around the town. Dr. McCormack, the father of Dr. A. T. McCormack here, was called in to help arouse public sentiment, and he did it to the queen's taste.

He visited all of the slaughter houses and made observations. A meeting of the city council and the physicians was then called and the whole odorous matter laid before them. Nothing, however, seemed likely to come of it, until the owners of the local ice plant were approached and asked to investigate the possibility of establishing a sanitary abattoir in connection with the refrigerating plant. The matter of cost was gone into and it was learned that for fifteen thousand dollars a satisfactory plant could be built.

A stumbling-block was then discovered in the city ordinance forbidding a slaughter house within a quarter of a mile of the corporate limits. Several members of the council, notably one member of the Board of Health, refused to sanction the building within the city. It is, I may say, essential to the successful working of a place of this

whole enterprise is successful from every point of view. This ought to point the way to municipally owned sanitary abattoirs as well as sanitary municipal market houses.

Dr. McCormack (addressing Dr. Seale Harris, the Secretary): Doctor Harris, would it not be possible to make photographs of that abattoir and of that sanitary market house for publication in the Journal?

(Editor's Note: The cuts illustrating this paper were furnished us through the courtesy of C. H. A. Wannenwetsch & Co., 353 Williams St., Buffalo, N. Y., who equipped the sanitary abattoir mentioned in this discussion.)

AUTHORS' ABSTRACTS.

Tropical Diseases and Public Health.

The Propagation of Amoebic Dysentery in Animals and the Recognition and Reproduction in Animals of Atypical Forms of the Disease. By Andrew W. Sellards and Walter A. Baetjer, Baltimore, Md. *American Journal of Tropical Diseases and Preventive Medicine*, 1914, II, 231.

Amoebic dysentery was produced in lower animals with unusually constant results (practically 100 per cent) by direct injection into the cecum, after its exposure by an exploratory laparotomy. Infection was secured even when the injected material was poor in amoebae and contained only atypical forms. This result is in marked contrast to the usual methods of inoculation, which give only about 50 per cent of infections. With the aid of this procedure continuous propagation of a typical strain was secured, whereas the current opinion maintains that sub-inoculation is limited to three or four passages. In typical amoebic dysentery no evidence was obtained from the infected animals that the entamoebae can produce death primarily by their own action, but when death occurred it was always due to a bacterial septicaemia. There is strong evidence to indicate that a fatal bacterial septicaemia may develop in acute cases in man.

Some diarrheas of obscure origin were studied. In one of these the clinical diagnosis of syphilitic proctitis seemed justifiable. In another case a giant colon had developed and the anatomic conditions appeared to be sufficient to account for the diarrhea. A few atypical amoebae occurred in these cases and animal inoculation proved that they were the etiologic factor. Absolute identification of these atypical amoebae was not possible, but, for the present, the authors prefer to regard them as atypical strains of *E. histolytica* until further information is available.

The Purity and Strength of Household Remedies.

By Martin I. Wilbert, United States Public Health Service, Washington, D. C. *Public Health Reports*, January 29, 1915.

It is asserted that the loss of human energy through morbidity and mortality by preventable diseases constitutes by far the greatest waste of our present day resources and that it is not generally appreciated that this waste is due either to neglect or ignorance so far as the use of prophylactic or curative measures may be concerned.

Sanitary combination rendering and drying apparatus.

sort that it be in juxtaposition to an ample refrigerating apparatus and accessible to the meat dealers. To convince these councilmen it was only necessary for the health officer to take them driving over the territory so lately covered by Dr. McCormack. The smells and the buzzards hovering round easily demonstrated the necessity for action, and the necessary permission to build was granted at the next council meeting, proper safeguards being taken for health department supervision. The construction was at once undertaken and as the work progressed the promoters decided to make the plant first-class in every particular, \$45,000 being the final cost. The abattoir today is killing all of the meat of the city and in addition has now attached to it a splendid meat-packing plant, which is operating to full capacity and readily disposing of all its products. The

The variability of drug action due to differences in the strength and purity of the several drugs or preparations is thought to be due to the fact that state food and drug laws and the laws designed to regulate the practice of pharmacy and to restrict the distribution of potent medicines to specially trained and capable individuals are not effectively enforced.

