

Caution—If the urine contains more than 0.6 percent of sugar, the blue color will be entirely destroyed. If the blue color turns yellowish on boiling, a smaller amount of urine must be used. Take 2 or 5 cc. of urine diluted with water to 10 cc. and repeat the operations this far.

5. Cool flask and contents to room temperature, quickly, by immersing the flask in cold water.

6. Titrate the contents of the flask with No. 2 solution (hydroxylamine solution) until the blue color is exactly decolorized. This titration should be so conducted that the solution runs from the burette rapidly, but in drops.

7. From the number of cc. of No. 2 solution used, calculate, from the appended table, the sugar in milligrams in the amount of urine used.

BANG'S TABLE OF REDUCTION EQUIVALENTS.

Cc hydroxylamine solution used	Mg. sugar represented	Cc hydroxylamine solution used	Mg. sugar represented	Cc hydroxylamine solution used	Mg. sugar represented	Cc hydroxylamine solution used	Mg. sugar represented
0.75	60.0	13.00	39.0	25.50	23.5	38.00	10.4
1.00	59.4	13.50	38.3	26.00	22.9	38.50	9.9
1.50	58.4	14.00	37.7	26.50	22.3	39.00	9.4
2.00	57.3	14.50	37.1	27.00	21.8	39.50	9.0
2.50	56.2	15.00	36.4	27.50	21.2	40.00	8.5
3.00	55.0	15.50	35.8	28.00	20.7	40.50	8.1
3.50	54.3	16.00	35.1	28.50	20.1	41.00	7.6
4.00	53.4	16.50	34.5	29.00	19.6	41.50	7.2
4.50	52.6	17.00	33.9	29.50	19.1	42.00	6.7
5.00	51.6	17.50	33.3	30.00	18.6	42.50	6.3
5.50	50.7	18.00	32.6	30.50	18.0	43.00	5.8
6.00	49.8	18.50	32.0	31.00	17.5	43.50	5.4
6.50	48.9	19.00	31.4	31.50	17.0	44.00	4.9
7.00	48.0	19.50	30.8	32.00	16.5	44.50	4.5
7.50	47.2	20.00	30.2	32.50	15.9	45.00	4.1
8.00	46.3	20.50	29.6	33.00	15.4	45.50	3.7
8.50	45.5	21.00	29.0	33.50	14.9	46.00	3.3
9.00	44.7	21.50	28.3	34.00	14.4	46.50	2.9
9.50	44.0	22.00	27.7	34.50	13.9	47.00	2.5
10.00	43.3	22.50	27.1	35.00	13.4	47.50	2.1
10.50	42.5	23.00	26.5	35.50	12.9	48.00	1.7
11.00	41.8	23.50	25.8	36.00	12.4	48.50	1.3
11.50	41.1	24.00	25.2	36.50	11.9	49.00	0.9
12.00	40.4	24.50	24.6	37.00	11.4	49.50	0.5
12.50	39.7	25.00	24.1	37.50	10.9	50.00	0.0

PUSHING BEYOND THE HALF-WAY MARK AND WHAT AM I DOING?

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Chief among the characteristics that carry men past the half-way mark on the road to success is eagerness to keep on learning more about business methods and principles. The ablest men are constant students. They agree with the statement recently made by the treasurer of a large steel corporation: "I have been in business for about thirty years and if my business experience has taught me one thing, it is this: *That the more a man knows about business principles*

and methods the more he is worth to himself, to his employer, and to his business associates.'"

WHAT AM I DOING?

Any pharmacist can look around in his own line and see prizes only a little distance ahead of him and he can likewise see plenty of pitfalls if he is watchful. To win the prizes and avoid the pitfalls, a man must act under the guidance of sound business principle. A progressive pharmacist should ask himself this question: "What am I doing day by day, week by week, or year by year, to build up my personal assets, my business knowledge and my producing ability? Am I directing my personal career with as much intelligence and foresight as a capable business manager shows in directing the affairs of his concern?"

Retail merchandising and methods employed to accomplish specific results have been problems ever since the beginning of time. The dealers in the time of Nero were as much concerned about retail merchandising as we are to-day and before the Civil War, they likewise had problems to solve similar to those of present date. Yet it seems as though competition was not as keen as it is to-day and in consequence, we are obliged to give this matter more attention from a scientific standpoint than our ancestors did. In consequence we look to the experienced business man for advice. As we look to the experienced business man for advice, so do the prospective customers of retail drug stores depend largely upon the suggestion of your show-windows and show-cases; therefore it is essential that in connection with salesmanship and advertising, we consider show-case and show-window displays. Salesmanship and advertising are so closely allied that it is almost impossible for us to consider one of these subjects without the other. Advertising is salesmanship plus publicity, while salesmanship is advertising plus getting the order. If it is true that salesmanship and advertising are so closely allied that we must consider them jointly, then we must likewise consider the silent factors, namely, the window and show-cases.

Before we go into this matter any further, let us consider the elements of a sale, and the steps to a sale.

