DATE

The advertising "literature," including testimonials of the apparently defunct Hydrocine Company, seems to have reverted to Mr. Getsinger, as the Oxydase Company's pamphlets are practically a re-hash of the old Hydrocine matter. In this connection, it is interesting to note how testimonials are overworked. One of the most imposing testimonials in the old Hydrocine pamphlet was that accredited to Dr. O. P. Barber of Saginaw, Mich. In this testimonial, Dr. Barber was quoted as saying:

> "I was looking for a case to try Hydrocine on, which Mr. George B. Morley, President Second National Bank, had brought home with him from New York, and was furnished me by him for nearly all the cases I have treated."

We called attention in our previous article to the somewhat unusual course of a physician administering a remedy of whose virtues he learned from the layman who furnished it. This objection can not be raised, however, to this same testimonial of Dr. Barber's as it now appears in the Oxydase "literature." While it is used practically verbatim, except for the substitu-



1

He then came to see me, at my request, as I was looking for a case to try hydrocine on, which Mr. George B. Morley, President Second National Bank, had brought home with him from New York, and was furnished me by him for nearly all the cases I have treated.

His condition was such that I had no hopes whatever of helping him with any remedy, but Mr. Morley had so excited my curiosity regarding this remedy by his description of cases he had talked with in New York, alleged to have been cured by this treatment, that I put him on the medicine.

His appearance was marked in the extreme

2

He then came to see me, at my request, as I was looking for a case to try Hydrocine on, which Mr. George B. Morley, President Second National Bank, had brought home with him from New York. Mr. Morley had so excited my curiosity regarding this remedy by his description of cases he had talked with in New York, alleged to have been cured by this treatment, that I put him on the medicine.

His appearance was marked in the extreme

3

He then came to see me, at my request, as I was looking for a case on which to try the Getsinger treatment, which Dr. George B. M. had brought with him from New York. Dr. M. had so excited my curiosity regarding this remedy by his description of cases he had talked with in New York, alleged to have been cured by this treatment, that I put Goldsmith on the medicine.

His appearance was marked in the extreme

The evolution of a testimonial. From the Goldsmith Case credited to Dr. O. P. Barber: 1, As it appeared in the earlier hydrocine pamphlets; 2, from the later hydrocine "literature"; 3, as it is now in the oxydase pamphlet.

tion of the term "Getsinger treatment" where "Hydrocine" used to appear, we find that the erstwhile bank president has assumed a professional *rôle,* and that "Mr. George B. Morley" has become "Dr. George B. M." We are loth to believe that a bank president would give up his highly reputable and not unlucrative business for the purpose of developing the therapeutic possibilities of rock candy—even though there may be money in it. Knowing what we do of testimonials and their value, it seems more reasonable to suppose that the transformation of the banker into a physician is merely an artistic touch on the part of those who adapted the Hydrocine advertisements to the Oxydase product.

THE NEW CHEMISTRY

Much stress is laid by the Oxydase Company on the statement that while their tablet is super-oxidized, the substitute tablet [Oleozone?] "is not oxidized." To prove (?) their point, the Oxydase Company says:

> "Place the tablet between tweezers, ignite with a match, then observe the *oxygen blue flame.* The sputtering is the *explosion of small quantities of Oxygen* as it is rapidly liberated. There is no smoke, *nor odor,* proving complete combustion." [Italics ours.—ED.]

This test, both from theoretical and practical considerations, deserves notice. Theoretically, because oxygen being, in air, an incombustible gas, can neither explode nor burn with a blue or any other kind of flame; practically, because, the statement to the contrary notwithstanding, there *was* some smoke and a distinct odor of burning sugar when a sample Oxydase tablet was ignited.

The "oxygenating" power of Oxydase and its varied therapeutic indications are set forth in the following weirdly constructed sentence:

> "With 20 remedial impulses in septemia within ten hours, or longer on the same dosage, is a formidable weapon in the hands of a physician—in cases of Typhoid Fever, and other sudden invasions of disease; in Croup, Pneumonia, Diphtheria, Asthma, Abscesses, Bronchitis, etc., Oxydase will give you surprising results."

OLEOZONE "STRICTLY ETHICAL"

In calling attention to his "improved Hydrocine," Dr. Roberts emphasizes that he is "distributing this remedy along strictly ethical lines only." In fact, he "will not even place it in drug stores, unless to accommodate a physician at his request." This course is somewhat of a departure from that which he followed in exploiting Hydrocine.

THE "COWLES INSTITUTE"

But Dr. Roberts and Mr. Getsinger are apparently not the only ones who dispense "oxygenated products." We have received letters from various parts of the country inquiring about a New York concern calling itself the "Cowles Institute." A pamphlet sent out by this "institute" has printed on the cover a red double-cross—a misuse of the international emblem of the campaign against tuberculosis that is as unwarranted as it should be illegal. On the title page we read:

> "Established for the treatment of tuberculosis in its various forms by entirely new and special methods of medication complying with the highest ethical standards, by which full recoveries in uncomplicated cases of tuberculosis are generally made in from six to nine months without the necessity of changing climate or enforcing severe or rigid hygienic-dietetic rules."

A SUBTLE REMEDY

The "entirely new and special methods of medication" is "by means of an easily digested specially oxygenated product that by regular process of assimilation conveys Atomic Oxygen in proper combination direct to the circulation. . . ." This wonderful remedy is far too subtle a product to distribute indiscriminately to the medical profession, much as the Cowles Institute would like to do so,

> "but owing to the necessity of keeping it under fixed conditions of light and temperature and of using it within a very limited period of time in order to obtain the proper results, it is manifestly impossible to do this."

We find, however, that the "treatment" is not to be entirely "cornered," as letters are sent to physicians stating that it is the desire of the "institute" to place the "oxygenated product" in the "hands of at least one competent physician in every community of consequence." To those physicians who have a tuberculous patient under their care, they would "be glad to send a sufficient quantity to demonstrate its value without any expense except express charges." As to what may be expected from this "treatment," the modest claim is made:

> "....practically 90 per cent. of the cases we take in the first and second stages of tuberculosis make a complete and apparently permanent recovery."

We have, then, apparently three concerns "curing" tuberculosis by means of sugar and essential oils, two of them operated by laymen. The similarity of the claims made, and of the methods pursued, by this trio of "consumption cures" is best shown by the quotations we have taken from the "literature" and correspondence of the three concerns and arranged in parallel columns.

We offer no apology for giving space to what may, at first thought, appear to be an insignificant matter. Reading be-

COMPARISON OF CLAIMS OF THE TRIO OF CONSUMPTION "CURES"

COWLES TREATMENT	GETSINGER TREATMENT (OXYDASE)	ROBERTS TREATMENT (OLEOZONE)
". . . composed of a base of *saccha-um* and two enzymes, one gastric and the ther *pancreatic.* To this . . . is dded the *highly oxygenated* active princi-al [sic] of the essential oils of *thymus, erebinthina* and eucalyptus with chlorophyl nd aromatics."	"Oxydase tablets contain Oils of Wintergreen, *Cinnamon, Peppermint, Coniin,* Sassafras, *Thyme* and *Turpentine* and *Sugar,* all *highly oxidized.*"	"Oleozone is prepared from the oxygenated principles of the oil of *cassia, coniin, peppermint,* spruce, myrtle, myrrh, marrubium, *turpentine* and *thymol* . . . combined with rock candy, *sugar* and *pancreatin.* . ."
". . . a safe, feasible method of apidly furnishing the blood with the ecessary oxygen properly combined. . ." "It is *non-toxic.* . ."	"Oxydase is . . . a prolific oxygenating agent in medicine. . ." ". . . *no toxic* dose possible. . ."	"It purveys a constant supply of oxygen to the blood. . ." ". . . a harmless compound . . . positively not injurious from prolonged use."
"Instruct patient to *avoid taking water* ithin *fifteen minutes before or after tak-ng* a tablet, as water in some cases, com-ined with the oils in the tablets, produce light nausea."	"Have patients drink milk at any time, *but not so with water,* which decomposes the tablet . . . causing cumulation and nausea."	*"Drink no water within fifteen minutes before or after taking* the tablets, as water disturbs the oils in the tablet."
". . . during the first week of treat-ment . . . the sputum may be *tinged ith blood* and the patient complain of light *shooting pains* or *tingling sensations* hroughout the infected area."	"Twenty days thereafter . . . dull, *twinging pains* over infiltrated *areas; tinges of blood in sputum.*"	"Soon *twinges* of *pain* and great soreness in the chest may be noticed, with perhaps *tinges of blood in the sputum.*"
". . . full recoveries in uncomplicated ases of tuberculosis are generally made in rom *six to nine months.* . ."	"Course of treatment lasts from *six to twelve weeks.*"	". . . this new treatment requires only *six to sixteen weeks* to perfect a permanent cure. . ."
". . . the oxygenated products em-loyed in our treatment . . . are un-btainable elsewhere. . . Neither are hey similar in characteristics or action to ny other so-called oxygenated products hat may be on the market."	"There are substitute hydro-carbon treatments now being exploited which are not an oxidized product."	". . . the party who formerly manufactured the old product for me . . . is now attempting to market it himself. I wish to avoid the danger arising from anyone confusing it with my improved treatment."
"In Pneumonia we find this tablet un-oubtedly a specific for this disease."	"in . . . Pneumonia . . . Oxydase will give you surprising results."	"in cases of acute Pneumonia it will cure them so quick that it will surprise you."

tween the lines in some of the letters of enquiry we have received regarding these "cures," there seems little doubt that at least some of these physicians have been "almost persuaded" to use them. There are now at least three concerns, where there was originally only one, engaged in exploiting "sugar and essential oils" as a cure for tuberculosis. This in itself proves that physicians are using these "cures" and making them commercially profitable, for so far as we know, they are advertised only to the medical profession.

