

**Test Your Glycerin!**

A certain indication of impurities in glycerin is foaming on the addition of distilled water and shaking. The more foam, and the greater its persistence, the greater the amount of impurities present. Pure glycerin should be entirely neutral toward litmus.

The following is an outline of a method of assay to determine the quality of commercial glycerin:

To determine the amount of water present, place a weighted quantity in a capsule, heat to 110° C. (230 F.), and maintain it at this temperature for one hour, or as long as it gives off aqueous vapors. Let cool and weigh the residue. The difference will give the amount of water present. From this determine the percentage.

Organic matters present are determined by adding to the glycerin double its weight of water, and precipitating the subacetate of lead.

Lime, if present, is detected by the addition of ammonium oxalate, which, added to pure glycerin, should not give a white precipitate. A solution of barium sulphide will throw down the sulphates, lead salts, hydrogen sulphide, etc., if present.

The most frequently occurring falsification of glycerin is the addition of glucose to the white, and molasses to the yellowish or brown varieties. To discover these frauds, agitate the sample with chloroform. The latter takes up the glucose, and the pure glycerin will float on top of the solution.

Sodium bichromate, heated with pure glycerin, should give no coloration. If color is present, it indicates the adulteration with sugar.

Having to choose between a number of samples of glycerin, of the same or similar in general appearance, color, etc., put 5 ccm. of each sample in a test-tube and add an equal amount of distilled water, agitate, and then choose that sample which gives the least foam, or that whose foam is the least durable—this on the basis of the first proposition above.—*American Soap Journal*.

**Calcium Permanganate for Purifying Water.**

Bordas and Girard suggest the employment of calcium permanganate for the purification of drinking water, since the use of this salt obviates the introduction of a foreign soluble salt, as when the permanganates of sodium or potassium are employed. To remove an excess of calcium permanganate, the lower oxides of manganese are used, which reduce the permanganate to the insoluble binoxide. Water thus treated contains neither dead organic matter nor living organisms; but contains a little calcium carbonate and minute traces of peroxide of hydrogen, which tend to assure the asepsis of the fluid.—*Comp. rend.*—*Pharmaceutical Journal*.

**Books and Magazines.**

A new book on Canada, by Dr. Bourinot, will shortly be issued. It is entitled "How Canada is Governed," and gives in plain, simple language a short account of the Executive, Legislative, Judicial, and Municipal institutions of the country, together with a sketch of their origin and development. The book will be illustrated with numerous engravings and autographs, and, being the work of so eminent an authority as Dr. Bourinot, will be indispensable to those who wish to be well informed about the affairs of the Dominion. The Copp, Clark Company (Ltd.), are the publishers.

The *Delineator* for July contains "The Etiquette of Visiting"; "Training school Experiences"; "Profitable Poultry-Keeping"; Kindergarten Papers: Burnt Work; an article on Alma College, St. Thomas, Ontario; "The College Settlement of New York"; "Voice Culture"; "Relations of Mistress and Servant"; "Choosing a Boy's Career"; Cookery; "Stains and Their Solvents"; "A Sunflower Tea"; "Amusements for Summer Evenings," etc.

The current July number of *Frank Leslie's Popular Monthly* presents an art display that is unprecedented even in the history of this great periodical of the people. It contains no less than one hundred and twenty illustrations, many of them full-page engravings, in the best styles of modern pictorial art; including the work of such well-known illustrators and painters as Carl J. Becker, Valerian Gribayédoff, Joseph Pennell, Hubert Herkomer, Cecil Lawson, G. Favretto, Makowsky, L. E. Fournier, Lepère, Enrico Serra, Henry Dawson, J. Becker, G. A. Davis, Pruett Share, A. B. Shute, F. Adams, Walter Dunk, and others. These pictures are, for the most part, illustrative of the literary features of the number.

"O, will he paint me the way I want,  
As bonny as a girlie,  
Or will he paint me an ugly tyke,  
And be d—d to Mr. Nerli?  
But still and on and whichever it is,  
He is a canty Kerlie.  
The Lord protect the back and neck  
Of honest Mr. Nerli."

This, one of the last verses ever written by Robert Louis Stevenson, is in reference to the portrait of himself, which is given to the public with his verse for the first time in the July *Cosmopolitan*. The lines might have come from the pen of Burns, and are inimitable in their way. The portrait was declared by Stevenson himself to be the best ever painted of him. In this same number of *The Cosmopolitan* Rudyard Kipling tells an Indian story, to which Remington adds charming illustrations; Mrs. Burton Harrison makes a serious study of New York society in "The Myth of the Four Hundred," and Kate Douglas Wiggin contributes a story of one of the most delightful of Welsh retreats. *The Cosmopolitan* was with this number reduced to ten cents per copy,

and, as a consequence, notwithstanding its large edition, it was "out of print" on the third day of publication.

The safeguards of marriage are treated of by Dr. Parkhurst in the July *Ladies' Home Journal* in a way that will strike many as particularly direct and to the point. Never, perhaps, has the marriage question been so well dealt with. The romantic life of the widow of Octave Feuillet is charmingly treated by Madame Blanc, under her pseudonym of "The Benizen," while Hezekiah Butterworth tells "The Story of Brook Farm," that unique New England experiment, which is unknown to a large part of the present generation. The illustrations show "Brook Farm" as it is to-day. The musical features of this issue are many: the most valuable probably being an article on "The Voice of Highest Range," by Frederic Peakes, one of the best known authorities on voice culture, and Mrs. Garrett Webster's carefully prepared article on "The Pay of Women Musicians." *The Ladies' Home Journal* is published by The Curtis Publishing Company, of Philadelphia, for ten cents per number, and one dollar per year.

**Cash and Credit.**

Every one will admit that the cash system is the ideal method of doing business, but few merchants conduct, or even try to conduct, an entirely cash business. Credit has extended its ramifications into every portion of the mercantile structure, until its abolition would seem almost an impossibility. A contemporary, in discussing this question, asks why merchants encourage the credit system. You answer that you don't. Yes, but you do. If the system were not encouraged by the merchants, it would not be in existence today. Did you ever stop to think that the mercantile community of the country are the only body of men that tolerate the credit system? Let's see you buy postage stamps, postal notes, money orders, etc., on credit; try it and see what you will be told. Go to the theatre and you pay money. Express companies demand cash, and railroad tickets are cash on delivery to the purchaser. Why should not the merchant demand and receive cash? Simply because he encourages the credit system. It may be an impossibility to completely eradicate the system, but strict limitations on credit is a step on the right road, and its evolution will be practically a cash basis system of doing business. It is worth a trial and should be begun at once. It would quickly spread, like measles in a country school, and when it does, it will solve the great problem for all time. When sifted down, it will be found that the credit system is the progenitor of, and responsible for, more evils that affect the financial and business world than all other agencies combined. Not only this, but it fosters extravagance—the purchase of goods which can be very well done without.—*Phar. Era*.