

chlorine as pure as is required (80 to 85 per cent. pure). Chlorine, as evolved from the generator, is never pure, but can be purified by passing the dry gas through a tube containing asbestos fibre, heated by a bunsen flame. The heat decomposes the chlorine dioxide, and pure chlorine can thus be collected.—*Chemical News*.

THE GASEOUS PRODUCTS EVOLVED FROM WOOD CHARCOAL WHEN SUBMITTED TO A HIGH TEMPERATURE WITH THE EXCLUSION OF AIR.—The mean composition of the gaseous products of distillation are:

Carbonic acid.....	9.14
Oxygen	0.26
Carbon monoxide.....	18.08
Hydrogen.....	49.11
Marsh-gas.....	16.04
Nitrogen	7.37
	100.00

Hence the reaction $C + CO_2 = 2CO$ hitherto admitted as the expression of the truth is much more complicated than the above formula indicates. The wood charcoal which has undergone the operation burns without odor or smoke, and is, in some cases, preferable to ordinary charcoal. The antiseptic properties of the gaseous mixture are superior to those of carbon monoxide.—*Chemical News*.

Reactions of Phenacetin.

Bayer (*Journ. de Pharm. d'Anvers*) gives the following tests for phenacetin: (1) When heated with a small proportion of hydrochloric acid and the mixture dissolved in water, the resulting solution becomes of a ruby red color on the addition of chromic acid. (2) Chlorine water or chlorinated lime in solution gives a violet color, passing to ruby-red in the presence of phenacetin. (3) Dissolved in concentrated sulphuric acid it is colored red by the addition of a few drops of nitric acid. This reaction distinguishes it from acetanilid. (4) Heated with a few drops of sulphuric acid and a trace of phenol it produces a purplish red color, and gives off an odor of acetic acid. (5) A solution of 0.01 gram of phenacetin in 10 c.c. of boiling water after cooling is not rendered turbid by the addition of sufficient bromide water to produce a yellow coloration.

Nitropentaerythrite and a Smokeless Explosive.

An application for a patent under the above name has been made. The process of manufacture is as follows: The product known under the name of pentaerythrite resulting from the condensation of acetaldehyde and formaldehyde in presence of lime, and having its fusing point between 190° and 260° C., is reduced to a very fine powder, and is then dissolved in nitric acid, and precipitated by concentrated sulphuric acid, or may be brought

into a mixture of nitric acid and sulphuric acid.

The crystalline solid thereby produced is separated from the liquid, washed with water, and any acid that is left in contact with it is neutralized by a diluted solution of soda. The substance is then pulverized while in a moist condition.

The substance thus produced may be pressed or brought into a granular form as a smokeless explosive, or it may be mixed with nitro-cellulose.

The claims for a patent are:

(1) The method of production as described.

(2) The production of a smokeless explosive.

(3) An enumeration of various substances with which it may be combined.

—*Manufacturing Chemist*.

The Spanish Cork Industry.

An official in the French Forestry Department, who was recently sent out by the French Government to inspect the cork forests of Spain, has just presented his report to the government. He estimates that about 1,550,000 acres of land are planted with cork trees in Spain. The province which is richest in cork trees is Gerona, with 395,000 acres of forest; then follows Huelva, 335,000; Caceres, 200,000; Seville, 181,000; Cadiz, 137,500; Ciudad Real, 70,000; and Cordova, 57,000 acres. The ten provinces of Badajoz, Jaen, Malaga, and Toledo (in the south), and Burgos, Santander, Zamora, Salamanca, Avile, and Saragossa (in the north) have cork plantations; but the trees do not flourish in any of them. Thirty-two provinces contain no cork plantations at all. It is just a hundred years since a cork factory was started in Gerona, since then the manufacture of cork has blossomed into one of the chief industries of Spain. The largest factories are at Gerona, Avenys de Mar (Barcelona), San Celoni, and Tordera. Over one thousand four hundred million corks for bottles, representing a value of seventeen million pesetas (£540,000) are turned out of the factories every year. About 12,000 men are employed in the work. It is difficult to calculate the income which cork brings in, as statistics in Spain are very faulty, and no account is kept of the cork that is used in the country itself. It is estimated, however, that during the past year £1,073,800 was paid for the cork that was exported. The chief markets for raw and manufactured cork are London, Paris, Reims, Epernay, Mainz, Dresden, New York, Calcutta, Melbourne, Sydney, and Yedda.—*Foreign and Colonial Importer*.

SALIFEBRIN or SALICYLANILID is the latest "coal-tar derivative" marketed by Radlauer. According to the *Pharmaceutische Wochenschrift*, it is a mechanical mixture of salicylic acid and acetanilid, with corresponding properties.

Details That Will Take Care of Themselves.

If there ever was an occupation requiring watchful care, it is that of the pharmacist. There are so many new remedies announced each year that get farther than the manufacturers' advertisements in the trade journals—yes, even so far as the druggists' prescription shelf. One by one these things accumulate, and, as time goes by, it becomes difficult in some cases to get reliable data referring to the dose, properties, solubilities of these once new remedies.

If the druggist will trim a neat blank label and gum it on the back of each bottle, he will find that he will need all of its space in which to write a few things down—details that will take care of themselves. The first thing to note down is the cost price per ounce. Then follows the selling price per grain or drachm. If the pharmacist will continue his statistics further, he should add the dose, usual and maximum, then the effects on the system, in one or two words—and we have plenty in the vocabulary to describe each therapeutic effect, by the way—giving also the incompatibles and solubility, concluding with an advisable vehicle.

It may be a year or two—yes, even longer—when these same facts, gleaned at the time from the books and journals, will be of great service to the one dispensing. Maybe it will be a new clerk, or assistant, or the proprietor, who will be asked by a physician or patient the dose, effect, compatibility or solvent for this identical, yet out-of-the-way remedy. By embodying all this in a few words, and writing it on a small label on the bottle, the answer will always be at hand, and where it is most needed.

It is just these peculiar remedies that your physician may ask you about, and it is your business to furnish the information. He may, doubtless, know the therapeutic value and dose, yet inquire for its solubility and a pleasant method of administration. If every out-of-the-way chemical or preparation is thus labelled, the compounding of a prescription calling for it would be more of a pleasure than a task, and still serve to relieve the druggist's memory of details which will then take care of themselves.—*Frank T. Green, in Pacific Druggist*.

PARAFORM.—According to Aronsohn (*Jour. d. Phar. v. Elsass-Loth.*), when formaldehyde is heated for a sufficient length of time in a watery solution, it passes into a solid, white, crystalline polymer, insoluble in water. This is paraform. It is a very strong intestinal antiseptic. For this purpose it is said to be superior to B-naphthol, iodoform, salol, dermatol, and benzo-naphthol. It has a strong inhibitory action on the propagation of bacilli. One grain of paraform will completely sterilize 200 grams of urine.