"The same question might be asked with at least as much if not even greater propriety concerning the other remedy requested and the complaint for which it is to be used.

"In the interest of a suffering public"—which has already suffered too long at the hands of nostrum manufacturers whose principal asset is public ignorance—we suggest that druggists use their influence to send sufferers from asthma and other ills to those who are legally authorized and presumably professionally equipped to diagnose their cases and prescribe remedies for their relief. The man who undertakes to diagnose and prescribe when he has not completed a course of study which entitles him to legal recognition as an expert in the practice of medicine, thereby becomes a quack and may justly be regarded as a faker; and his status is not changed by his surroundings, no matter whether they be the luxurious fittings of a suite of offices in a large manufacturing establishment, rows of bottles over a prescription counter, or the gaudy trappings of a mountebank's cart at a county fair."

Correspondence

Bacteriologic vs. Clinical Control of Diphtheria Quarantine

To the Editor:—Dr. Simonds in his article on diphtheria (*THE JOURNAL*, Jan. 7, 1910, p. 37) said: "It is evidently unjust to . . . the patient . . . to place him in quarantine on a clinical diagnosis of diphtheria, which in over 40 per cent. of the cases is proved by bacteriologic examination to be incorrect."

It seems to me that this is assuming an infallibility for bacteriologists that is unwarranted. No careful and experienced physician would consider even half a dozen bacteriologic examinations as proof of error in a case diagnosed as diphtheria from clinical evidence such as the presence of a membrane and a rise of temperature. Negative evidence must always be uncertain, and, while a positive diagnosis based on bacteriologic examination should be taken as conclusive even where the clinical evidence is negative, it does not follow that the reverse is true. In other words, the presence of the characteristic membrane is quite as conclusive as a positive bacteriologic finding.

THOMAS J. TURPIN, Corpus Christi, Tex.
Health Officer Nueces County.

[The above was referred to Dr. Simonds, who writes:]

To the Editor:—It must be borne in mind that the statement quoted by Dr. Turpin referred solely to the regulation of quarantine in diphtheria. It was not intended to apply to the treatment of the disease. When the clinical symptoms are reasonably clear, the physician who administers antitoxin without waiting for a bacteriologic examination is to be commended. The harmlessness of antitoxin and the more favorable results obtained from early injections render its use on clinical grounds alone perfectly justifiable. But in the case of quarantine I insist that it is unjust to a patient, especially to an older child or adult, to confine him for an arbitrary period of time on clinical grounds alone when a bacteriologic examination is obtainable. It is just as unfair to the community to release such a patient merely because all symptoms of diphtheria have disappeared.

It is true that a small percentage of positive cases are negative on first culture—at the Boston City Laboratory something more than 6 per cent. This simply means that neither clinical nor bacteriologic examinations are absolutely infallible, but that the percentage of error in the latter, especially where single negative cultures in suspicious cases are followed by second cultures, is so small that we are justified in relying entirely on this method for the regulation of quarantine.

I cannot agree with Dr. Turpin that "the presence of a characteristic membrane is quite as conclusive as a positive bacteriologic finding." For the control of treatment such a principle is very good; but from the standpoint of public health it is exceedingly bad for two reasons: First, when the people of a community are taught that a membrane is characteristic of diphtheria it will be difficult to convince them that the patient may still be a source of danger after the membrane has disappeared. Second, such people will also refuse to believe

that a perfectly healthy person may be a carrier of virulent diphtheria bacilli and thus be a menace to his associates. It is from patients released too early and from healthy carriers that the disease is kept alive in a community.

To sum up the whole matter, the control of treatment by clinical manifestations is entirely justifiable; but the regulation of quarantine should be based solely on the results of bacteriologic examinations, when such are obtainable. Every suspicious case should be held in temporary quarantine until the result of the bacteriologic examination is known. Such a method, while not absolutely infallible, is far more accurate than clinical observation; it will certainly insure better protection to the community.

