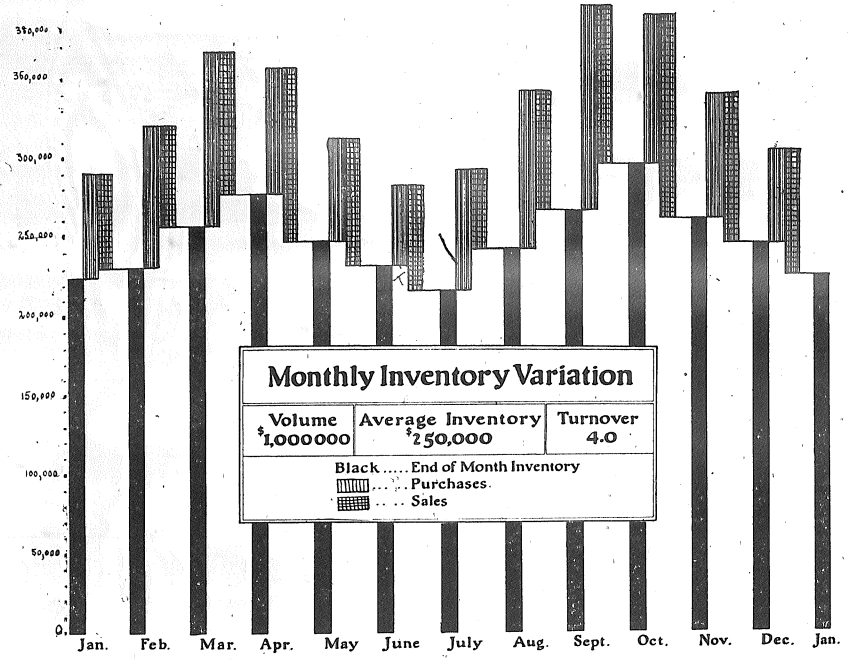

Figure 5

Monthly Inventory Variation

We have now seen approximately how the volume of $1,000,000 will be distributed by months. Figure 5 shows how that variation will affect an inventory.

The particular distributor we have in mind has been securing a turnover of about three times. He knows that he can reduce his capital investment and hence make a greater profit by increasing that turnover. He finds that he is so located geographically that he can secure fill-in merchandise from the mill readily. He therefore lays his plans to obtain a turnover of four times. For the present we shall leave this as an assumption and demonstrate later how this turnover can be improved even more. If we assume a volume of $1,000,000 in the year and plan on a turnover of four times, we imply an average inventory of $250,000. Average inventory is determined, of course, by taking the average of twelve end-of-month inventories, measured either in terms of cost of goods or cost of goods plus mark-up. Whichever of these two methods is used, however, it must be used continuously. The only advantage of utilizing cost of goods is that the confusion that might be produced by mark-downs on obsolete merchandise is reduced. In January, we normally find sales comparatively low. We expect a low inventory in January after the fall peak. We, therefore, start our theoretical distributor with an inventory of $225,000. His purchases during January, when added to his January 1 inventory, bring him up to $290,000.

During the month of January, however, sales reduce this to $230,000, so that he starts the month of February with a $230,000 inventory. On the chart black indicates the end-of-the-month inventory, the vertical hatching indicates current purchases and the cross hatching current sales. The average of the twelve black columns is $250,000.

Many considerations would vary such a program in any one locality, such as the purchase of special merchandise; for example, dropped patterns. Variations in seasons in different geographical localities are another factor. Nevertheless, these two variations can largely be eliminated and a business planned on a definite turnover as a result of a study of a distributor's past performance records.

This chart also shows another thing. We have seen that the black columns represent end-of-month inventories. Down at the very bottom of these columns is the inventory which has remained in stock for several seasons. At the top of the column is the inventory which has just been brought in from the mill upon the distributor's order and which the distributor believes to be readily salable. At the present time too much of the merchandise that is being brought in is gradually finding its way down to the bottom of the column and resting among the merchandise that has been on the shelves, or in the warehouse, for several years. Such obsolete merchandise, of course, has a greatly depreciated value. It represents capital investment and reduces turnover. It eats up profit. If we can prevent or minimize the acquisition of merchandise which must ultimately find its way into dead stock, we shall have determined another way of increasing turnover.

Composition of Rug Inventory by Weaves, Grades and Sizes

A complete distributor's rug inventory should, of course, contain a certain number of rugs in each of the four major classifications—axminster, velvet, tapestry and wilton. Although the long-time trends demonstrate such things as the decrease in the use of tapestries, at the present time national averages indicate that about 57 per cent of the total number of carpet-sized rugs in a distributor's stock should be axminsters. This will represent about 58 per cent of his capital investment. About 27½ per cent of that capital investment will be velvets, 6 per cent tapestries and 8 per cent wiltons. Certain localities will, of course, require, a higher wilton inventory; others may require a higher axminster inventory. The answer to the question as far as any one distributor is concerned can readily be determined by analyzing his own past sales and sales trends.

After it is determined what proportion of an inventory should be axminsters, the next question is one of grades. A breakdown of the axminster inventory, arranged in order of high, medium and low grades, shows that 3 per cent of the carpet-sized rugs (or 4¾ per cent of the dollar inventory) should be "Smiths"; 18 per cent (or 22 per cent of the dollar value) "Yonkers" and "Yonkers Specials"; 27½ per cent (or 28¾ per cent of the dollar value) "Carletons"; 51½ per cent (or 44½ per cent of the dollar value) "Ardsleys."

A similar breakdown for the various grades of velvet rugs shows that 12½ per cent of the carpet-sized velvets (or 21½ per cent of the dollar inventory) should be "Irvingtons" and "Meadowbrooks"; 49½ per cent (or 50 per cent of the dollar value) "Colonials," "Palisades" and "Argonnes"; 38 per cent (or 28½ per cent of the dollar value) "Katonahs," "Marvels" and "Fernbrooks."

In the case of tapestry rugs the inventory is about equally divided as to numbers, between the high and medium grades. Only 6 per cent of the inventory is in the low-grade rugs.

Sixty-two per cent of the wilton inventory is in low-grade rugs while the remaining 38 per cent is divided among three higher grades.

Before we continue let us sum up what has been accomplished. We have planned on a sales volume of $1,000,000. We have built up an approximate inventory based upon a predetermined turnover. We have broken down this inventory by weaves. We have determined the per cent of each weave to be applied to each grade.

To keep our stock truly balanced we must have a proper division by sizes. Figure 6 shows such a division, based upon national averages obtained over a period of years.

By applying all of the characteristics outlined above we obtained a picture of the composition of a five-thousand, carpet-sized rug inventory; first, by weaves, then by grades within the weaves, and finally by sizes. Figure 7 shows this graphically.