HOFF'S CURE FOR CONSUMPTION

(From The Journal A. M. A., Feb. 6, 1909)

Several inquiries regarding the composition of "Professor Hoff's Cure for Consumption" having been received, the chemical examination of this preparation was taken up in the Association laboratory. The following is the report of the analysis:

Professor Hoff's Cure for Consumption, manufactured by Bendiner & Schlesinger, Third Avenue and Tenth Street, New York, is a dark brown liquid with a bitter taste and an odor of opium. The label on the bottle—at least since the advent of the Food and Drugs Act—states that the preparation "contains, in addition to other valuable medicaments, watery extract of opium 2 grs. to each ounce." Besides opium the preparation was found to contain approximately 2.5 gm. sodium cinnamate to each 100 c.c., sugar and a caramel-like coloring. The presence of heavy metals, iodids or bromids, could not be demonstrated.

The "Cure," then, consists essentially of sodium cinnamate (hetol) and extract of opium, a mixture at one time suggested for the treatment of tuberculosis, but which like many remedies has since been discarded. A remedy which depends on opium for whatever therapeutic effect it may have, is, when sold indiscriminately to the laity, inherently vicious.

THE INTERNATIONAL INSTITUTE*

A Fake Consumption Cure

(Abstracted from The Journal A. M. A., Dec. 12, 1908, and Jan. 16, 1909)

The International Institute for the Treatment of Tuberculosis, a Chicago concern which accepts "any case with sufficient vitality to turn over in bed," and promises that "all may expect ultimate recovery excepting those who have serious

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* A full account of this concern is reprinted in pamphlet form, price four cents.

complications below the diaphragm," is the offspring of one Orlando Edgar Miller. The minimum charge for "treatment" at the "institute" is $250.00 and $25.00 a week additional for hospital expenses. The "treatment" is said to be "a combination of purely vegetable substances, which, administered hypodermically, produces three effects on the system, viz., Sleep, Relaxation and Elimination." What the "purely vegetable substances" are which produce such marvellous cures the "institute" does not disclose, as "there are very serious reasons why promiscuous experimentation should not be carried on by physicians unacquainted with the actions of one of the drugs." The "inventor" of the "treatment"—O. E. Miller— is not a physician, but for some years he ran a "rupture cure" concern which was advertised widely. Later he organized the St. Luke's Society of Chicago for treating drug addicts, and after a disastrous fire in which many of his patients lost their lives, he started a "university" with a "sanitarium" annex, in a suburb of Chicago. A number of the "institute's" cases were investigated. One of these was that of the son of the business manager of the concern, whose case had been made the subject of a widely distributed "Case Report." While according to the "report" the young man was practically well, the fact is that he recently died of tuberculosis.

Some light is thrown on one of the earlier episodes in Miller's attempt to get his "cure" before the public in a letter sent to THE JOURNAL by the physician in charge of the Cook County Hospital for Consumptives. It appears that 11 men from the Dunning institution took the O. E. Miller "treatment" with the results that 6 are dead, 2 are unaccounted for and 3 are in advanced stages of tuberculosis. THE JOURNAL then gives the results of its investigation of 51 consecutive cases of tuberculosis, in which the patients received the Miller "treatment." Definite information was received of 36 of the patients, 25 of whom were dead. Of the 11 living, 4 might be said to be in dying condition, and the others are "weak," "aphonic," or "very low," as the case may be. What the "treatment" actually seems to accomplish is to hasten the dissolution of the unfortunate victims taking it.

[From information received after the publication of the last article in THE JOURNAL on the International Institute, the mortality on May 1, 1909, was as follows:

Number of patients reported	62
Number of cases investigated	49
Number of patients that died	41
Number of patients in terminal stage	8
Number of patients unaccounted for	13]

THE KALMUS CASE*

The Epileptic Institute Company and The Hamilton Dispensary

(Abstracted from The Journal A. M. A., Nov. 28, 1908)

A pseudo-medical institution operated by one Otto Kalmus of Cincinnati was investigated by the postoffice authorities and a fraud order issued against it was known as the Epileptic Institute. In the report by the assistant attorney-general for the postmaster-general it was shown that it snared its customers by advertisements and by circulars containing extravagant representations of the success of the methods employed. These circulars were addressed to persons named on mailing lists purchased from, in the words of the inspector, "other concerns that have obtained all of the money possible from such unfortunates without effecting a cure." If replies were received, often after more or less persistent sending, a stock diagnosis, varying only in the name of the patient, the alleged variety of epilepsy and the price of the medicine, was usually sent together with a package of medicine, to be paid for on delivery. If the medicine was not at once accepted and paid for, a series of letters were sent urging its acceptance and the importance of not missing the opportunity offered to secure this valuable treatment. The patients were urged to continue the treatment for from a year to a year and a half or longer; the charge varying from about $3 to $9 a month, according to the patient's willingness and ability to pay. The so-called "Schönka" treatment advertised by this concern, is based on the bromids, special virtues being claimed for their combination with the drug adonis vernalis in the medicines used.

The inspector's report gives testimonials from authorities as to the effects of the drugs; he was unable to learn of any cures that had been effected. The testimonials published by the concern appear to have been obtained after direct or indirect solicitation from patients while under treatment. In one instance the patient was given free treatment for his testimonial, and in another the present of a silver watch was used as an inducement. The alleged "skilled specialists" employed by the concern seem to have been three men of very questionable or no standing in the profession. Other misrepresentations exposed in the inspector's report are those made as to the harmlessness of the drugs as used, their costliness, etc. The institute, as the inspector was informed, had treated

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* The article here abstracted is reprinted in full in pamphlet form, price four cents.

about 6,000 persons before it was deprived of the use of the mails.

After the fraud order had been issued against this concern, its promoter, Otto Kalmus, at once attempted to evade the effects of the order by starting the same scheme under another name—the Hamilton Dispensary. The postoffice authorities again took up the matter and not only was a fraud order against the Epileptic Institute Company extended to cover the mail addressed to the Hamilton Company, but criminal proceedings were instituted against Kalmus.

THE LEACH CANCER CURE*

(Abstracted from The Journal A. M. A., Nov. 6, 1909)

Another of the numerous "cancer cure" fakes which the postal authorities have exposed, is that of L. T. Leach and his "cure," Cancerol. Leach is said to be the son-in-law of D. M. Bye, who some time ago operated a similar business in which Leach was employed in the capacity of manager; later Leach started a "cure" of his own. When a prospective victim answered one of Leach's advertisements he was sent a pamphlet and other matter which conveyed the impression that Leach had discovered and offered a treatment which would cure practically all cases of cancer. The cost of the treatment was $25 a month. When the medicines which Leach used in his business were analyzed by the government chemists, they were found to consist essentially of cottonseed oil (Cancerol) and simple tonics. The inspector obtained the names of persons who had paid money to Leach, and by correspondence received reports of the results of the treatment in about forty instances. Examination revealed that but seven out of the forty claimed to have been cured, and that in but two cases was the patient examined by a local physician who diagnosed the trouble as cancer. In eighteen other instances in which the local physician had examined the patient and stated that the trouble was cancer, the patients found no benefit from the treatment. In no case had there been a microscopic examination of the growth, so that it cannot be positively said that in any case the disease was a true cancer. After showing the mendacity of Leach's claims, the valuelessness

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* A description of this concern together with that of the Bye and Curry "cures" is reprinted in pamphlet form as it appeared in full in THE JOURNAL: "A Trio of Cancer Fakes," price four cents.

of his medicines and the worthlessness of his "cures" the assistant attorney-general thus sums up the case against this man as follows: "Dr. Leach's pretense that he can properly diagnose cases of cancer, and prescribe remedies for them without personal examination merely by this correspondence scheme is without any scientific or proved foundation, and he must well know that it is mere pretense. What is undoubtedly the fact that out of the many cases submitted to him and diagnosed by him as cancer, there are some which are not cancer at all, but simply non-malignant sores which in some instances yield to the treatment, is what affords him a basis on the recovery of such cases to claim that he has cured cancer." The postmaster-general on the recommendation of the assistant attorney-general, issued a fraud order against Leach.

LEHN & FINK'S METHODS

How They Advertise and How the Testimonial Market Is Supplied

(Abstracted from The Journal A. M. A., Feb. 29, 1908)

Communications were received by THE JOURNAL from two physicians, in different parts of the country. One correspondent enclosed a letter showing the firm's methods of reaching physicians; the other shows the attitude of Lehn and Fink toward the public. The letter to the physician first refers to an article written by him in which he mentioned phenolphthalein, and then goes on to say:

> From the wording of this portion we infer that you may have mentioned the preparation Purgen also, and that probably the editor cut it out when the article was published, in fact, we have been told as much. Under separate cover we are sending you the latest issue of our publication, *"Notes on New Remedies,"* which is just off the press. We should have been very pleased to reprint in full your paper in our "Notes" had it not been mutilated in the way we assume. We accordingly desire to ask if you cannot find it within your time and inclination to prepare an original communication, treating of the use of Purgen in intestinal troubles, for publication in the next issue of *'Notes.'* We should value such a paper highly, and we are sure our readers, who number some 16,000 among the most representative of the medical profession, would likewise appreciate the information that you may give. Our customary remuneration for papers of this character is $10.00 per printed page, which we are pleased to offer you if the offer meets with your approval.

