

and an excess of glycocholic acid resulting from the reaction. Glycocholate of quinine has the appearance of a resinous, dense mass, insoluble at ordinary temperatures in water and diluted acids, soluble in ammonia and alcohol, and difficultly soluble in caustic potash, although a double combination is effected by the prolonged action of this alkali. If a mixture of glycocholate of quinine and a strong acid, such as sulphuric acid, is heated, the quinine separates, and coloidal acid appears to be formed. The salts of quinine may be absorbed by the stomach; if they pass into the intestine they are rendered ineffectual, in consequence of the insoluble compound they produce when mixed with bile.—*Chemist and Druggist*.

LIQUOR STRYCHNINÆ.—Mr. Deans writes to the *Lancet*:—I wish to call attention to what I consider a grave defect in the liquor strychnine of the British Pharmacopœia. I find that in cold weather, when the thermometer is 45 or 40 degrees, the strychnia is deposited in crystals at the bottom of the bottle, which crystals are again dissolved at a higher temperature. I think this is due to the small proportion of acid, or to the acid being hydrochloric, as when the solution is effected by means of sulphuric acid I have not noticed that any deposition has taken place. What is the reason, too, of the red discoloration and muddy deposit which occurs in the syrupus ferri phosphatis when it has been made for any length of time? Does it in any way interfere with its therapeutic action?—*Chemist and Druggist*.

HOW POPULAR SCIENCE IS WRITTEN.—In a letter on "Poisonous Dyes," recently sent to the *Times*, commenting on the highly explosive nature of the dye which was supposed to be used, Mr. Crookes wrote: "It is almost as explosive as nitro-glycerine, and has already destroyed one factory, with loss of several lives. Should the dye retain this character in the fabric, the wearers of these socks would be able to vary the excitement they are now indulging in in a highly sensational manner." This harmless little joking, perpetrated two months ago, has this week been disinterred by the editor of a contemporary which occasionally dabbles in popular science, and now appears in the following shape: "Mr. Crookes has recently asserted that woollen stockings dyed with picrate of potash are liable to explode on the feet of those who sit too near the fire."—*Chemical News*.

HYDRARGYRI SUBCHLORID AND AMMON. CARB.—J. Robinson (Chester-le-street) writes—"Perhaps you will allow a 'beginner in chemistry' a small space in your valuable journal to make a few remarks. I had an order from a surgeon for a few chemicals, among which were hydrarg. subchlor. and ammon. carb. Never dreaming of any decomposition, I put them all into one parcel. A few days after the calomel was returned, marked "wrong," and on opening the packet I found a dingy grey powder. I at once suspected the ammonia had something to do with it, so I put a little calomel into a wine-glass, and added about ʒss. liq. ammonia, which immediately deposited a black precipitate (black oxide of mercury.)

I have written the above, as I thought some of my brother chemists might, having

similar orders, put them up in the same style as I did, and so lose a parcel of calomel. To remedy this evil I would recommend it to be put into a bottle.—*Chemist and Druggist*.

A NEW ALARM.—A Berlin mechanic has invented an ingenious apparatus for giving an alarm in case of the presence of carbonic oxide or coal gas in a room. It consists of a galvanic battery with a bell and a glass tube filled with chloride of palladium. This metallic salt is extremely sensitive to the pressure of carbonic oxide gas. A small quantity of the gas will at once throw down some of the metal from the solution, and this precipitate collecting in the bottom of the tube at once establishes a connection in the current of electricity, and the violent ringing of a bell will warn the sleeper of his danger.

THERAPEUTIC EFFECTS OF LUPULINE.—M. Méhu finds that the resin of hop, in the dose of twenty to thirty grains, produces often an immense headache; sometimes a nausea, and even slight vertigo; and always a state of insensibility, lasting several hours, but without hallucinations such as hashish causes. Each time he has found a subsequent and notable increase of appetite.—*British Medical Journal*.