Elements of a sale	{	Salesman The Article or Merchandise The Purchaser
Steps to a sale	{	Secure Attention Inspire Confidence Create a Desire

From the foregoing remarks we plainly see that there is a direct relation between the salesman and the silent salesman. Therefore we should consider the silent salesman, namely, the show-window and the show-case, very important factors and in connection with these factors there are such things as decorating, illuminating, special displays, backgrounds and signs to be considered. The show-windows and show-cases really act as suggestions and work in with your general line of advertising, and therefore your windows should be made up so as to back up your newspaper or circular advertising. You may advertise in the very best way, without the desired results, and take that same medium and sup-

plement it by a window display, and a show-case display, and get far better results, as we all know that we are dealing mainly with the human mind through the medium of suggestion. Suggestion is found in its simplest form in the association of words. The name *Ingersoll* suggests a watch, *Colgate* suggests soap, *Ford* suggests motor car, because by long familiarity with these combinations we have come to think of one part in connection with the other, and it is almost impossible to separate them. It may be noted in passing that the particular word suggests the general but that the general does not always suggest the particular individual. Watch does not necessarily suggest *Ingersoll* nor motor car, *Ford*. All words, however, have their associations. We take common maxims and repeat the first part of it and the mind implies the rest. "All's well,"—"It is an ill wind,"—"Early to bed, early to rise," and so forth. In a novel it is no longer necessary to put at the end "they are married and lived happy afterwards." All we need is the slightest term in the direction of an engagement; not even the spoken "yes"; so with many jokes, the listener fills in the ending from his experience. Suggestion is often used in advertising in similar ways and particularly is this true of show-window and show-case suggestion, it being directly allied with salesmanship and advertising, becoming inseparable for perfect results. Your windows first of all being silent salesmen should be so utilized to bring you fair returns and should be used with the same intent that you have in mind when writing your advertisement; namely, to attract attention, inspire confidence and create desire, which leads on to the sale. Your results will be in proportion to the attractiveness of your display. This does not necessarily mean that you must spend a great amount of money to put in fancy displays, for a display may be made attractive by arranging the merchandise so as to appeal to the customer, and the customer once attracted into your store, may add materially to your sales, provided proper salesmanship is exercised. You therefore must direct your attention to the method of decorating and arranging your merchandise in a tasty and attractive manner, giving due consideration to color harmony. Every pharmacist should have a general knowledge of the principal colors used in decorating and apply the rules of harmony and contrast, their formation and influence upon the eye. Psychological experiments prove that red is a color which attracts best. When we look upon a painting, red is a color which we see first. As we look along the railroad yards at night, how plain the red lights up above the signals are; red, therefore, is one of the essential colors in making attractive displays. Red and green harmonize well; yellow and green likewise; yellow alone is a pretty color; orange contrasts with black; purple looks rich with gold; green harmonizes with yellow; pink is a good summer color; blue is a very soothing color; gold contrasts with any dark color; while black is very heavy and alone does not make up well; while white is always appropriate and can be combined with practically any color and harmonize.

LIGHTING.

The show-windows properly illuminated will add materially to the attractiveness of your display; money spent for proper illumination is well spent. Arrange your lights in your show-windows so as to avoid shadows.

BACKGROUNDS.

With your windows enclosed, it will not be necessary to build special backgrounds, provided they are made of attractive material. Otherwise they should be decorated with a background similar to that which should be used in open windows. Special displays should be made from time to time which you should plan before you trim your windows, and considerable thought given to same in order that special displays may serve as special attractions: Easter displays with chickens and rabbits; Fourth of July displays; Thanksgiving displays; Washington's Birthday displays all serve as good advertising mediums, using in connection merchandise that is seasonable.

SIGNS.

Signs are absolutely necessary for every window display as a show-window without a sign is like bread without butter. All window displays should have this silent salesman talk; prominently displayed in the way of a sign. Window strips are exceptionally good for bringing out special features in connection with the soda fountain, cigars and sundry items.

INTERIOR DISPLAY.

Interior display of both show-case as well as general decorations is usually neglected by the average druggist and these features should have careful consideration as the attractiveness of the store depends largely upon the manner in which the interior is decorated. While the main interior decoration should consist of well arranged show cases, yet displays on your show-cases add materially to the attractiveness of your displays, giving it this "merchandisery" effect that a commercial drug store of to-day is endeavoring to have. Then let us repeat what we have already said in just a few words: Advertising supplements salesmanship; show-window displays supplement advertising; show-case displays supplement show-window displays.

NOTE ON THE USE OF COLLOIDAL IRON IN THE DETERMINATION OF LACTOSE IN MILK.*

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The method described below has the advantage of being within the reach of the ordinary laboratory student; it requires comparatively little time and gives very accurate results.

In clarifying the milk, a 10 per cent solution of colloidal iron (dialyzed ferric hydroxide) is used. By adding the proper amount of colloidal iron, all the proteins of the milk are completely precipitated and can be rapidly filtered off leaving a perfectly clear colorless filtrate.

* Journal of Biological Chemistry, March, 1915, 175.