J. P. SIMONDS, Indianapolis.

Gonorrhea and Ophthalmia Neonatorum

To the Editor:—I am in receipt of a circular letter from the Ohio State Board of Health and the Ohio Commission for the Prevention of Blindness, stating that more than one-fourth and nearly one-third of all blindness of infants in Ohio is due to ophthalmia neonatorum, urging the necessity of preventive treatment of the new-born and also announcing the free distribution of silver nitrate solutions to physicians and midwives. While this is a laudable effort and one to which we should all lend a helping hand, we must go a step farther, it seems to me, if we wish to strike at the root of this evil. For every child born with this disease there is a mother who is infected with gonorrhea. For nearly every mother so infected there is a father who married with an uncured case of gonorrhea. While it may be true that in many instances the man has made no effort to obtain a cure, or what is worse, has been self-treated or treated by a druggist, it is equally true that in the majority of cases he has been treated and discharged as cured by a practicing physician. It is high time to call a halt and to ask that the treatment of this disease be given the same serious consideration as is granted to other much less serious and far less disastrous diseases. The presence or absence of a visible discharge seems to be the only determining factor that is used by the majority of men in diagnosing the presence or absence of gonorrhea. This is utterly fallacious. In the same category may be placed a single determination of the presence or absence of the gonococcus in the discharge. Of course the use of such means leads to the discharge from treatment of thousands of men who are still suffering from the disease and who will, in the majority of instances, infect their innocent partners. Instances of this kind have come to the notice of every practicing physician in this country. The following item, clipped from a Cleveland daily paper, illustrates the frequency of such cases:

TO PROSECUTE MIDWIFE—SOCIETY CHARGES THAT WOMAN NEGLECTED BABY'S EYES

A warrant was yesterday issued from the police prosecutor's office for the arrest of Mrs. Rose Natrefa, charging her with failing to report soreness of a child's eyes. Mrs. Natrefa, who is a licensed midwife, lives at 2253 East Eighty-Third Street.

Officers of the Society for the Promotion of the Interests of the Blind found Luretta Sovenski, 3 days old, 7610 Stanton Court, S.E., infected with what physicians say is an extremely virulent case of sore eyes. The baby was at once removed to Lakeside Hospital, where the physicians say there is only a slight chance of preserving its sight. The midwife, officers who made the investigation say, told the mother of the child that the case was nothing more than a cold in the baby's eyes.

I have not touched on the morbidity in the patient himself, which, as we all know, is of alarming frequency, and, in the case of women especially, is attended with such dire results. Let me repeat, the time has come for intelligent, serious and persistent treatment of gonorrhea to prevent the consequences of present-day methods.

DR. W. E. SAMPLINER, Cleveland.

Action of One Society on the Secret Commission Evil

To the Editor:—The subject of fee-splitting and commission-giving by surgeons has come up in the Western Surgical Association, and the society has taken some definite steps to eliminate the practice. Dr. John P. Lord, in his presidential address, read a paper on this subject. The executive council

eliminated a number of applicants for membership from the list of those eligible to election, because of authentic knowledge of such practice on their part.

The executive council went a step further than this, however, and considered the question in connection with some of those who are already members of the association. A number of members were dropped in order to increase the efficiency of the society. They were stricken from the list for various reasons; a few of them for the practice of fee-splitting and commission-giving.

A. T. MANN, Secretary, Minneapolis.

Transmission of Bubonic Plague

To the Editor:—In THE JOURNAL (December 24, 1910, p. 225S), in an abstract of a report on bubonic plague in California by an officer of the United States Public Health and Marine-Hospital Service, occurs the following:

The ground-squirrel is the reservoir of plague germs, but does not transmit the disease to human beings, but by its bite infects the rat, which in turn, acting as a germ-carrier, bites and infects a human being, who in due course comes down with bubonic plague.

The latter presumably then bites his fellow-men and thus passes the disease along, and this would argue the necessity for muzzling every person afflicted with plague! But, seriously, what has become of the rat-flea which recently figured so largely as an indispensable factor or link in the spread of this disease? And an answer to this question is required by what follows the above quotation, namely, "as all that is necessary to start a season of bubonic plague anywhere is an infected ground-squirrel or human being."