THE JOURNAL'S other correspondent writes that pamphlets advertising "Piperazine Water" were sent to one of his patients. One pamphlet contained an article by Dr. Edward P. Adams, and stated in a footnote that Dr. Adams is at liberty to give advice by mail. Commenting on these commu-

nications THE JOURNAL says that this causes one to wonder whether the twelve-page disquisition on the "Treatment of Gout and Rheumatism with Piperazine," by Dr. Edward P. Adams, in *Notes on New Remedies*, is really what it purports to be, a scientific article of general interest to the medical profession or merely a $120 testimonial made to order "by request." One is doubly suspicious, too, that the four-page article in the same publication on "The Internal Treatment of Gonorrhea" (with Gonosan), represents but $40 worth of "copy." This Gonosan testimonial was written by the renowned A. H. Ohmann-Dumesnil, A.M., M.E., M.D., Ph.D., etc., editor of the, now defunct, *St. Louis Medical and Surgical Journal* of unsavory reputation. Possibly, however, Lehn & Fink vary their schedule of rates for such testimonials according to the professional standing of the authors furnishing them.

MADAME YALE'S PREPARATIONS

The Latest Series of Nostrums Officially Demonstrated to be Humbugs

(From The Journal A. M. A., Aug. 14, 1909)

A few of the convictions under the Food and Drugs Act have been noted in THE JOURNAL, April 24, 1909. One of the latest "notices of judgment" emanating from the Board of Food and Drug Inspection at Washington refers to the misbranding of a number of preparations marketed by one Maude Yale Bishop Wilson, of New York City, who rejoices in the euphonious trade name of "Mme. Yale."

MME. YALE'S EXCELSIOR SKIN FOOD

One of the preparations was known as "Mme. Yale's Excelsior Skin Food" and was advertised as "a marvelous nourishing product that feeds through the pores of the skin. . . . Can not be duplicated as it is compounded by Madam Yale personally and protected by a chemical secret. . . . The only genuine skin food in the world. It is absolutely guaranteed to remove wrinkles and every trace of age from the face of all who use it."

The government chemist analyzed this "marvelous" product and found that "it consisted of 76.5 per cent. of vaselin which was mixed with fixed oil or fat and zinc oxid, colored with a pink dye and perfumed."

MME. YALE'S EXCELSIOR FRUITCURA

Mme. Yale's Excelsior Fruitcura is, according to madam, herself, "primarily 'Woman's Tonic,' a cure for every ill to which she is sexually heir from Infancy to Old Age. It is Nature's prompt omnipotent Restorative—a Specific for the Generative Organs—Fruitcura cures the so-called 'Incurable.' It is an Elixir of Life—It prevents and cures Prolapsus or Falling of the Womb and all Displacements of Womb or Ovaries."

This also was analyzed and found to consist "of 76.97 per cent. of volatile matter (largely water with 16.66 per cent. of alcohol by volume), 29.71 per cent. of sugar and small quantities of plant drugs."

MME. YALE'S FERTILIZER TABLETS

Still another preparation was "Mme. Yale's Fertilizer Tablets," which were recommended as "A Cure for Obesity" and "A specific for curing . . . all Gastric troubles." The government chemist said that "the tablets were very largely composed of charcoal compounded with potassium bitartrate and sugar."

MME. YALE'S EXCELSIOR HAIR TONIC

"Mme. Yale's Excelsior Hair Tonic" was found to consist "of 15.56 per cent. of alcohol by weight, 82 per cent. of water and small amounts of glycerin, perfumed with bergamot oil." If "Mme. Yale" is to be believed, this mixture of alcohol and glycerin "stops hair falling, cures and prevents Dandruff and all Scalp Diseases and overcomes any hereditary tendency to Baldness or Grayness."

MME. YALE'S EXCELSIOR COMPLEXION BLEACH

Another of the Madam's preparations was claimed to "remove moth patches and all skin discoloration" and in addition "creates natural beauty." But that is not all: "It purifies the entire skin, penetrating its remotest recesses—invigorates nerves, muscles and ligaments—makes the flesh firm and searches out and expels every impurity. Its compound is a chemical secret known only to Madam Yale."

No longer is it a secret for we read "the analysis of the . . . Complexion Bleach, disclosed that it was mainly a saturated solution of borax in orange flower water."

MME. YALE'S ANTISEPTIC

"Mme. Yale's Antiseptic" was also alleged to possess remarkable properties. "Used in the bath is a sure cure and preventive of . . . all diseases of the skin and scalp. It is a perfect Disinfectant, Deodorant, Germicide, Prophylactic and Antiseptic, destructive of all disease germs, bacilli and all bacteria of micro-organisms [*sic*] yet it is 'non-toxic.'" In addition it was a "Sure preventive of typhoid fever."

This destroyer of "all bacteria of micro-organisms" was analyzed by the Bureau of Chemistry and found to consist "of 97.6 per cent. of volatile matter (16.96 per cent. of alcohol by weight, 4 per cent. of formaldehyd, and water), 2.37 per cent. of boracic acid and aromatics."

MME. YALE'S BLUSH OF YOUTH

"Blush of youth is refreshing as concentrated dew, pure as purity—It overcomes all inactivity and imperfection of the skin and underlying structure; spiritualizes the expression and gives the countenance the glow, luster and beauty of Childhood and preserves the morning of life indefinitely." "Blush of Youth" it should be explained is but one more of Mme. Yale's marvelous preparations.

For those who, like Ponce de Leon of old, are looking for something in this line, the analysis of the government chemist may prove interesting: "Mme. Yale's Blush of Youth . . . consisted of 56.15 per cent. of volatile matter (6.30 per cent. of alcohol by weight and 49.85 per cent. of water, colored with a cold tar dye and perfumed), and about 43.85 per cent. of glycerin." This would seem to show that the long-sought fountain of eternal youth consists essentially of a mixture of water and glycerin, with a dash of alcohol.

These various preparations, comprising in all over eighty dozen packages, had been shipped to S. Kann Sons & Co., Washington, D. C., by "Mme. Yale." They were seized by the government and samples of the various preparations were subjected to analyses in the Bureau of Chemistry of the Department of Agriculture. By comparing the analyses with the statements on the labels and circulars enclosed with the several preparations "it was apparent that these statements were false, misleading and deceptive and the preparations misbranded within the meaning of Section 8 of the Food and Drugs Act of June 30, 1906." These preparations of "Madam Yale's" thus furnish the latest addition to the government's galaxy of officially demonstrated humbugs.

MEAT EXTRACTS AND MEAT JUICES

Their Composition and Relative Values

(From The Journal A. M. A., Jan. 23, 1908)

The Bureau of Chemistry of the Department of Agriculture has recently given in Bulletin No. 114 much new and valuable data regarding the commercial meat products. The work contained in this bulletin is practically an elaboration or continuation of that published in THE JOURNAL of May 11, 1907, p. 1612. It was taken up to determine the condition and quality of meat preparations in general and from the results obtained to prepare tentative standards for the preparation and composition of such meat preparations. The results as well as the methods of analysis of many meat products are given, showing the composition and relative value of the various preparations. The comments of many investigators regarding the food value of such products is also a valuable contribution to the knowledge of meat extracts, and will help in deciding the real value of the preparations.

The preparations taken up are divided into three general classes: (1) Solid and Fluid Meat Extracts; (2) Meat Juices; (3) Miscellaneous Preparations. For each of these the tentative standards submitted by the Committee on Food Standards of the Association of Official Agricultural Chemists are given along with the tabulated results of the chemical analysis. The preparations examined showed, for the most part, that they conformed to the standards, and only those which are at variance in one or more particulars will be mentioned in this review.

SOLID MEAT EXTRACTS

For solid meat extracts the following are the requirements:

"Meat extract is the product obtained by extracting meat with boiling water and concentrating the liquid portion by evaporation after removal of fat, and contains not less than 75 per cent. total solids of which not over 27 per cent. is ash and not over 12 per cent. is sodium chlorid (calculated from the total chlorin present), not over 0.6 per cent. is fat and not less than 7 per cent. is nitrogen. The nitrogenous compounds contain not less than 40 per cent. of meat bases and not less than 10 per cent. of kreatin."

With the above as the standard, several of the solid meat extract preparations examined were not up to grade on one or more points, though in some cases it is true they were very slightly below the standard set. The following products

were found wanting in some respects and the requirements which they failed to meet are given:

"Rex" Brand Beef Extract (Cudahy Packing Co., Omaha) contained 26.50 per cent. water instead of the standard 25 per cent.

Extract of Beef Premier (Libby, McNeill & Libby, Chicago) contained 30.92 per cent. of ash instead of the standard 27 per cent.; 18.32 per cent. of sodium chlorid (standard, 12 per cent.); 6.02 of nitrogen (standard, 7 per cent.).

Beef Extract (Swift & Co., Chicago) contained 13.51 per cent. sodium chlorid (standard, 12 per cent.); 6.60 per cent. nitrogen (standard, 7 per cent.).

Beef Extract, Coin Special (G. H. Hammond Co., Hammond, Ind.) contains 13.25 per cent. of sodium chlorid (standard, 12 per cent.); and 6.86 per cent. nitrogen (standard, 7 per cent.).

With these few exceptions, the solid meat extracts were found to comply with the standards given.