A table presenting a compilation from the reports of state chemists shows that 3,472 samples of ten official articles that are widely used as household remedies, examined in 1913, 1,259, or 38 per cent, were rejected as being adulterated or not in compliance with the official requirements.

A second table shows that of 5,347 samples of the same articles examined during 1912, 1,861, or 35 per cent, were rejected.

The preparations included in these tables are more frequently used as household remedies than on the prescriptions of physicians, but are, nevertheless, recognized medicines, the abuse or misuse of which may lead to serious consequences.

The author concludes that a more energetic and active control of all drugs and preparations is needed.

Occurrence of Yaws in United States. By E. J. Wood, Wilmington, N. C. *American Journal of Tropical Diseases and Preventive Medicine*, January, 1915.

The importance of this article lies in the fact that yaws has occurred in a white child never out of North Carolina, and it may be that, like pellagra was, it is being overlooked. The writer refers to an interesting article by John Brickell, M.D., a Dublin physician, who was an emissary to the Cherokee Indians. This writer described yaws accurately in North Carolinians and the work was published in 1737. The probability that yaws is being called syphilis in the negro is emphasized and the suggestion made that this may account for the relative infrequency of tertiary manifestations.

The work of Capt. H. J. Nichols on the study of the treponema pertenuis, which is now known to be the causative agent, is carefully detailed. The difficulties encountered by investigators in distinguishing between *T. pertenuis* and *T. pallidum* receives special mention.

The chronological bibliography of J. Numa Rat is published with numerous additions and brought up to date. This will serve to aid any who may care to look further into this interesting subject.

Some Facts and Discoveries Concerning the So-Called Continued Malarial Fever. By J. H. McCurry, Grubbs, Ark. *Memphis Medical Monthly*, February, 1915, pp. 62-65.

The common cold or retention of an abnormal amount of toxic elements in the blood cause more than half the ailments we treat. A piece of iron is shorter when cold than the same piece of iron when hot, caused by cold contracting the pores. The same is true in regard to the skin,

there is a drawing and contraction of the skin caused by exposure and chilling of the body, this rendering the dermal glands inactive and somewhat closing, and preventing the blood from unloading the dead cells, poisonous gases and toxic compounds through the skin.

"every case of this fever I have ever treated I have found all the unmistakable evidences of this complicating element present.

Quinine furnishes the best illustration known to therapeutics of a true specific. The proper prophylactic and hygienic precautions, coupled with the proper remedies and quinine given over a long enough period, will effect a cure in every case so far as malaria per se is concerned.

If this was a malarial manifestation per se, quinine would destroy every available hematocoon within one week. If the cause of any trouble is removed, the manifestation produced by that particular cause will rapidly subside and a gradual return to the normal will result.

From close observation I am fully convinced that when in a fever we suspect malaria, even though confirmed by the microscope and hematozoa found in abundance resists the action of quinine for more than one week, we have some other condition present.

The Late Outbreak of Plague in Havana. By Aristides Agramonte, Havana, Cuba. *American Journal of Tropical Diseases and Preventive Medicine*, July, 1914, pp. 13-27.

The first cases of plague appeared almost simultaneously in Havana and San Juan, Porto Rico, and it was therefore surmised that both ports were infected from the same source, the Canary Islands, where the infection has taken root and, all evidence shows, remains in a more or less latent form. The Spanish authorities follow the method of concealment and deception with regard to plague, according to their own acknowledgment. Three cases of plague occurred in Havana in 1912 (June-July); active anti-rat measures instituted had to be suspended in June, 1913, for lack of funds. First case of second crop appeared in February, 1914; subsequently nineteen cases developed, and seven in Santiago, on the other end of the island. The measures which definitely suppressed this outbreak were mainly directed upon rat destruction, although much was done to rat-proof houses found honeycombed by rat burrows. Much fumigation by means of hydrocyanic acid gas was carried out, and to the lethal qualities of this gas is attributed the apparent success in the disappearance of the infection. At one time seventeen blocks of houses were vacated simultaneously and fumigated, mainly with sulphur. Some of the houses, in which plague appeared after fumigation, were again treated, but with hydrocyanic acid gas. No rat plague was found anywhere, except for two rats discovered in an old stable, which was destroyed by fire. The result of treatment by massive and intra-venous injection of plague antitoxine was demonstrated by the low death rate, compared with other epidemics; twenty-one cases with three deaths.