Is this orthodox teaching concerning the science of sanitation as applying to bubonic plague, or is it merely an instance of misquoting or bad reporting? For, if the latter, it is too serious to pass uncorrected.

GEORGE HOMAN, St. Louis.

[COMMENT:—The error was due to a mistake of the reporter. The sentence should read: "The ground-squirrel is the reservoir of plague germs, but does not transmit the disease to human beings. Squirrel-fleas transmit the plague germs to rats, and rat-fleas in turn bite and infect human beings."—Ed.]

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.

ACUTE THYROIDITIS

To the Editor:—I was very much interested in the report in THE JOURNAL (Nov. 12, 1910, p. 1732) of a case of acute thyroiditis, because of having encountered, a few years ago, my first and, so far, my only patient suffering from this condition, and because of the apparent rarity of the condition, the suddenness of onset, the difficulty of determining the etiology, at least in my patient. I cannot see valid reasons for attributing the thyroiditis, in the case of Drs. Lewis and O'Neill, to the infection of their patient from the horses suffering from epizootic. While it could not be disproved, I cannot but feel that it is possibly a coincidence, especially because of the rapid and complete recovery. My patient had a slight recurrence a few weeks later, which, I understand, may be expected in these cases. I did not see him in the second attack, which was mild, giving him but little trouble, he said.

Another thing which has impressed me is the slight mention of the condition in the literature, many of the text-books not referring to it at all. I am quite sure that the well-developed case of much severity, confronting for the first time the young practitioner who perhaps has never heard of the condition or has forgotten it, will occasion some serious and anxious thought on his part.

A German farmer, of good habits, aged 65, had been in his usual good health, doing no hard work, although still a very active man. On Aug. 9, 1904, he had gone to the elevator, some five or six miles from his home, and was returning shortly before noon in an open lumber wagon. When nearing home he suddenly noticed a sensation of pressure in the throat, increasing to choking, with dyspnea and dysphagia. Putting his hand to his neck, he found an immense tumor. He managed to get home and was brought immediately to my office. These symptoms came on very rapidly, reaching their acme, he says, in less than an hour. I saw him within two or two and a half hours of the onset.

The patient was somewhat nervous and excited, cyanotic, hoarse and suffering great difficulty in speaking, with great dyspnea and dysphagia. The thyroid gland was immensely enlarged, distended and distinctly outlined, the overlying skin flushed. He was put to bed and morphin and cathartics administered and an ice-bag applied

over the thyroid gland. The condition began to improve in a few hours and passed off in two or three days, with no trouble since, except as stated above. This patient has developed in the meantime cardiac symptoms, that is, within the last two or three years, apparently due to myocarditis.

I have talked with a friend in St. Louis who has encountered three or four cases of acute thyroiditis in his practice. One of the patients died in an attack; I think, a second attack.

I should like to hear from others and to have references to literature on this condition.

G. L. ARMSTRONG, M.D., Taylorville, Ill.

ANSWER.—Our correspondent reports a very interesting case, although perhaps some doubt may be thrown on the diagnosis of thyroiditis, inasmuch as swelling occurring so suddenly would suggest hemorrhage or some other cause than inflammation. Little is given in text-books on this subject and literature is scanty. The following are some of the principal articles on acute non-suppurative thyroiditis:

Kyle, D. B.: Simple Acute Thyroiditis with Report of Two Cases, *Ann. Otol., Rhinol. and Laryngol.*, May, 1900; abstr. in THE JOURNAL, July 21, 1900, p. 187.

Illoway, H.: Case of Acute Thyroiditis of Rheumatic Origin, *Ann. Otol., Rhinol. and Laryngol.*, May, 1900; abstr. in THE JOURNAL, July 21, 1900, p. 187.

Secord, E. R.: A Case of Acute Thyroiditis, *Canada Lancet*, February, 1903.

Garbini, G.: Acute Thyroiditis, *Arch. ital. di otol.*, 1903, xiv, No. 1.