FLUID MEAT EXTRACTS

For fluid meat extract the following standards have been suggested:

"Fluid meat extract is identical with meat extract except that it is concentrated to a lower degree and contains not more than 75 per cent. and not less than 50 per cent. of total solids."

According to this standard all excepting one of the fluid meat extracts examined were found to be below grade in one respect, that of solids. The following are preparations examined and the percentage of solids found:

	Per cent.
Concentrated Fluid Beef Extract (Armour & Co., Chicago)	42.25
Meat Juice (Valentine's Meat Juice Co., Richmond, Va.)	42.36
Beef Juice (John Wyeth & Bro., Philadelphia)	41.16
Vigoral (Armour & Co., Chicago)	50.06
"Rex" Fluid Beef Extract (Cudahy Packing Co., Omaha)	44.01
Fluid Extract of Beef (Cibilis Co., New York)	35.37
Fluid Beef Jelly (Mcsquera-Julia Food Co., Detroit)	31.03

Special notice is directed to the price of some of these preparations, which in spite of their large water content, are higher priced than some of the solid meat extracts.

MEAT JUICES

The following is given as the standard for preparations of meat juice:

"Meat juice . . . is the fluid portion of muscle fiber obtained by pressure or otherwise, and may be concentrated by evaporation at a temperature below the coagulating point of the soluble proteids. The solids contain not more than 15 per cent. of ash, not more than 2.5 per cent. of sodium chlorid (calculated from the total chlorin present), not more than 4 per cent. nor less than 2 per cent. of phosphoric acid (P_2O_5), and not less than 12 per cent. of nitrogen. The nitrogenous bodies contain not less than 35 per cent. of coagulable proteids and not more than 40 per cent. of meat bases."

It is especially noticeable among the meat juices, so called, that none shows any appreciable amount of coagulable proteids. Valentine's Meat Juice and Wyeth's Beef Juice, besides being below the standard in total solids as fluid extracts, are misbranded when called meat or beef juices, as can readily be seen by comparing the results of the analyses and the standard.

Wyeth's Beef Juice is advertised as containing "all the albuminous principles of beef in an active and soluble form" and "in an unaltered form"—two statements that are on the face of them untrue and misleading. To say that all the albuminous principles of meat are present is to say that not only the juice of the meat but all the fiber is present, which evidently is not true. Then, again, to say that it is present in an unaltered form is far from the facts, for, as is stated on page 18 of the Bulletin: "It appears impracticable to prepare a true meat juice for market, as the temperature necessary for the preservation of food products in hermetically sealed packages coagulates the proteids and changes the nature of the product." On page 55: "When prepared under the best possible conditions a commercial meat extract is, of necessity, in order that it may not spoil, deprived of the greater part of the coagulable proteids, which constitute the chief nutritious elements of the juice."

On examining the tables of analysis, it is seen that Wyeth's Beef Juice contains but 23 per cent. of its total proteids in a coagulable form, while the standard calls for 35 per cent., thus showing it to be no more valuable as a food product than any other so-called meat juice, the statements of the manufacturers to the contrary notwithstanding.

In the case of Valentine's Meat Juice we note a large discrepancy between the standard requirements and the results of the government analysis, for instead of the proteid matter containing 35 per cent. in the coagulable form, it contains but 1.6 per cent. These figures show, then, that Valentine's preparation contains practically no coagulable proteids, and since the quantity of these measures the food value of such preparations, the conclusion must be drawn that Valentine's Meat Juice has practically no value as a food and should certainly not be classed as a meat juice.

Bovinine, another widely advertised meat preparation, which, according to statements on "The Bovinine Co.'s" letter head, is "a concentrated beef juice" and "the only perfect food in the world," was analyzed and found below the standard set for meat juices, since it contains only 3.38 per cent. of coagulable proteids. Yet in spite of this discrepancy, the manufacturers of Bovinine persist in exploiting it as a food, stating it to be " . . . a concentrated easily assimilable, nitrogenous food," and in another place it is stated that Bovinine "is an ideal food." As it is deficient in coagulable proteids and thus below the requirements as a food, it is misbranded when called a food of any sort, for to quote again the Bulletin, page 55: " . . . meat extracts . . . must not be looked on as representing in any notable degree the food value of the beef or other meat from which they are derived"; and, again: "They are not, however, concentrated foods, having, on the contrary, but comparatively little nutritive value."

Taken individually or as a class, meat extracts are not to be considered as foods, and should, therefore, not be advertised as such, a conclusion which the government officials have come to and voiced in the conclusion of the Bulletin as follows:

VALUE AND LIMITATIONS

"It seems to be the consensus of opinion among scientific investigators who have studied this question that the food value of these meat extracts is rather limited, and although they are a source of energy to the body they must not be looked on as representing in any notable degree the food value of the beef or other meat from which they are derived. When prepared under the best possible conditions a commercial meat extract is of necessity, in order that it may not spoil, deprived of the greater part of the coagulable proteids, which constitute the chief nutritious elements of the juice."

MERCOL

(Abstracted from The Journal A. M. A., Jan. 16, 1909)

R. Hunt and A. Seidell, Washington, D. C., report the result of an examination of a preparation called Howell's Mercol, manufactured by H. B. Howell & Co., Ltd., New Orleans, and claimed to be a 1 per cent. solution of mercuric iodid in a non-irritating neutral menstruum, and recommended for hypodermic use in the treatment of syphilis. Their examination indicates, as they say, "that although the manufacturers of Mercol may have used a mercuric iodid in its preparation, they have not succeeded in obtaining a 1 per cent. solution of this compound in their 'non-irritating neutral menstruum.' It is furthermore evident that the sample examined as above outlined contains none, or at most, only traces of biniodid of mercury." It is stating it mildly to say that a manufacturer is careless who claims to make an efficient preparation of what is almost a specific for one of the most serious of diseases but which contains practically none of the essential active ingredient.

The Component Parts and the Finished Product

(Abstracted from The Journal A. M. A., May 15, 1909)

After the appearance of the first article, a physician wrote stating he had seen mercol manufactured, following the process in detail and had himself weighed out a sufficient quantity of mercuric iodid to produce a 1 per cent. solution. He protested that the firm "had no desire to foist on the medical profession or the public a fraud." With his letter he sent a sample of the particular batch of Mercol which he had seen manufactured. This sample was analyzed with the same care and thoroughness that the previous sample had been, and the practical absence of mercuric iodid was again demonstrated. While THE JOURNAL does not question the honesty and good faith of either the manufacturers or the physician it maintains that claims for remedial agent should be based on the finished product rather than on the component parts used in its manufacture. Without attempting to explain what has become of the mercuric iodid, it insists that the important fact, and the one that vitally concerns both patient and physician, is that the finished product fails to contain it. If the manufacturer has made an honest mistake in supposing he could produce a 1 per cent. solution of mercuric iodid in liquid petrolatum, he will doubtless see that the mistake is

corrected. If, on the other hand, he is governed by commercial considerations only, the misrepresentation will probably be perpetuated.

MORE CONCERNS DECLARED FRAUDULENT

The Wilson Consumption Cure and the Soluble Sulphur Company Come Under Postoffice Ban

(From The Journal A. M. A., Jan. 2, 1909)

THE "REV. EDWARD A. WILSON" CONSUMPTION "CURE"

A fraud order has been issued by the postoffice authorities against a concern engaged in the "consumption cure" business under the name of Rev. Edward A. Wilson. The individual conducting the business was one C. A. Abbott of Brooklyn, the Rev. Mr. Wilson being a hypothetical personage whose name was used as an advertising "blind." Advertisements were published in newspapers, chiefly in those with a rural circulation, in which the Rev. Mr. Wilson informed the afflicted that "having been restored to health by simple means after suffering for several years with . . . consumption" he was "anxious to make known to fellow sufferers the means of cure." This he offered to do by sending free of charge to all applicants, "a copy of the prescription used, which they will find a cure for consumption, asthma, catarrh, bronchitis" and several other conditions.

Those who answered this advertisement received a large amount of printed matter purporting to come from the Rev. Mr. Wilson. In this the reverend gentleman explained how, when in charge of a church in Maine, he contracted tuberculosis and after trying various treatment, was finally cured by a famous Dr. Churchill of Paris, France. The prescription to which he owed his life he was giving away free in a spirit of thankfulness. But in view of the difficulty experienced in having many druggists fill the prescription, he had imported large quantities of the ingredients direct from Dr. Churchill himself, had had them compounded by a competent chemist, and was prepared to furnish a three weeks' supply of the same to any one who would send him $3.00, including six or twelve cents for postage. As the prescription contained as its essential ingredient "Extract of Blodgetti"—a drug whose existence was as immaterial as that of the Rev. Mr. Wilson — the difficulty in getting it filled was not overestimated.

Investigation showed that there was no "Rev. Wilson"; that the ingredients were not imported; that they were compounded by Abbott himself, who was not a chemist; that there was no "Extract of Blodgetti," and that the advertising "literature" was false and misleading in every respect. Hence the fraud order.

THE OHIO SOLUBLE SULPHUR COMPANY

The Ohio Soluble Sulphur Company of Greenville, Ohio, is another concern that has been suppressed as fraudulent by the postoffice authorities in spite of the efforts of the Physiologic Elements Co., of New York City, whose manager, H. M. Munsell, appeared in behalf of the Ohio company. The Ohio Soluble Sulphur Company also used an imaginary individual in its process of relieving the gullible sick of their money. "F. M. Hill, the world's greatest physiologic chemist" was the straw man in this case, and what Chemist Hill had not discovered in the realm of science—according to the advertisements—was too trivial to mention. But his greatest discovery was the process for making sulphur soluble, a discovery that "meant death to all malignant diseases" and "pure blood for every affected being in the land"—that is, providing such beings could pay $2.00 for a two-ounce bottle. Soluble Sulphur, it should be said, was not a drug or medicine, but a "physiologic element."

