his environment. He has reached the "parting of the ways" and must either devote himself to the broader and humanitarian aspects of his art, or apply himself to the purely commercial pursuits of the tradesman-druggist. For him to essay the former and at the same time center upon the latter, is a corollary and deception which cannot longer endure.

It is this type of hybrid druggist-pharmacist which has permitted the unprecedented development of the great *pharmaceutical octopus*. Those great manufacturing establishments have long since outgrown the purposes for which they were created —the production of legitimate pharmaceuticals— and have developed into gigantic proprietary-medicine enterprises. The essential differences between these quasi-reputable establishments and the old-time out-and-out patent-medicine faker, are in the methods of exploitation. The old-time faker approached and appealed direct to the laity. The great pharmaceutical manufacturer, under the cloak of respectability, enlists the active co-operation of both doctor and druggist, and through these influential mediums, establishes himself with the public. Once entrenched, his position is well-nigh impregnable.

The source of large profit to the pharmaceutical manufacturer is the "specialty" in which a proprietary (patent or trademark) interest is maintained. The physician, through extensive advertising and personal solicitation, is induced to prescribe these multitudinous specialties, taking the producer's word for it that they possess exceptional virtues. The druggist in turn, lacking the power of discrimination and ability to advise with his medical confreres, falls readily into line, taking it for granted that if the doctor prescribes the nostrum, it must be all right.

Not satisfied, and as a further means of expansion, the octopus reaches out, through its "private formula" department, to the promoters of lay patent-medicine enterprises, and millions of pills, tablets and other preparations are supplied for public consumption. The manufacture of the majority of "patent" medicines on the market, is in the hands of the great pharmaceutical manufacturing establishments. They have the facilities and can do this work better and cheaper than any small concern. A concern exploiting a line of female preparations was put out of business by the U. S. postal authorities in San Francisco some months ago. The line of suppositories, tablets, etc., was manufactured by a Detroit firm known throughout the world. A representative of this pharmaceutical house bemoaned to the writer, the loss of this "fat" business! These gigantic enterprises laboring under enormous expense, cannot be too particular as to the source of their profits. Competition, the necessity for constant expansion and the payment of generous dividends, are other factors which impel the addition of new therapeutic "novelties" to the already bewildering lists.

The great army of druggists appear oblivious to the part they are induced to play in this great scheme of exploitation. Or, in an effort to rehabilitate the dwindling exchequer, form co-operative organizations for the manufacture of their own lines of proprietary specialties.

A new and distinct type of man must evolve from this state of pharmaceutical demoralization. The professional pharmacist—the man of scientific attainment and high character—must step into the breach and redeem his lost estate. There are few fields so large and promising as the pharmaceutical field for men of the proper caliber.

The scarcity of good pharmaceutical timber is largely accounted for by the avidity with which the octopus "gobbles up" promising talent, to be converted into detail men, branch house managers, and members of the "scientific" staffs. It is further accounted for by the failure on the part of the colleges of pharmacy to attract and develop the proper material. The status of pharmacy as typified in "the drug business" is not calculated to attract men of exceptional abilities.

Finally, the hold the octopus has upon the colleges of pharmacy through endowments, scholarships, and "interlocking directorates" is not conducive to independent thought and the development of progressive ideals upon the part of the student body; not to mention the muzzling influence of the great pharmaceutical interests upon the medical and pharmaceutical press, from which the main source of revenue is derived.

The one great hope of the broad-minded progressive pharmacist, as also the physician, is the work of the Council on Pharmacy and Chemistry of the American Medical Association.

Let all that is good and worthy in both professions, aid in every way possible, the great work of the Council. Therein lies the salvation of *pharmacy as a profession!*

NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1914, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

Electrargol.—Electrargol is a colloidal solution of silver, containing silver, equivalent to 0.25 per cent. metallic silver. It is said to be useful in febrile diseases, even in those which are not of a septic character. It is also used externally in inflammatory conditions. For subcutaneous, intramuscular or intravenous injections, electrargol is supplied as Electrargol for Injection in ampoules containing 5 Cc. For external use electrargol is supplied as Electrargol for Surgical Use in bottles containing 50 Cc. (Jour. A. M. A., June 6, 1914, p. 1808).

Refined and Concentrated Tetanus Antitoxin.—Marketed in packages containing 5,000 units (curative dose) put up in syringe containers. E. R. Squibb and Sons, New York (Jour. A. M. A., June 13, 1914, p. 1890).

Culture of Bulgarian Bacillus, Mulford.—A pure culture in tubes of the **Bacillus bulgaricus.** It is designed for internal administration for the purpose of establishing lactic-acid-producing bacilli in the intestines and for external use. H. K. Mulford Co., Philadelphia, Pa. (Jour. A. M. A., June 13, 1914, p. 1890).

Lactobacilline Tablets.—A pure culture of the **Bacillus bulgaricus.** These tablets give rise to the production of considerable quantities of lactic acid,

which tends to restrain the growth of putrefactive organisms in the intestines. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1890).