Quervain, F. de: Acute, Non-Suppurative Thyroiditis, *Mitt. a. d. Grenzgeb. d. Med. u. Chir.*, 1905, xiii, Supplement: *Semaine méd.*, 1905, xxv, No. 44; abstr. in THE JOURNAL, Dec. 2, 1905, p. 1785.

Lublinski: Acute Iodin Intoxication and Acute Inflammation of the Thyroid, *Deutsch. med. Wchnschr.*, 1906, xxxii, No. 8; abstr. in THE JOURNAL, April 14, 1906, p. 1147.

Lamb, S. D.: Case of Acute Thyroiditis, *Washington Med. Ann.*, 1907-08, vi, 243.

Dunger, R.: Acute Non-Suppurating Thyroiditis, *München. med. Wchnschr.*, Sept. 8, 1908; abstr. in THE JOURNAL, Oct. 17, 1908, p. 1381.

Schwerin, H.: Acute Non-Suppurative Thyroiditis, *München. med. Wchnschr.*, Oct. 13, 1908; abstr. in THE JOURNAL, Nov. 21, 1908, p. 1326.

Lecène, P., and Metzger: Acute Thyroiditis in Puerperal Infection, *Ann. de Gynec. et d'Obst.*, February, 1910; abstr. in THE JOURNAL, April 2, 1910, p. 1174.

Parisot, J.: Acute Thyroiditis and Cardiovascular Complications, *Presse méd.*, May 7, 1910; abstr. in THE JOURNAL, June 11, 1910, p. 2007.

Lewis, J. P., and O'Neill, B. J.: Acute Thyroiditis with Edema of the Glottis, THE JOURNAL, Nov. 12, 1910, p. 1732.

DOSE AND VALUE OF SALVARSAN AND OTHER ARSENIC COMPOUNDS

To the Editor:—Please answer the following questions:

1. What per cent. of arsenic does each of the following contain: arsenous acid; sodium arsenate; sodium cacodylate; salvarsan?
2. What is the maximum single dose, by mouth, of arsenous acid, sodium arsenate, sodium cacodylate?
3. What is the maximum single dose, hypodermically, of sodium cacodylate; salvarsan?
4. Would it not be possible to introduce into the system with sodium cacodylate as much arsenic as it is possible to do with salvarsan, and in as short a period of time and with as little or less danger to the patient? If so, what advantage has salvarsan over sodium cacodylate in the treatment of syphilis?

G. W. SHRIVER, Sistersville, W. Va.

ANSWER.—1. Arsenous acid (arsenic trioxid) contains 75.74 per cent. of arsenic; sodium arsenate (crystallized) contains 24.01 per cent. of arsenic; sodium cacodylate (crystallized) contains 35.64 per cent. of arsenic; salvarsan should contain 34.16 per cent. of arsenic.

2. The dose of arsenic trioxid is given as from 0.002 to 0.004 gm. (1/30 to 1/15 grain). It may be increased gradually as tolerated by the patient, and it is impossible to state the maximum dose that can be given, except that we know the fatal dose is as small as 2 grains, and probably 1 grain may be fatal in some patients. The compounds of arsenic acid, like sodium arsenate, are not so poisonous as those of arsenous acid, hence sodium arsenate can be given in larger doses. The dosage is stated to be 0.003 to 0.008 gm. (1/20 to 1/8 grain). The dose of sodium cacodylate is from 0.03 to 0.13 gm. (1/2 to 2 grains).

3. The maximum dose of sodium cacodylate, hypodermically, would appear to be 0.13 gm. (2 grains). According to the experiments of Dawes and Jackson (THE JOURNAL, June 22, 1907, page 2090), sodium cacodylate appears to have only a very slight toxic action. They found that 0.5 gm. did not kill a rabbit, while 0.8 gm. did. The toxic dose of salvarsan has been estimated to be 0.15 gm. per kilo, which would correspond to 10.5 gm. for a man weighing 70 kilo. The maximum dose of salvarsan may be put at 0.6 gm., although possibly more might be given without serious results. A dose above 0.6 would, however, be attended with risks.