

ing 50°. The pyrogallate so obtained possesses a sulphur-yellow color, and contains 60.1 per cent. of bismuth. The amount of pyrogallol in the compound may be determined volumetrically by means of a solution of iodine, using starch paste as an indicator. The blue color of the iodide of starch is only formed when all the pyrogallate is decomposed. It is necessary to work with very dilute solutions, and 762 parts of iodine correspond to 126 parts of pyrogallol. The bismuth is removed by passing sulphuretted hydrogen through water containing a weighed quantity of the pyrogallate in suspension, and the excess of the gas removed by warming the liquid. By this means Vittorio finds that his preparation corresponds with the formula— $C_6H_3O_4Bi$.

The author concludes as follows from his researches:

(1) Pyrogallate of bismuth, even in considerable doses, is not toxic.

(2) When introduced into the system, it suffers but little decomposition in the intestines. The bismuth passes through the system, whilst the pyrogallol is only found in the form of the products of its oxidation.

(3) By reason of its slight solubility, its application is advantageous in all cases where the use of pyrogallol is desired without the risk attendant on the simple acid. In particular, therefore, it is recommended in infectious maladies of the intestines.—*Journal de Pharm. et de Chim.; Manufacturing Chemist.*

Demonstration of Wood Fibre in Paper.

Wolesky states in the *Papierzeitung* that if paper, either sized or unsized, be wet with a solution of diphenylamin in alcohol, to which sulphuric acid has been added, if wood fibre be present it will show itself by an orange reaction that is very characteristic. The intensity of the color is in direct proportion to the amount of the fibre present. In colored papers, which yield to sulphuric anilin very feeble or no results at all, and even phloroglucin gives a very faint reaction, the diphenylamin test gives most satisfactory results, the orange coloration becoming very marked as the paper dries. Yellow or orange-colored paper sometimes makes the detection of wood fibre by this means somewhat difficult, but the difficulty is removed at once by bleaching the paper with a mineral acid, hydrochloric preferably.

Koch, the great bacteriologist, has placed himself under the care of Father Kneipp, the clerical water-cure practitioner.

In the French budget for 1895 is an appropriation of \$15,000 to provide for the organization of chairs of dental surgery in several of the medical schools of that country.

Pharmacy Abroad.

MUNICIPAL PHARMACY.—It is not often that pharmacy is even remotely connected with such a hot debate in supreme legislative bodies as took place lately in the French Chamber. The Municipal Council of Roubaix is Socialist, and in carrying its opinions in practice established a pharmacy, managed by a duly qualified pharmacist, at which drugs were sold and prescriptions dispensed at cost price. The local pharmacists naturally objected to this, and agitated for the suppression of the municipal pharmacy. In virtue of a law prohibiting corporations from engaging in commercial transactions, this was done by the Prefect of the Nord. M. Guesde, a prominent Socialistic revolutionist leader and a deputy in the Chamber, seized the opportunity for a general debate on Socialistic doctrines. M. Dupuy, the Premier, showed how the establishment of a pharmacy would lead to other shops being opened, and to Collectivism. After violent speeches, a vote of confidence in the government was passed, and so the Roubaix pharmacists have got their way.—*British and Colonial Druggist.*

THE CHINESE PHARMACOPOEIA.—The Chinese Pharmacopoeia contains many peculiar remedies. Snow-water is supposed to be good for worms, while hail-water is poisonous. For eye troubles the excrecence of bats is recommended. Amber is nerving. Ink is a diuretic, and gunpowder is a vermifuge. Benzoin is good for stomach ache. It is much adulterated, but there is a sure test. If real, its fumes will charm rats out of their holes. Wheat bread is prescribed for a variety of complaints, and bread pills are an old remedy with celestial doctors. Verdigris is good for skin troubles. Ambergris is a substance coughed up by dragons, and is excellent for healing. Plasters of elephant hide are useful for wounds that heal slowly. Dried scorpions and seed pears cure a number of diseases. Ashes of paper are an astringent.—*New England Druggist.*

PHARMACY IN WESTERN AUSTRALIA.—The Western Australian Pharmaceutical Society have succeeded in getting an Act passed through the legislature last month to control the practice of pharmacy in the colony. The Pharmaceutical Society of Western Australia is the official body, and will have the power of enforcing the subscriptions payable yearly for the right to keep open shop. All sellers of poisons are to hold a license from the society. The council will be elected by the chemists, but the Governor may remove any member of the council, and on the advice of the council he may direct the removal of any name from the register, and may add fresh items to the poison schedule. The Act comes into force on March 1st, 1895. Their rights are secured to per-

sons already in practice, and the society are empowered to recognize certificates from other countries. Four years' apprenticeship is enjoined before passing the qualifying examination. The poisons regulations include directions for their safe keeping, and for sales by post. Medicines dispensed by medical men or by pharmaceutical chemists from prescriptions by medical men, as well as patent or proprietary medicines, are outside the poisons regulations.—*British and Colonial Druggist.*

Italy now requires that all compounded medicines sold within her borders shall bear outside the package a recipe showing the ingredients of which they are composed.

A Scientific Discovery from Japan.

A Japanese *savant*, Jokichi Takamine, who has studied at Glasgow and Tokio Universities, has discovered says *The Times*, a novel method of preparing diastase and some other substances, of which we recently received specimens. He has been cultivating *Eurotium oryzae*, a mycelial plant of the *Aspergillus* family, on wheat-bran, and has found that, at an early stage of its growth, it bears upon its roots minute crystals of diastase, while the unripe spores contain a very powerful ferment. By washing the bran in percolators and crystallizing the solution, he claims to be able to obtain diastase of considerable purity as a commercial product. Takamine claims that a mixture of equal parts of this diastase (or "Taka-koji," as he calls it) and crude wheat-bran, when added in the proportion of 10 per cent. to the quantity of grain mashed, will effect a more perfect conversion than the use of 10 per cent. of the best malt. The ferment is a very remarkable substance. It is said to be three times as powerful as yeast—that is, it will continue to produce fermentation in a sugar solution till there is 20 per cent. of alcohol present, whereas the action of ordinary yeast stops when the percentage of alcohol reaches 7. This one fungus, therefore, appears to produce in itself the converting agents required in two of the most important processes in the manufacture of beer and spirits. Besides this, the wheat-bran, after two or three cultivations have been grown upon it, is said to form a good food for cattle, containing some 20 per cent. of protein, or flesh-forming substance.—*British and Colonial Druggist.*

Test for Wintergreen Oil.

The following is an excellent test for oil of wintergreen, or birch, that is suspected of being mixed with the synthetic oil:

The theory is that, while synthetic oil of wintergreen is almost the same, chemically, as true oil, yet, it being an alcoholic product, it is impossible to entirely remove traces of alcohol; hence, if a