

frequently asserted, that the only remedies which are to-day paying are inexpensive pills, advertised to produce miracles at fifty cents per box. If the pills cost three or four cents per box, and can be sold retail at fifty cents, there is sufficient scope for profit to enable the proprietor to give practically unlimited advertising contracts, and thereby sustain a demand. If this is, as we have some reason to believe it is, the secret of the new era in advertising, we are certain it cannot last, as sooner or later an exposure will be made which will land such remedies high and dry out of the tide of trade.

#### WHAT IT MAY BECOME.

It is always difficult to foretell the future; but as it is usually generated from events of the past, a rough guess may safely be made. Considering that past events and present conditions have been from good to bad, we may assume that the latter condition will continue to prevail unless radical changes take place at an early date.

The moment the members of the drug trade realized that patent medicine manufacturers had inaugurated a new system or avenue for the distribution of their goods, that moment they, in turn, adopted new methods of treating the difficulty. First, counter distribution of advertising matter was discontinued, and the manufacturer was put to thousands of dollars expense for travelling and distributing agents; second, organized companies were instituted to manufacture substitute goods for co-operative purposes, and met with considerable success; third, druggists who felt somewhat jealous of co-operative goods saw no reason why articles of their own, of similar import, should not prove supplantive; and to this last cause the patent medicine man of to-day properly ascribes his chief difficulties, as he realizes that he has to pay for the creation of a demand for goods for which the man who fills the order by substitution has to pay nothing.

The foregoing is, in our belief, a true statement in condensed form of past, present, and prospective conditions, and, while it is no part of our duty to determine or point out the policy to be pursued by the manufacturer, we would suggest that he attach his own experience to the above description and carefully consider where he was leading. The drug trade is not as dependent upon the advertised patent remedies as many would suppose. It could exist, and possibly

with greater success than at present, if advertised remedies were unknown; and unless honest, earnest, and combined efforts are put forth by the present manufacturers to rectify matters on the lines now being suggested, we are not sure but the day of extinction for their trade is near at hand.

#### Review of the Year 1895.

In attempting to select the subject entitled to the first place in the discoveries of the past year, we think there can be little doubt that Argon will be *facile princeps*. Although, strictly speaking, it was discovered by Lord Raleigh, and investigated by Professor Ramsay towards the close of 1894, the whole scientific world received the first announcement with something more than suspicion. Since then overwhelming evidence of its existence has been produced, foreign savants have examined it, and the United States has awarded the discoverers one of its most substantial prizes, whilst the Royal Society has conferred its medals, and the French Academy its Lecomte prize. During the past year the progress of serum therapeutics can hardly be said to have been so great as was anticipated. Statistics, usually misleading, have been specially confusing to those who wanted a clear and unbiased reply as to the value of diphtheria antitoxin, tetanus antitoxin, etc. There can be little doubt that we are only on the threshold of the subject, and Goethe's cry, "Light, more light," is particularly applicable at the moment. As long as we are ignorant of the exact chemical nature of the antitoxins and their biological relation and therapeutical properties, the experiments are being made, more or less, in the dark. The endless series of organic derivatives still form a rich harvest to the experimental therapeutists—and the German manufacturers.

#### THERAPEUTICS.

Contributions to our knowledge of the physiological action of the extract of the suprarenal capsules have been made by Oliver and Schafer, who conclude they are secretory rather than destructive, and that the products act as tonics to the muscular tissues. Moore also examined the same substance and suggests that it is a powerful reducing material, and Nabarro found it to consist of globulins and nucleo-albumins, pepsin and peptones being absent. Schafer and Oliver have also proved that extract of pituitary body raises the blood pressure, whilst that of thyroid lowers. This opposite action disproves the assumption that the two glands are vicarious in function. Fraser proved that the antitoxic serum of animals rendered immune to snake bites possesses definite antidotal properties. The snake poison antitoxin of one kind of venom renders an animal resistant to others. Cancer antitoxin is prepared by Richet

from a tumor rubbed up with water and injected into dogs or asses. After a few days the blood was drawn and serum separated. The successful treatment of two cases of cancer was reported in Paris. As syphilis is unknown in animals, Bayet obtained an antisiphilitic serum from the blood of cows and sheep, and treated the disease with injections of this pure serum. After fifteen days the syphilitic eruption had disappeared.

Contradictory reports are still appearing in the veterinary journals as to the diagnostic value of mallein and tuberculin in detecting latent glanders and tuberculosis in cattle. Pickering has shown that the introduction of the chlorine atom into the caffeine molecule considerably modifies the action, chlorocaffeine producing far less tonic contraction of the heart than caffeine. Digitoxin has been recommended by Masius and Corin as the most prompt and reliable principle of digitalis. Its cardiac action is very marked in doses of  $\frac{1}{2}$  milligram, whilst Wenzel suggested its administration in the form of an enema, in order to reduce the risk of gastric disturbance. According to Schney, the combination of guaiacol and Peruvian balsam has given the best results in tuberculosis. Inhalations of the balsam are also recommended. Lederer proposed the use of saligenin instead of salicin, as by this means the patient is relieved of the work of splitting up salicin into saligenin and sugar in the internal economy. Saligenin is now easily prepared from carbolic acid and formaldehyde by Von Heyden's patent. The value of piparazine as a solvent of uric acid stones has been disputed. The physiological action of emetine and cephaeline, the two alkaloids of ipecacuanha, isolated by Paul and Cownley, have been examined by Wild, who finds that cephaeline is the more powerful emetic, acting in doses from 1-12 grain, whilst at least  $\frac{1}{4}$  grain of emetine is requisite.

#### NEW REMEDIES.

To the production of iodoform substitutes there appears no end. Airol is the latest candidate, and is the name given by Ludy to an oxy-iodo-gallate of bismuth. It is voluminous, odorless, and stable, and as a dusting powder for ulcers, etc., has already gained some little reputation. Liebrecht and Rohmann have obtained a soluble silver albumin salt, which they call argonin, and recommend as superior to other silver salts, as it is non-irritating to the mucous membrane, an effective antiseptic, and specially active on species of gonococci. Parachlorophenol has been successfully used in the form of ointment in the treatment of erysipelas. Bismuthol is a phosphosalicylate of sodium and bismuth, and is claimed to combine antiseptic and antipyretic properties. An ointment of 10 per cent. strength and a solution of 4 per cent. have been used in the antiseptic treatment of wounds, skin diseases, etc. Mellinger has introduced the methyl ester of gallic acid,  $C_4H_3O_5$ , under