That the prolonged administration of thyroid gland will sometimes bring about a marked reduction in weight is true but its use even under skilled medical supervision is fraught with danger. It is little less than criminal that ignorant quacks of Kellogg's type should be permitted to distribute indiscriminately drugs that have the potency for harm that is possessed by the thyroid preparations.

THE DETERIORATION OF DRUGS

The investigations of Hale¹ on digitalis, of Edmunds and Hale² on ergot, and Dohme³ on calabar bean, coca and aconite, have revealed the facts that many drug preparations deteriorate, and that drugs are often several years old when they reach the patient. These facts have been emphasized, also, through a report of the Council on Pharmacy and Chemistry dealing with the testing of epinephrin solutions in which the Council recommends that "manufacturers stamp the age of manufacture on the container, to guard against samples which are obviously overaged." Naturally some manufacturers have asserted that the reported deterioration is accidental, or have tried to put the blame on the pharmacist. Some have shifted their previous claims as to strength in such a way as to avoid responsibility. Some firms, however, instead of attempting to dodge responsibility, are doing what ought to be done, and indicate the date of manufacture on the label of those preparations which are prone to deterioration. This, for instance, has been done by Fairchild Bros. & Foster for their Lactic Bacillary Tablets (N. N. R. Supplement, 1912, p. 5); by Hyson, Westcott & Co. in the case of their Bulgara Tablets (N. N. R., 1912, p. 127) and by the H. K. Mulford Co. for their Cornutol (N. N. R. Supplement, 1912, p. 2) and Digital (N. N. R. Supplement, 1912, p. 3). A serious attempt to overcome deterioration has been made in a recent report by Pittenger and Vanderkleed,⁴ of the scientific staff of the H. K. Mulford Co., on methods for the preservation of fluidextract of ergot. They found that a fluidextract of ergot, put up in hermetically sealed vials, kept its strength for a year without the least change.

While most pharmaceutical houses appear indifferent to the demands of modern medicine, there are signs, nevertheless, that scientific pharmacy is making headway.

1. Referred to editorially in THE JOURNAL A. M. A., April 22, 1911, p. 1198.

2. Referred to editorially in THE JOURNAL A. M. A., March 9, 1912, p. 705.

3. Dohme, A. R. L.: Am. Druggist, 1909, iv, 37.

4. Pittenger, P. S., and Vanderkleed, C. E.: Jour. Am. Pharm. Assn., 1912, I, 709.

Correspondence

Stanley's and Livingston's References to Mosquitoes and Miasma

To the Editor:—On reading "The Mystery of Miasma as Darwin Saw It" in THE JOURNAL (August 31, p. 736), I thought the following from two celebrated African explorers would be of interest in this connection:

Henry M. Stanley ("In Darkest Africa," ii, 33) says, in his observations on malaria: "Emin Pasha informed me that he always took a mosquito curtain with him, as he believed that it was an excellent protector against miasmatic exhalations of the night."

Dr. David Livingston ("Livingston's Expedition to the Zambesi and Its Tributaries," 1858-1864) says of the mosquito and malaria: "A large brown sort, called by the Portuguese *munso* ("tame"),

lies straight to its victim and goes to work at once as though it were an invited guest. Some of the small kinds carry uncommonly sharp lancets and very potent poison. 'What would these insects cut if we did not pass this way?' becomes a natural question. The juices of plants and decaying vegetable matter in the mud probably form the natural food of the mosquitoes, and blood is not necessary for their existence. They appear so commonly at malarious spots that their presence may be taken as a hint to man to be off to more healthy localities."

ST. CLOUD COOPER.
Fort Smith, Ark.

Fraudulent Impersonation

To the Editor:—In February, 1912, Dr. C. J. Albaugh of Salt Lake City, Utah, a graduate of the University of Pennsylvania of about 1908, was approached by a man who gave his name as Dr. E. S. Everhart of the class of

1907 (my graduating class), University of Pennsylvania. Thinking that the man's face was familiar and that he was telling the truth, Dr. Albaugh was persuaded to endorse a draft on a Boston bank for \$40, which he had to pay. I have reason to believe that other physicians were swindled, especially University of Pennsylvania men. In order to help in the apprehension of the miscreant and to clear my name, please publish this statement in THE JOURNAL.

EDGAR S. EVERHART, Crabtree, Pa.