> "Whatever you may be suffering from, whatever your ills, whether the disease is of bacterial origin, like consumption, or of some chemical origin in the blood like rheumatism, Soluble Sulphur will cure you. There is no disputing this. It is a fact."

The number of morbid conditions in which Soluble Sulphur was indicated is simply marvelous. Space forbids us to list them; it would be easier to detail the pathologic conditions for which it is *not* recommended. Apparently, it is valueless in cases of housemaid's knee or soft corns — in all other morbid states, use it. The omission of these two afflictions, however, should possibly be taken as an oversight rather than as indicating any possible limitation to the therapeutic value of the remedy.

The Bureau of Chemistry, Department of Agriculture, analyzed this preparation and found that the amount of sulphur was less than one-half of 1 per cent.—to be exact, 0.42 per cent. Ninety-eight per cent. of the "remedy" was glycerin. In fact, the public was apparently paying $2.00 for two ounces of glycerin, in which was dissolved a minute amount of ichthyol. This, then, was the wonderful new preparation

that was advertised to "positively cure" cancer, rheumatism, sore eyes, barber's itch, spinal meningitis, and other diseases too numerous to mention, and to "destroy blackheads, beautify the complexion, and make the hair soft and glossy."

Fake testimonials were used, of course, and these combined with the false claims and the exploitation of the hypothetical Chemist Hill were the means of the Ohio Soluble Sulphur Company's undoing. The business conducted by this concern was declared to be "a scheme and device for obtaining money through the mails by means of false and fraudulent pretenses, representations and promises," and was therefore suppressed by the postoffice department.

OXYDONOR

A Fake Cure and What the Courts Think of It

(From the Journal A. M. A., Nov. 13, 1909)

Of therapeutic fakes there are, in the main, two kinds—medicinal and anti-medicinal. The individuals who get "bitten" on the former frequently turn to the latter, for credulity must have an outlet. One of the most impudent fakes of the anti-medicinal type is the "Oxydonor," which was foisted on a long-suffering but easily humbugged public by one "Dr." Hercules Sanche. This modern Hercules tackles the Augean stables of disease by means of his newly-discovered "science" of "Diaduction" which is "practiced with Pocket Diaductive Instruments and Devices"—to-wit: the Oxydonor, price $25.

HOW IT WORKS

The "instrument" consists of a cylindrical portion and a disc portion, the two being connected by a flexible wire. Its *modus operandi* is as follows: The cylinder is placed in cold water while the disc is attached to the patient's ankle. Immediately the cylinder begins to "draw the positive fluid from you, thus creating a vacancy in the system. . . ." It would seem that there are then two vacancies, for we must presuppose the presence of one vacancy in any individual who will part with $25 for such a silly piece of charlatanry. When this induced vacancy—as distinguished from the natural—has been secured, it "leaves you 'negative'" (this has no reference to the financial condition). Being thus "negative," the oxygen of the air "has an affinity for the negative state" and immediately you begin to "absorb the oxygen in the skin and tissues." Then, of course, you get well.

So much for the fake itself.[1] It seems incredible that rational human beings would exchange good money for such a self-evident piece of quackery, but its wily "inventor," remembering Barnum's aphorism, knows better. The United States courts have decided that the "instrument" is not of sufficient value to entitle "Dr." Sanche standing in a court of equity.[2] But the crop of "suckers" is perennial and the sale of this nickel-plated fake goes merrily on.

Very recently an attempt was made in New York to invoke the medical practice act of that state against this transparent humbug. The case fell to the ground because (1) Sanche himself does not apply his cure-all to the patient, and (2) his methods "smack more of the retail vendor or of business methods than of the medical practitoner", and (3) because, in the opinion of the court, the framers of the medical practice law did not "intend to inhibit every one but recognized physicians from publicly recommending manufactures or products as beneficial physically or as curatives or correctives of human disease, pain, injury, deformity or physical condition."

WHAT THE JUDGE THOUGHT OF IT

Whatever satisfaction the Sanche Company may get out of the final decision, it will find small cause for rejoicing in reading the judge's summing up. Said the judge in referring to this fake:

"There has been a studied attempt to stimulate sales by fulsome praise, vague explanations of the force and virtue of 'diaduction,' and exuberant representations of the benefits derivable by using the invention . . . all to attract attention of the curious and credulous."

After quoting some of the claims made by the exploiters of this humbug, the judge goes on to say: "From the record evidence we have tried to get some intelligent idea of 'diaduction.' We have failed utterly. Mr. Justice Shiras, now of the U. S. Supreme Court, with the letters patent before him did not succeed any better for . . . he said: 'I am entirely certain that I do not understand the working of this so-called force, if any such exists, and I greatly doubt whether Dr. Sanche has any clear conception of the force or principle which he seeks to describe under the name of "diaduction."'"

All of which seems to mean, when summed up in non-legal phraseology, that while the learned judges have no doubt that

1. A full description of this article was given by Dr. N. C. Morse, Eldora, Ia., in THE JOURNAL, Dec. 1, 1900.
2. See also THE JOURNAL, Jan. 11, 1902.

the oxydonor is a fake, and that Dr. Sanche is a faker, they are unable so to stretch the law as to convict the Sanche Company of the illegal practice of medicine.

PROSECUTIONS UNDER FOOD AND DRUGS ACT

The Value and Necessity of Pure Food Laws and What They Are Accomplishing

(From The Journal A. M. A., April 24, 1909)

As a broad generalization, the command, "Thou shalt not lie," has been accepted as a good moral precept for a number of centuries; when applied specifically, however, more or less specious arguments have, in all ages, been advanced against too slavish an adherence to its tenets. This point has been somewhat emphasized since Jan. 1, 1907, when the national Food and Drugs Act went into effect and so modified the earlier commandment as to read in effect "Thou shalt not lie on the label." As a general proposition, that requirement of the law would seem incapable of working hardship to any one —yet apparently it does.

"HARPER'S BRAIN FOOD"

For instance, Robert N. Harper, of Washington, D. C., manufactured a headache nostrum to which he gave the euphonious name "Harper's Cuforhedake Brane-Fude." This was sold with the statements that it contained no "poisonous ingredients of any kind" and that it was a "harmless relief." The Bureau of Chemistry of the Department of Agriculture analyzed this "harmless" and "non-poisonous" preparation and reported that it consisted of the following ingredients:

Alcohol (per cent. by volume) 24.2
Acetanilid (grains per ounce) 15.0
Caffein (per cent.) 1.5
Antipyrin (per cent.) 1.0
Potassium, sodium and bromids also present.

Inasmuch as this nostrum was shown to be neither "harmless," "non-poisonous" nor a "brain food," Mr. Harper was found guilty of misbranding and sentenced to pay a fine of $700. Motions were made in arrest of judgment and also for a new trial, both of which were overruled. Then notice was given of appeal to the Court of Appeals. Subsequently, however, Mr. Harper withdrew the appeal and paid the fine.

HANCOCK'S LIQUID SULPHUR

The Hancock Liquid Sulphur Company of Baltimore marketed a product of the same name for which they made numerous claims. The statements on the label represented that this preparation contained some unknown, peculiar liquid sulphur and that it was "Nature's Greatest Germicide" as well as "the Great Cure for . . . Diphtheria . . . " and numerous other conditions such as "itch," "granulated eyelids" and "pimples." The Bureau of Chemistry analyzed a sample of this product and reported that it "consisted of an aqueous solution of commercial calcium sulphid." R. N. Menefee, manager of the Hancock Liquid Sulphur Co., was therefore prosecuted by the government for shipping a misbranded product. The court decided that a solution of calcium sulphid was not "Nature's Greatest Germicide," neither was it a "Great Cure for . . . Diphtheria . . . " and that the statements on the label "were false, misleading and deceptive." The manager of the company entered a plea of guilty and the court imposed on him a fine of $100.

"CONCENTRATED OIL OF PINE COMPOUND"

A preparation labeled "Concentrated Oil of Pine Compound," manufactured by the Globe Pharmaceutical Co., Dayton, Ohio, was subjected to analysis by the Bureau of Chemistry. The result obtained showed, according to the report, that the sample examined "consisted of a mixture of fixed oil, a resinous substance and a small amount of volatile oil . . . resembling turpentine." This analysis made it evident that the product was misbranded as "the composition did not in any way warrant the use of the name 'Concentrated Oil of Pine Compound,' and the statement that it was such was false, misleading and deceptive." The Globe Pharmaceutical Co., in the persons of Wm. E. Pilkinton and A. P. Foose, pleaded guilty to the charge and paid the fine imposed and the costs of the prosecution.

"CASTOR OIL PILLS"

Robert Blackburn, doing business under the name of the Victory Remedy Company, Dayton, Ohio, was prosecuted by the United States for shipping a misbranded drug prod-

uct from Ohio to Michigan. The preparation in question was labeled "Blackburn's Cascara, Wild Lemon, Castor Oil Pills, Compound," and samples were subjected to analysis at the government laboratory. According to the report the "pills" contained "calcium sulphid, capsicum, atropin (introduced probably, in the form of belladonna extract)." As to castor oil, if they contained any, it was at most a trace. As the cathartic, curative and therapeutic effects of castor oil were naturally "almost wholly absent," the use of the name "castor oil pills" was unjustified and constituted misbranding. Blackburn pleaded guilty and paid the fine and costs of prosecution.