NEW PROCESS FOR OBTAINING NITROGEN.—A new and elegant method of preparing nitrogen gas has been made known by a distinguished Italian chemist, Signor Massimo Levi. It consists in heating bichromate of ammonia in a retort; the salt is thus resolved into green oxide of chromium, water and nitrogen gas.

TO REMOVE OLD PUTTY.—Dip a small brush in nitric or muriatic acid and with it anoint or paint over the dry putty that adheres to the broken glass and frames of your windows. After an hour's interval, the putty will have become so soft as to be easily removable.

—The *Moniteur des Interests Materials* estimates the total production of copper in the world at large at 93,415 tons. The United States contributed 14,420 tons.

—Gun cotton explodes when metallic sodium or metallic potassium is brought in contact with it. The amalgams of these metals do not produce the same effect. Finely divided arsenic requires percussion before it explodes the cotton.

—To remove the bitterness of sulphate of magnesia, which is the chief drawback of this useful saline aperient, it suffices, according to the *Bulletin de Therapeutique*, to boil a little coffee in the solution of the sulphate; the flavour of the coffee masks that of the medicine. The flavour of the decoction of senna may be covered in the same way.

The amount of petroleum remaining unsold in the United States on the 1st of January last, is stated at 520,588 barrels; afloat and in Europe, 439,668 barrels; total 960,256, showing a decrease of 312,925 barrels as compared with the 1st of January, 1868.

An Illinois beet sugar company uses fifty tons of beets a day, and will soon increase its consumption to sixty tons.

NEW METHOD FOR THE SEPARATION OF SILVER FROM GOLD.—At a late meeting of the Chemical Society of London, Mr. F. B. Miller read a paper on the application of chlorine gas to the toughening and refining of gold. The process devised by the author consists in passing a stream of chlorine gas through the melted gold covered with borax. In a few hours the whole of the silver present is converted into chloride, which floats on the gold. The borax prevents the loss of silver by absorption or volatilization. As soon as the gold has become solid, the still liquid chloride of silver is poured off, and the gold is now found to have a fineness of 993 parts in 1,000; the loss of gold is about the same as in the ordinary process.

CANADIAN MEDICINAL PLANTS.

PRIZES.

PRIZES are offered for collections of indigenous medical substances of vegetable origin, as follows:—

1ST PRIZE—FIFTEEN DOLLARS—a copy of *Griffith's Medical Botany*, and Certificate.

2D PRIZE—TEN DOLLARS—a copy of *Wood's Class-Book of Botany*.

3D PRIZE—FIVE DOLLARS—a copy of *Wood's Class-Book of Botany*, and Certificate.

Conditions of competition to be—

1st. Competitors to have been engaged in the drug trade, and for not more than three years, and to be members of the Pharmaceutical Society previous to 1869.

2. Specimens to be forwarded (carriage paid) to the Secretary of the Society, Toronto, by 1st September, 1869, with a sealed letter, enclosing the address of the competitor, a certificate from his employer that the collection has been made by the competitor solely within a year; that he has been engaged in the drug trade during that time, and that he has not been more than three years so engaged at the date of this notice.

3. Each specimen is to be carefully prepared ready for sale or use, and packed in a paper bag. On each shall be written legibly, the common and scientific names, the date and locality of collection, and a private mark, which shall also be put on the outside of the letter accompanying the collection.

4. Three judges shall determine the order of merit; they shall be at liberty to withhold any or all of the Prizes, if the collections do not warrant an award, and to select such specimens as they may deem meritorious for the Museum of the Society, which specimens will have the name of the collector put upon them.

5. The points of competition to be number of specimens, condition, correctness of naming, and general excellence; quantity a secondary consideration.

Collections to which Prizes are awarded will be sent to the Provincial Exhibition at the expense of the Society; and any Prizes secured there, shall be for the benefit of the collector.

Address—Collections,

Canadian Pharmaceutical Society,

H. J. ROSE, Secretary,

September 15th, 1868.

Toronto.