Goethe's Reference to Pellagra

To the Editor:—It may be of interest to students of pellagra in this country to know that the German poet, Goethe, has a curious reference to what appears to be this disease in his "Letters From Italy," written in 1786. Writing

from the shores of Lake Garda in northern Italy, he says that he was particularly displeased by the pale-brownish complexion of the women, whose features indicated wretchedness. "I imagine," he continues, "that the cause of this sickly condition may be found in the frequent consumption of Indian corn and buckwheat. Both the former, which they also call 'yellow blende,' and the latter, which is called 'black blende,' are ground, made into a thick pap with water, and thus eaten. The Germans pull out the dough and fry it in butter. The Italian Tyrolese, on the contrary, eat it just as it is, often with scrapings of cheese, and do not taste meat throughout the year. This necessarily glues up and stops the alimentary channels, especially with the women and children, and their cachectic complexion is an indication of the malady."

I do not pretend to a wide acquaintance with the literature of pellagra, so it may be that this interesting note by Goethe may not have escaped the attention of others. Goethe has been credited with being ahead of his times in a number of scientific matters, especially the doctrine of evolution; it is therefore additionally noteworthy that he also took a foreglimpse at what many consider to be the cause or one cause of pellagra. I think most neurologists will agree that anything that glues up and stops the alimentary channels must be bad for the nerves.

JAMES HENDRIE LLOYD, Philadelphia.

Queries and Minor Notes

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

SENSITIZED LIVING CULTURES IN TYPHOID

To the Editor:—What is meant by the term "sensitized living cultures," referred to in the editorial (THE JOURNAL, August 24, p. 656) in reference to vaccination against typhoid?

HARLAN SHOEMAKER, Shelby, N. C.

ANSWER.—This term is used to designate live cultures of an organism to which has been added an antiserum, and the mixture allowed to remain in contact for a certain length of time, the serum then removed by washing and centrifugation, and the deposit suspended in physiologic salt solution. The sensitized living cultures of typhoid bacilli used by Metchnikoff and Besredka for vaccination against typhoid are prepared as follows: The growth on a twenty-four-hour agar slant of typhoid bacilli is washed off in 1 or 2 c.c. of physiologic salt solution. To this suspension of living bacilli are added about 10 drops of antityphoid serum prepared from the serum of a horse which has been highly immunized by intravenous injections of living typhoid bacilli. The mixture of serum and typhoid bacilli is allowed to remain in contact over night. The next morning the sensitized bacilli are washed twice in physiologic salt solution, the centrifuge being used to remove the supernatant fluid. After the second washing the deposit in the bottom of the tube is suspended in 100 c.c. of physiologic salt solution; from 1 to 1.5 c.c. of this suspension represents the initial dose. The second dose, given eight days later, is 2 or 3 c.c. The bacilli used by Metchnikoff and Besredka have been isolated from man and are of an average virulence for laboratory animals.

PREPARATION OF ACID SOLUTION FOR EXAMINATION OF CEREBROSPINAL FLUID—DIAGNOSTIC VALUE OF TUBERCULIN

To the Editor:—1. Please tell me how to keep and how to prepare the acid solution for the cerebrospinal fluid examination described in THE JOURNAL, Aug. 17, 1912, p. 544.

2. What is the prevailing opinion, if there is any, regarding the use of tuberculin, both as a diagnostic and as a curative agent? Is there any unanimity of opinion whatever?

A. B. C.

ANSWER.—1. The solution referred to in the editorial is a 1/300 normal hydrochloric acid solution. This would be prepared by diluting normal hydrochloric acid to 300 times its volume. If one has an accurate preparation of one-tenth normal solution, the best way would be to measure exactly 1 c.c. into a graduated cylinder and fill up with distilled water exactly to 30 c.c.

2. As a diagnostic agent tuberculin is specific in its action. A positive reaction indicates the presence of tuberculosis.

It does not distinguish with certainty, however, between an active tuberculous process and one which is latent or practically cured. Inasmuch as adults have, in the majority of cases, experienced tuberculosis, a positive reaction to tuberculin gives no positive evidence of an active tuberculous process unless focal symptoms are produced by the subcutaneous injection. In children, the cutaneous reaction of von Pirquet indicates, as a rule, an active tuberculous process without affording evidence of the location of the lesion. In children over 5 and in adults, a positive reaction may also be due to a latent condition which produces no symptoms and needs no treatment. If focal symptoms are produced by the subcutaneous injection of tuberculin, we have evidence of an active process located in the organ which is the seat of the symptoms. There seems to be no doubt that in properly selected cases, the therapeutic use of tuberculin is a valuable adjunct to other forms of treatment. It must, however, be carefully used by one who is experienced in its application.