"SARTOIN SKIN FOOD"

The Globe Pharmaceutical Company, which has already been referred to in connection with the "Concentrated Oil of Pine Compound," also marketed what was known as "Sartoin Skin Food." The modest claim was made for this preparation that it "is probably the most effective remedy known to science for sunburn, rashes and all skin blemishes" and that it was equally effective in "creating the normal growth of all parts not fully developed and shrunken." The Bureau of Chemistry analyzed a sample of this "skin food" and found "the most effective remedy known to science" to consist essentially of "epsom salts colored with a pink dye." The government decided that to claim epsom salts to be a "food" is "false, misleading and deceptive"; as Wm. E. Pilkinton and A. P. Foose (the Globe Pharmaceutical Co.) failed to "show any fault or error in the findings of the analyst," but pleaded guilty, they were each fined $10.

It must not be thought that these five prosecutions represent all that has been accomplished in bringing adulterators or misbranders to justice under the provisions of the Food and Drugs Act; up to April 12, 1909, no fewer than fifty judgments have been rendered against firms or individuals that have violated the law. When it is borne in mind that advantage of every legal technicality is likely to be taken by those who make a business of putting on the market adulterated food-stuffs or misbranded "patent medicines," the success of the Board of Food and Drug Inspection is highly to be commended.

THE REINHARDT CASE*

The Wisconsin Medical Institute and The Master Specialist

(Abstracted from The Journal A. M. A., Oct. 3, 1908)

This case is really the history of a fight of the Wisconsin State Board of Medical Examiners against the notorious Reinhardt brothers, who for a number of years have carried on business in Milwaukee under the name of the "Wisconsin Medical Institute" and "The Master Specialist." The account is furnished by A. C. Umbriet, attorney for the board. The three brothers Reinhardt, with various members of their families, etc., conducted, also, other similar concerns, the "Heidelberg Institute," at St. Paul, Minn., the "Vienna Medical Institute," Chicago, and the "Copenhagen Institute" at Davenport, Iowa. Their methods were those of advertising quacks, roping in their victims by decoy letters, giving out terrifying diagnoses of sexual diseases, taking iron-clad judgment notes, when the victims' ready-money payments failed, etc. Their profits were enormous, netting several thousand dollars a month, and they dipped also into politics, employing attorneys and an active legislative and advertising agent in Chicago, who worked the legislature and the country press and who had to be included with them in the prosecution started by the state board. The board has finally succeeded in driving them out of Wisconsin, but there is nothing to prevent this delectable family group from carrying on their frauds in other states where the laws may be less rigid or the authorities less active. It is to be hoped that other state boards will be alive to the situation and prevent them repeating or continuing their depredations elsewhere.

THE RUPERT WELLS CANCER CURE†

(Abstracted from The Journal A. M. A., Feb. 20, 1909)

Rupert Wells, M.D., the "cancer cure" faker of St. Louis, has been denied the use of the United States mails by the Postoffice Department which, a few days ago, issued a fraud order against this notorious quack. Samuel Hopkins Adams, in his "Great American Fraud" series, paid his respects to Wells—whose real name, according to the Postoffice officials, is Dennis Dupuis—and called attention to the fact that Wells

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* The article here abstracted is reprinted in full in pamphlet form, price four cents.

† A description of this concern as it appeared in full in THE JOURNAL may be had in pamphlet form, price four cents.

was one of the first to recognize the commercial possibilities of the public's interest in radium as an asset to quackery. To furnish good advertising "copy," Wells invented a mythical "Postgraduate College of Electrotherapeutics of St. Louis," and forthwith appointed himself to an equally mythical chair of Radiotherapy. His hypothetical professorship in a non-existent college was, like his fictitious name, of use only for business purposes. Of the "cure" itself and its methods of exploitation, the official report from the Postoffice Department says: "Dupuis causes to be published extensively throughout the country advertisements over the name of Dr. Rupert Wells, giving his address as Saint Louis, Missouri, inviting those persons who may believe they are afflicted with cancer to write to him for free information about his treatment for the cure of that disease, and in those advertisements makes such statements as these:

"'I can cure cancer at home without pain, plaster or operation. I have discovered a new and seemingly unfailing remedy for the deadly cancer. I have made some most astonishing cures. My marvelous radiotized fluid did it. No matter what your condition may be, do not hesitate to write.'

For his treatment Dupuis *alias* Wells had a sliding scale of prices ranging from $15, the amount first asked, down to $2.50. The "marvelous radiotized fluid" sold by Wells was known as "Radol (Wells)," and came in two forms for external and for internal use, respectively. The latter, when analyzed by the Department of Agriculture, was found to consist "essentially of a weak acidulated solution of quinin sulphate in water and alcohol in the proportion of about 1¼ grains quinin to the ounce of the fluid solution and about 7 per cent. alcohol." The fluid for external use was found to be "a watery solution of inorganic salts." As to the radioactivity, both solutions were tested and "no such activity was detected in an amount greater than is to be commonly found in ordinary hydrant water." In his advertising matter Wells called particular attention to a "bluish fluorescent glow imparted to it (Radol) by the Radium." Needless to say the fluorescence is such as an acidulated solution of quinin sulphate always exhibits and has nothing to do with radium. The extent of the business done by Wells is estimated in the official report as being, during 1908, about $70,000.00. In summing up the Assistant Attorney-General says: "I find that the operations of this person, under the name of Dr. D. Rupert Wells, is a scheme for obtaining money through the mails by means of false

and fraudulent pretenses, representations and promises, and I recommend that a fraud order be issued against the address, Dr. D. Rupert Wells and Dr. Rupert Wells, at St. Louis, Missouri."

RUPTURE CURES

"Lymphol" and "Healine"—Two British Fakes

(Journal A. M. A., Dec. 5, 1908)

In continuing its articles on "Certain Secret Remedies," the *British Medical Journal*, Oct. 17, 1908, p. 1193, takes up preparations for rupture, considering Rice's treatment for rupture and the "Healine" treatment. As these are not sold to any extent in this country information regarding them is of minor importance to us, but they illustrate the usual methods of nostrum-makers. Rice's treatment pretends to furnish a "developing lymphol" which will enable Nature to repair the breach in the wall. According to the advertisements, the "developing lymphol—Nature's true assistant"—is said to be "a vitalizing and restorative application that is absorbed into the tissues through the skin pores, just as rain-drops sink into the ground to soften the earth and keep it fertile." The company furnishes a mechanical appliance to restrain the outbreaking intestines while the "lymphol" is working. The appliance is supplied with the "lymphol" at prices varying from $5 to $21.50, according to grade. The "lymphol" alone costs $4 for a four-ounce bottle, the cost of which is estimated at 18 cents. According to the *British Medical Journal*, analysis showed the "lymphol" to consist of capsicum resin and essential oils of origanum, peppermint and spearmint, dissolved in alcohol. The results of the analysis of Healine were mainly negative.

SODIUM OLEATE IN PHARMACEUTICAL PREPARATIONS

(From The Journal A. M. A., Feb. 22, 1908)

The recent exploitation of preparations sold as sodium acid oleate makes advisable a discussion on the composition of these compounds as well as on the close relationship existing between them and the well-known official "Castile" soap. They serve as excellent examples of the manner in which physicians are led to accept simple and well-known articles disguised by loosely applied chemical names which surround

the preparation with mystery and a pseudoscientific atmosphere.

One of the earlier sodium acid oleates examined by the Council on Pharmacy and Chemistry was a preparation manufactured by *Vereinigte Chininfabriken*, Zimmer & Co., Frankfort a M., Germany (Bischoff & Co., agents), as a cholagogue under the name of "Eunatrol."

This was claimed by the manufacturers to be an "acid oleate of sodium," with the formula of $(C_{18}H_{33}O_2)_3Na_2$, a pure oleate of sodium in which three atoms of hydrogen have been replaced by two sodium atoms. But no such chemical compound has been isolated or described and, according to authorities, such a compound is an absurdity. Working even on the supposition that these compounds were not acid oleates but mixtures, chemists have reported to the Council on Pharmacy and Chemistry that the claims are still erroneous as regards the composition of Eunatrol. According to the formula given by the manufacturers, the content of sodium oleate should be 68 per cent., but two chemists, working entirely independently, reported that "Eunatrol" contains 55 per cent. free fatty acid and but 39 per cent. soap, showing that the preparation lacks 29 per cent. of sodium oleate in order to conform to the manufacturer's formula. These analyses have further shown that the sodium acid oleate, so-called, is simply a mechanical mixture, consisting of approximately one part of sodium oleate or soap and two parts of free fatty acid.

The conclusion drawn from the chemical analysis, namely, that the commercial acid sodium oleates are really mixtures and not definite chemical bodies, is substantiated by the statements of the foremost pharmaceutical manufacturers, who, in reply to inquiry, state that the "sodium oleate (acid)" listed in one of their catalogues was "made at the request of some physicians who wanted a sodium oleate which contained an excess of oleic acid," thus, openly, and without reserve, telling the medical world that "acid oleates" are simply mixtures of soap and oleic acid. Still another firm makes open statements showing that they "use commercial sodium oleate made acid by the addition of 5 per cent. of pure commercial acid," thus adding evidence against the manufacturers who placed on the market soap and oleic acid and claimed it to be a definite chemical compound.