Lactobacilline Liquide, Culture A.—A pure culture in tubes of the **Bacillus bulgaricus** grown in a neutralized sugar bouillon, each tube containing from 5 to 6 Cc. Its actions and uses are the same as those of Lactobacilline Tablets. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Liquide, Culture D.—A pure culture in tubes of the **Bacillus bulgaricus** grown in a neutralized bouillon. Its action and uses are the same as those of Lactobacilline Tablets. Marketed as Lactobacilline Liquide, Culture D., Small—containing 5 Cc., and Lactobacilline Liquide, Culture D., Large—containing 16 Cc. in each tube. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Liquide, Infant's Culture.—A pure culture in tubes of the **Bacillus bulgaricus** in a whey medium. It is employed in the treatment of diarrhea or dysentery in nursing infants or young children. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Glycogene Tablets.—Tablets containing pure cultures of the **Bacillus bulgaricus** and the **Glycobacter peptolyticus.** The **Glycobacter peptolyticus** transforms into sugar the amylaceous substances in the diet, thereby furnishing a pabulum for the **B. bulgaricus,** which in turn transforms the sugar into lactic acid. These tablets are designed for the prevention and treatment of intestinal diseases. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Glycogene Liquide.—A pure culture in tubes of the **Bacillus bulgaricus** and the **Glycobacter peptolyticus.** Its action and uses are the same as those for Lactobacilline Glycogene Tablets. Marketed as Lactobacilline Glycogene Liquide, Small—containing 5 Cc., and Lactobacilline Glycogene Liquide, Large—containing 16 Cc. in each tube. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Milk Tablets.—Tablets containing pure culture of the **Bacillus bulgaricus** and **Bacillus paralacticus.** These tablets are used in the preparation of scientifically soured milk. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Suspension.—A pure culture in tubes of the **Bacillus bulgaricus** grown in a neutralized bouillon medium. This culture tends to inhibit the growth of deodorant, putrefactive and pathogenic organisms and is used externally in various suppurative conditions. Marketed as Lactobacilline Suspension, containing 5 Cc. and Lactobacilline Suspension, Surgical, containing 20 Cc. in each tube. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Lactobacilline Milk Ferment.—A pure culture in tubes of the **Bacillus bulgaricus** and **Bacillus paralacticus.** Its actions and uses are the same as those of Lactobacilline Milk Tablets. Franco-American Ferment Co., New York (Jour. A. M. A., June 13, 1914, p. 1891).

Prophylaxis of Tetanus.—The following procedure is advised: Remove every particle of foreign matter from the wound. Dry the wound and treat every part with iodin or cauterize it with a 25 per cent. phenol solution and apply a wet pack saturated with boric acid solution or alcohol. Inject as soon as possible, intravenously or subcutaneously, 1,500 units of antitetanic serum and repeat the injections if indications of possible tetanus arise. In no case close the wound, but allow it to heal by granulation (Jour. A. M. A., June 20, 1914, pp. 1964 and 1971).

The Absorption of Iron.—The belief that organic compounds of iron were superior to inorganic iron salts arose before it was known that the bowel forms the most important channel for the excretion of this element, when the failure to find an increase in the amount of iron eliminated with the urine by means of the kidneys after ingestion of the element in some form or other was taken as an indication that it had not been absorbed. To-day it is known that iron can be absorbed and excreted by the intestinal wall. Experiments have demonstrated that both inorganic and organic iron can be absorbed and satisfactorily carry out the purposes for which iron is administered (Jour. A. M. A., June 13, 1914, p. 1913).

Liquid Albolene.—This is a light variety of liquid petrolatum marketed as a proprietary medicine, exploited in an objectionable manner and with more or less misleading claims. It is said to come from Russia and differs from American products in being entirely nonfluorescent—an immaterial difference (Jour. A. M. A., June 27, 1914, p. 2048).

Cystogen.—At a meeting of physicians recently, the question was asked: Why is Cystogen, which is just plain hexamethylenamin, not recognized by the Council on Pharmacy and Chemistry? The answer is simple: Because the therapeutically suggestive title as well as the method of exploitation encourage its indiscriminate and ill-advised use, both by the medical profession and the public (Jour. Mo. State Med. Assn., June, 1914, p. 473).

Scopolamin-Morphin Anesthesia.—McClure's Magazine for June contains a sensational account of the use of scopolamin-morphin in anesthesia as used by Krönig and Gauss at Freiburg. In America the scopolamin-morphin anesthesia has received little attention. It is far from safe and can be carried out only in hospitals. Morphin and scopolamin should not be used in fixed proportions (Jour. A. M. A., June 6, 1914, pp. 1815 and 1829).

Glyco-Heroin, Smith.—A report of the Council on Pharmacy and Chemistry explains that Glyco-Heroin, Smith, although containing 1/16 grain heroin to the teasponful, is exploited in a way to encourage self-drugging by the layman. The advertising matter suggests the administration of Glyco-Heroin, Smith, to children and much of it has contained the evident falsehood that this heroin mixture does not produce narcotism or habituation. The possibility of habit formation should be sufficient to induce the thoughtful physician to avoid the use of Glyco-Heroin, Smith (Jour. A. M. A., June 6, 1914, p. 1826).

Malt Nutrine.—This product of the Anheuser-Busch Brewing Association was declared misbranded by the government authorities because the label claimed that it was a highly concentrated extract of malt, which was untrue. Malt Nutrine was found to contain 1.6 per cent. alcohol and extravagant therapeutic claims were made for it (Jour. A. M. A., June 20, 1914, p. 1981).

Buffalo Lithia Water.—The fallacy that diseases are due to uric acid and the fallacy that lithium would eliminate the uric acid has made mineral waters highly profitable—even when lithium was present only in infinitesimal amounts. One of the most widely used "lithia waters" was Buffalo Lithia Water, later called Buffalo Lithia Springs Water, which has been declared misbranded by the Federal Courts because it was shown to contain less lithia than does Potomac River water and that a person would have to drink 150,000 to 225,000 gallons of the water to obtain an ordinary dose of lithia. The testimonials certifying to the high efficiency of Buffalo Lithia Water and its superiority to lithium compounds given in the past by physicians eminent in their profession, certify to the unreliability of clinical observations (Jour. A. M. A., June 13, 1914, p. 1909).