ALCOHOL INJECTIONS FOR NEURALGIA.

To the Editor:—Please send me the index of articles appearing in THE JOURNAL on the subject of alcohol injections for neuralgia, as well as the names or titles of some works on the subject, giving the technique.

A. H. STAPLES, M.D., Washington, D. C.

ANSWER.—We do not find any books devoted to the subject. As to articles, we might refer our correspondent simply to the index to THE JOURNAL, but as the subject is of general interest we cite the following articles. These are found by consulting the index to THE JOURNAL, which is printed in the last issue of each six months.

Patrick, H. T.: Further Report on Deep Injections of Alcohol for Facial Neuralgia, *Lancet-Globe*, Dec. 28, 1907; abstr. in THE JOURNAL, Jan. 18, 1908, p. 238.

Kilian, O.: Schlösser's Alcohol Injections for Facial Neuralgia: Sixteen Months' Experience with Fifty-Five Cases; Three Failures, *Med. Rec.*, Jan. 18, 1908; abstr. in THE JOURNAL, Feb. 1, 1908, p. 399.

Ostwalt: Injections of Alcohol in Neuralgia, *Bull. de l'Acad. de med.*, April 21, 1908; abstr. in THE JOURNAL, June 6, 1908, p. 1047.

Bodine, J. A. and Keller, F. C.: Injections of Alcohol for Relief of Trigeminal Neuralgia, *New York Med. Jour.*, Sept. 26, 1908; abstr. in THE JOURNAL, Oct. 10, 1908, p. 1276.

Alexander, W.: Treatment of Neuralgia with Injections of Alcohol, *Berl. klin. Wochenschr.*, Nov. 3, 1908; abstr. in THE JOURNAL, Jan. 10, 1909, p. 255.

Harris, W.: Alcohol Injection Treatment for Neuralgia and Spasm, *Lancet*, London, May 8, 1909; abstr. in THE JOURNAL, June 5, 1909, p. 1890.

Walker, R. J.: Trifacial Neuralgia Treated by Alcohol Injections, *Jour. Mich. State Med. Soc.*, May, 1909.

Patrick, H. T.: Seventy-Five Cases of Trifacial Neuralgia Treated by Deep Injections of Alcohol, THE JOURNAL, Dec. 11, 1909, p. 1987.

Leszynsky, W. M.: The Alcohol Injection Treatment of Trifacial Neuralgia, *Med. Rec.*, April 30, 1910; abstr. in THE JOURNAL, May 14, 1910, p. 1646.

Offerhaus, H. K.: Technique for Alcohol Injections in Trigeminal Neuralgia, *Arch. f. klin. Chir.*, xcll, No. 1, 1910; abstr. in THE JOURNAL, Aug. 13, 1910, p. 630.

Ball, C. R.: Treatment of Neuralgia by Deep Injections of Alcohol, *Ohio State Med. Jour.*, Aug. 15, 1910.

The Treatment of Neuralgia with Injections of Alcohol, editorial, THE JOURNAL, June 17, 1911, p. 1818.

Blair, V. P.: Notes on Trifacial Neuralgia Treated by Deep Injections, THE JOURNAL, Feb. 4, 1911, p. 335.

Patrick, H. T.: The Technique and Results of Deep Injections of Alcohol for Trifacial Neuralgia, THE JOURNAL, Jan. 20, 1912, p. 155.

CRISCO AND THE ALLEGED IRRITANT EFFECT OF COTTON-SEED OIL

To the Editor:—In an abstract of an article on "Soaps and Their Effects on the Skin" by F. H. Gardiner in the *Edinburgh Medical Journal*, June, 1912, printed in THE JOURNAL (July 27, p. 310), it is stated that cotton-seed oil is irritant to the skin. How about the effect of cotton-seed oil on the stomach? I refer to a hard substitute for cooking purposes, advertised under the name of Crisco.

DR. W. L. MILNER, Cincinnati.

ANSWER.—There is no evidence which proves that properly purified cotton-seed oil acts differently from other edible oils, either on the skin or internally. If cotton-seed oil is found to be irritant to the skin it will, in all probability, be when it contains impurities. While Gardiner, in the abstract of the article referred to, says that cotton-seed oil uncombined is a skin irritant, he admits that it is a matter for further inquiry. We understand that Crisco is a solid synthetic vegetable fat made by chemical means from various vegetable oils, such as peanut oil, corn oil, coconut oil and cotton-seed oil, depending on market conditions. This process is a new industry and consists in converting the liquid olein of fats into the solid stearin by absorption of hydrogen. In this reaction each