Sodium oleate is the chief constituent of Castile soap and for a long time has been used in that form with satisfactory results. Why, then, should we pay an exorbitant price for a

proprietary substitute of a well-known official remedy which any pharmacist can dispense, simply because it bears a chemical name, high sounding, but loosely and inaccurately applied? The addition of oleic acid to the soap can have no added effect on the therapeutic value of the remedy, for as soon as the compound enters the stomach the sodium oleate is acted on by the gastric juice which gradually changes the oleate into oleic acid, with a speed depending on the solubility if the pill. As soon as oleic acid thus formed, as well as the acid originally present in the compound, passes into the alkaline contents of the intestine the reverse action begins to take place and sooner or later the whole of the oleic acid is converted back to sodium or potassium oleate, and the remedy then acts in the same way as if the soap had been administered in the first place. So "sodium acid oleate" is not only a misnomer, but misleads physicians into believing that they are getting a new compound when in reality it is nothing but soap with free oleic acid added.

SOUR MILK THERAPY

(From The Journal A. M. A., Jan. 30, 1909)

The present interest in what may be called "sour milk therapy" in intestinal putrefaction makes the article by P. G. Heinemann in this issue a timely one. While much of the work done on the subject seems to show that lactic acid or lactic ferments possess value in cases of intestinal putrefaction, the question has in no sense been settled. Still less has it been proved that the *Bacillus bulgaricus* as a lactic acid producing organism possesses the advantages in arresting putrefaction which Metchnikoff originally claimed for it. Because of the unpleasant taste produced by the *B. bulgaricus*, Metchnikoff has urged that the paralactic bacillus (*Streptococcus lacticus*) be used in combination with it. It is therefore, doubtful which of these two organisms is responsible for any resultant benefit.

UNJUSTIFIED CLAIMS

Heinemann's experiments show that the claims made for the various preparations on the market for the artificial souring of milk, are not justified in the light of our present knowledge on the subject. The question is not whether lactic acid, lactic acid bacteria, buttermilk or sour milk has any therapeutic value, but, admitting that it has, whether sour milk prepared

with commercial cultures possesses any therapeutic advantages over milk naturally soured. The evidence at hand fails to give the artificially soured product any such pre-eminence.

LACTOBACILLINE

To consider the claims of manufacturers specifically: Lactobacilline made by the Lactobacilline Company is said to be prepared according to Metchnikoff's directions. While Metchnikoff states that yeasts should be absent, as their presence encourages pathogenic bacteria in the digestive tract, Lactobacilline contains a yeast. This, too, in spite of the statement of the manufacturers, "it contains no yeast germs," and is "pure and absolutely free from all microbes except the remedial lactobacillus isolated by Prof. Metchnikoff. . . ."

FERMENLACTYL

Fermenlactyl, which is put on the market by the Anglo-American Pharmacal Company, is very similar in every respect to Lactobacilline. It, too, contains, besides the Bulgarian bacillus, streptococci and yeasts. In the advertising matter microscopic plates are reproduced purporting to show only the "Bulgarian lactic acid bacilli from which Fermenlactyl is prepared." As a matter of fact, there are in addition to the *B. bulgaricus*, other bacilli, yeast cells and cocci. The claim of the manufacturers of both Lactobacilline and Fermenlactyl that the Bulgarian bacillus is the chief agent, is true only when conditions are such that the preparation of sour milk can take place at a temperature considerably higher than that of any ordinary room. This is a somewhat difficult matter when the beverage is prepared in a private house. When the milk stands at room temperature the common *Streptococcus lacticus* becomes the predominating organism. This would be no disadvantage if it had not been claimed that the chief virtue of milk soured by these preparations is the presence of the *B. bulgaricus*. This organism is said to lodge permanently in the digestive tract and to give rise to the formation of lactic acid *in statu nascendi* and thus inhibit the growth of putrefactive bacteria—a statement that lacks scientific proof.

KEFILAC

Kefilac, made by the Kefilac Company, is not a pure culture of lactic acid bacteria and the sour milk prepared with this ferment does not seem to differ materially from ordinary sour milk. Contrary to Metchnikoff's statement that the alcohol contained in the fermented milk of the Bulgarians is of no

value, the Kefilac Company states that "through its large portion of water . . . through its carbon dioxid and through its small per cent. of alcohol, Kefilac greatly influences all the vital processes." Like the two preparations previously mentioned, it is a "remedy" for a long list of diseases including cancer of the stomach, rheumatism, etc.

YOGURT

Yogurt is another preparation of this class made by the Good Health Company, of Battle Creek, Mich. It contains a variety of bacteria and at least one species of yeast so that the composition of the fermented product is very similar to that of the others. The term "meat bacteria" is used in the advertising pamphlet, though what is meant is not altogether clear, since non-sporing bacteria are killed if meat is thoroughly cooked. The Yogurt tablets are called an "antitoxic ferment"—whatever that may be. The bowels must be kept active, otherwise "Colax"—a "patent medicine" put out by these people—must be used. The number of diseases cured by milk prepared with the Yogurt tablets is enormous. An elaborate list of symptoms is given, some of which may easily be imagined by the anxious layman. In fact, the descriptive matter regarding Yogurt reads very much like a Lydia Pinkham advertisement.

LACTONE

It is claimed for Lactone tablets by their makers, Parke, Davis & Company, that the soured milk made with them possesses certain advantages over ordinary buttermilk. The statement: "The cream is left in the milk, rendering it of far greater nutritive value" is only partly true. If directions are followed, the milk is diluted with one-third of its volume of water before inoculation and the fat, therefore, is naturally reduced to 75 per cent. of the original value in the milk. The fact, too, that the casein, milk sugar and salts of the milk are also reduced to 75 per cent. of the original amount is not stated by the manufacturers. The casein is certainly the most valuable part of the milk and while in ordinary buttermilk only the fat-content is reduced, the other constituents being in nearly the normal proportion, yet in Lactone buttermilk there is more fat but less casein. This is of significance since it is now fairly well established that when cow's milk is used the fat is the cause of infantile digestive troubles rather than the casein.

The advertising matter goes on to state:

"In the ordinary method of making butter the milk is allowed to sour from what accidental bacteria may get into it. Usually the lactic acid germs predominate, but along with these there is always a greater or less number of putrefactive bacteria so that the resulting buttermilk is a mixture of true lactic acid, milk, and putrefactive products." It is difficult to understand why putrefactive bacteria should not be present in the milk when Lactone tablets are used but should be present in the same milk when the tablets are not used. If the purest milk obtainable is used, the putrefactive bacteria which are always present in the milk—even of the best grade—will not develop because the normal lactic acid bacteria antagonize them. It is clear that the same dairyman who, by observing cleanliness in his establishment, furnishes a good quality of sweet milk, will observe the same care in handling cream for making butter, and his buttermilk also will be wholesome and clean.

USE OF COMMERCIAL "STARTERS"

More criticism of a similar nature could be made in regard to the use of commercial preparations for fermenting milk. Where clean—certified—milk can be obtained the use of these various preparations seems unnecessary. Inasmuch as it is not always feasible to obtain certified raw milk, however, boiled or pasteurized milk is to be preferred. It is here that the artificial "starter" is of value. After the first inoculation, the same product can be obtained by inoculating pasteurized or boiled milk with a small amount of the first lot inoculated, with proper precautions of cleanliness. Once started, this process may be continued for a long time without having to renew the "starter." Those who have confidence in the merits of the Bulgarian bacillus of Metchnikoff can procure one of the preparations containing this bacillus and then proceed in the same manner as with the butter starter. It is entirely unnecessary, if not misleading, to use fancy names, as fermenlactyl, lactobacilline, kefilac, lactone or yogurt, this last name suggesting the original Bulgarian fermented milk, containing lactic acid, alcohol, decomposition products of butterfat and of casein, besides a number of micro-organisms. A simple name, applicable to all such preparations alike, as for instance, "buttermilk tablets" or "sour milk tablets," seems more rational.

The scope of Heinemann's paper and the thoroughness with which he treats the subject make his article an important addition to the literature of lactic acid therapy. The medical profession—and the public—is under great obligations to him for his willingness to undertake and carry out these important investigations.

TESTIMONIALS

How They Are Secured

(From The Journal A. M. A., April 10, 1909)

An article by George Frank Lord on "Testimonials in Advertising" (*Printer's Ink*, Feb. 3, 1909), undoubtedly deserves the prize for a cynical unveiling of the unscrupulousness that underlies the modern advertising method. He supports the use of the testimonial on the following ground: "Until the evolution of a perfect man with infallible judgment and universal knowledge, we must all of us depend on the experience and opinion of others—and that is exactly what a testimonial represents." He then proceeds to demonstrate that that is exactly what a testimonial does not represent, in very many cases: "The average 'patent medicine' testimonial is genuine . . . because the 'patent medicine' ad. appeals chiefly to hypochondriacs who are not sick, but imagine they are when they read their 'symptoms.' The same ad. creates the sickness and effects a cure *à la* Christian Science. The purchase of the medicine is really unnecessary except from the advertiser's viewpoint."

Another instance of the value of the so-called experience and opinion of the testimonial giver is displayed in the following advice: "The best time to get a testimonial is shortly after the purchase is made, while the buyer's first enthusiasm is at its height. . . . Further, advantages resulting from the use of an article are not always permanent, and unless the testimonial is secured at the psychologic time it can not be obtained at all."

If the principles involved in the foregoing excerpts are not blankly dishonest, then we must confess that the meaning of the term dishonest is not clear to us. And yet they are the principles that are adopted in securing "patent medicine" testimonials.

Schedule of Rates

(From The Journal A. M. A., Dec. 19, 1908)

At different times we have discussed the value—or worthlessness—of testimonials. As evidence, their scientific value is *nil;* as psychic stimulants, they rank high. It is for the latter quality that they are sought by the "patent medicine" and "ethical proprietary" exploiters. Testimonials to "patent medicines" are always paid for in an indirect way, though this fact is not given any undue prominence. It has remained for an English quack concern to come into the open and offer a spot cash remuneration for letters which detail the virtues of their goods. This is done by the "Dr." Gardner's Remedies, Ltd., of London, who advertise in the British press:

> "One Guinea each paid for every *bonâ fide* testimonial that is printed or used in any way as an advertisement, and
> ONE HUNDRED POUNDS CASH
> for the best testimonial received on or before December 1 next."

London *Truth,* a lay weekly that is aggressively exposing "patent medicine" frauds and quacks, says: "Any one who comes across in the newspapers, after this, surprising personal evidence of the miraculous effects of 'Dr. Gardner's Pink Tablets' or any other specific sold at the same shop will have no difficulty in accounting for the milk in the coconut."

To the initiated, the source of the milk has always been fairly evident, but it will be interesting to see whether the psychic—and only—value of the testimonial will be in any way weakened when the secret of its birth is a matter of public knowledge.

In the proprietary world a recent letter from the Manola Company to physicians shows a similar method of procuring testimonials. Not, of course, that they are called testimonials —that would be too suggestive—no, "clinical reports" if you please, or "clinical data." Neither does the company offer to pay cash for such testimonials—that is to say "clinical data" —nothing so useful as money. Says the Manola Company:

> "We are now preparing a book containing clinical reports."
> ". . . we would like to have whatever clinical data you can give us in regard to your experience with Manola, even if it only covers one case."
> "As a token of our appreciation of such a report we will send you three full-sized bottles of Manola, express prepaid, for your personal use."

In the future, "personal evidence of the miraculous effects" of Manola will—at least to the initiated—at once conjure to one's mental vision three bottles of Manola! Isn't this pretty

cheap? Those addicted to the testimonial habit have, therefore, three schedules: Lehn & Fink's,[1] $10.00 a page; the Manola Company, 3 bottles a report; and "Dr." Gardner's, from 1 guinea to 100 pounds, ($5.00 to $500.00) a testimonial. From a purely business standpoint, it would appear that the out-and-out "patent medicine" firm offers the highest inducements.

The Manola people are evidently profiting by past experience. They it was who conceived the idea[2] of getting the physician to act as a peddler for Manola, and at the same time force the druggist to fill up his shelves with their stuff. The price for this service also, was—three bottles!

Will the time ever come when the medical profession will administer such a rebuke to firms of this type that fear of commercial annihilation will compel in them that regard for decency which less drastic methods seem unable to effect?

Write-up Manufacture in Germany

(From The Journal A. M. A., Jan. 2, 1909)

The readiness with which some physicians respond to the dishonorable appeals of manufacturers of nostrums is well shown by some quotations from *Der reelle Geschäftsmann*, Cologne, a journal devoted to the exposure of business frauds. These quotations are given in the *Apotheker-Zeitung*, September 30. From this it appears that there was inserted in a reputable journal a short time ago the following notice:

> For Physician. Wanted: Licensed physicians who are disposed to furnish favorable reports for advertising purposes of a newly introduced chemical preparation of epoch-making importance (germicide). Fee from 500 to 1,000 marks ($120 to $240).

In spite of the insult thus rendered to professional sentiment, a large number of offers from physicians were received in reply to this advertisement. Some were so cautious as to condition their recommendation on the utility of the article and to request the sending of a preliminary sample. But what shall be said of the conscientiousness of a physician and a specialist who writes: "I am not disinclined to give an opinion of your chemical preparation in the manner desired. Please send me further details regarding the scope of the report." Nothing is said of trying the remedy first; a favorable report is assured beforehand. The writer is concerned

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1. See page 248.
2. See page 163.

about the extent of the report because he would rather sell his convictions for 1,000 marks than for 500.

Another physician, the owner of a much-patronized dispensary in a large city, as well as the conductor of a private sanatorium, is still plainer. He is not forced to earn the "tainted" money. He is prepared to give the desired opinion and thinks it will be best for the manufacturer to furnish him the report already prepared, as the manufacturer is the best judge of what is needed. It is impossible to go further. A blank signature is the simplest way and the physician hands over his conscience done up in a brown paper parcel.

That the medical men who are willing thus to sacrifice their professional honor are not fair examples of the German medical profession goes without saying. This is shown when we learn other aspects of the character of those who thus offer their services.

In the first article, *Der reelle Geschäftsmann* scores physicians without mentioning names, but in a later issue it is more specific and gives the names of Thisguens, a notorious Cologne "specialist" in skin and venereal diseases, who has attracted attention by publishing in advertisements his recommendation of a secret remedy for rheumatism. He is also willing to supplement his income from his special practice by giving his favorable opinion of the "germicide" for the net fee of 500 to 1,000 marks.

Chemists' Certificates and Proprietary Medicines

(From The Journal A. M. A., Jan. 9, 1909)

Some time ago we pointed out that the chemists' certificate used by the exploiters of hydrocine, "hyperoxidized hydrocarbon," did not furnish a correct statement of the composition of this nostrum. Recently we noted that the chemist's analysis on the label for uriseptin did not correctly indicate the composition of that article.

The *Druggists' Circular*, October 19, editorially discusses the value which should be attached to chemists' certificates when used to exploit proprietary remedies. As an explanation of the disparity sometimes noted between the published analysis of proprietary medicines and the facts, a conversation overheard by the writer of the editorial is given. A manufacturer accosted a chemist, an old friend, in a breezy, hail-fellow-well-met way, and, during the conversation, incidentally remarked:

"By the way, professor, I'd like to have your certificate of analysis of my preparation."

"Certainly," said the professor, "I'd be glad to make an analysis for you, and I won't charge you much, either. Send me a package as soon as you like."

"Oh, never mind the price; I'll pay you well; and don't bother about the sample, either; I have a certificate of analysis here in my pocket" (producing it), "and all you need to do is to sign it."

The chemist looked straight into the eyes of the manufacturer for an embarrassing second, and then calmly informed him that he had selected the wrong man. The brazen manufacturer, not to be so easily silenced, retorted:

"Oh, come off, now; they all do it; you know they do, and you might just as well pocket the fee as to see it go to the next man."

Presumably the fat fee went into the pocket of the "next man," and no doubt the latter's name is now going all over the country in the advertisements attached to a certificate of purity which druggists and the public are expected to accept as if it were gospel.

As another kind of deception which tends to bring discredit to chemists' testimonials is mentioned the practice of publishing a certificate as to the quality of goods, written by a chemist who is connected with their manufacture, such connection being carefully concealed by the advertiser of the product. This form of deception has, as its counterpart, the practices of the manufacturer of proprietary remedies who has the degree of M.D. and who as a physician writes glowing articles as to the value of the remedy which he as a manufacturer sells to his "colleagues," the doctors.

THE TURNOCK MEDICAL COMPANY

It Refers Its Victims to "Any Chicago Newspaper" and One Newspaper Responds

(From The Journal A. M. A., Jan. 30, 1909)

The consideration which has been accorded quacks and nostrum mongers by the daily press—thanks to their extensive advertising patronage—has led to a slight misapprehension in some quarters. Some misguided fakers have at times thought that they owned the press—that all they had to do was to crack the whip and watch the journalistic trick-dog jump through the hoop. In some cases the gentlemen afflicted with this obsession have been severely jarred back into the world of realities.

A recent case of this sort was that of the Turnock Medical Company of Chicago. This concern is one of those which advertise to cure rheumatism and uric acid diseases for $3.00 —more or less. A patient who had sought a long-distance diagnosis from these "noted specialists" found that he had been forwarded unasked a bottle of Dr. Turnock's Genuine Discovery, for which he was requested to remit $3.00. This he refused to do and his refusal brought from the company one of those strictly private, personal and confidential, heart-to-heart circular letters which play so important a part in the quack's armamentarium. The "letter" was signed by Dr. T. Frank Lynott. As to the company's ability, reliability and responsibility, Dr. Lynott referred the victim to "the editor of any Chicago newspaper." Dr. Lynott pointed out, further, that the cost of the "whole treatment of medicine" was "simply the price of a single visit to any reputable physician" and that "I charge nothing extra for my professional services."

The argument, of course, is not a strong one, as the relation between "any *reputable* physician" and Dr. Turnock's Genuine Discovery as administered by Dr. Lynott is not clear. So, evidently, the patient thought, for he wrote to the editor of one of the Chicago newspapers. Unfortunately for the medical company, it was the *Chicago Tribune* that was consulted and this paper responded to the inquiry with a column writeup of the Turnock Medical Company. It showed that some other "references" given by the concern in its advertising matter were equally unauthorized. The names of an alderman, of the director of a conservatory of music, and of a druggist, all of Chicago, had also been included in the company's mythical list of "references." Each of these persons repudiated the use of his name in this connection and the opinions of the medical concern as expressed by the victims were the reverse of complimentary. Unfortunately for the individuals concerned, there seems to be no legal process which can be invoked against the company. In the future when Dr. Lynott gives Chicago newspapers as references, he would better add parenthetically—except the *Tribune*. And that will be about as complimentary a thing as any newspaper could wish!

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