COMMODITY SUMMARY: MATERIAL AND DIRECT LABOR COST TO LIST PRICE Revised to Material Cost Labor Cost Material T CTREM Value of and Labor Product Amount Per Cent Amount Per Cent to List Com. A 1 (E) 444.718 B) \$ 144.826 (R) .3256 (E) \$ 92,305 (E) .2076 (E) .5332 300,000 . 00 A 2 84.174 .2805 54,000 .1800 4605 A 3 150,000 43,000 .2866 25,000 .1700 4566 \*\* A 4 105,282 31,000 .2949 20,195 .1922 .4871 A 5 1,200,000 400,000 .3333 252,000 . 2100 . 5433 A 6 1,800,000 360,000 .2000 300,000 .1666 .3666 A 7 500,000 110,000 .2200 100,000 .2000 .4200 A 8 1,500,000 390,000 .2600 320,000 .2133 4733 A 9 2,000,000 440,000 . 2200 360,000 4000 ets. etc. etc. etc. etc. etc. Com. B 1 4,000,000 1,347,000 .3367 850,000 . 2125 .5492 B 2 1,000,000 230,000 .2300 200,000 .2000 .4300 B 3 500,000 75,000 .1500 120,000 2400 **3900** 1,000,000 160,000 . 1600 172,000 .1720 .3320 etc. etc. etc. ets. etc. etc. etc. Com. C 1 3,000,000 700,000 ,2333 618,000 .2060 4393 C 2 1,700,000 357,680 .2104 289,000 .1700 .3804 etc. eta. eto. etc. etc. etc. etc. Total \$50,000,000 \$7,500,000 .2500 \$6,000,000 2000 .4500

Exhibit F

In setting the value of the material and labor, the object is to set what it should be at certain prescribed schedules of prices. If you happen to know that certain departments, processes or people are wasteful or inefficient, do not make allowance for these facts. The purpose in setting standards is to determine not merely the fact of efficiency or inefficiency but also the degree. Where formal time studies and material studies exist, these should be used. Where they do not, ordinary estimates may be used, but the advantage of the more accurate figures is much greater than their cost. The manner in which these costs may be adjusted from month to month as prices of material and wage rates change will be explained later on.

In the last column is given the combined cost of material and labor to each dollar of sales. The purpose of this column will be explained in connection with Exhibit M

In setting the value of the material and labor, the Exhibit F.—Total Sales Quota and Material and Labor pject is to set what it should be at certain pre-

This exhibit represents a summation of totals of a number of separate sheets, like the preceding Exhibit E, each total representing a group of commodities. The figures in Exhibit F which were taken from Exhibit E are identified by an E in parenthesis—(E).

The footings of Exhibit F show an average material cost for the entire list of commodities of \$.25 on each dollar of sales, and an average labor cost of \$.20 on each dollar of sales. The average material and labor cost is \$.45 on each dollar of sales. Certain groups range as high as \$.54 and one as low as \$.33 on the dollar. These represent extreme variations from average of 9 points up and 12 points down.

This difference in cost of material and labor constitutes the principal difference in total cost of the different groups of commodities. In order to appreci-

ate fully the part which this record serves in the determination of price and policy, it might be well to refresh your minds concerning what may be termed common practice among the better managed concerns in determining individual prices within a large group of commodities.

Unit sales prices are not always based upon unit costs, as is generally supposed; in fact, under our modern competitive system, costs are seldom considered until after a practicable sales price has been determined. In the average industry, such as I am now describing, the steps in making sales prices are as follows:

1. List all of the articles.

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- 2. Determine the articles with which these will compete, and head up a column for each of the principal connectiors.
- 3. Fill in the price at which these competitive articles are sold.
- 4. Determine and fill in the price, under the circumstances of your sales campaign, at which you believe you can produce the desired volume of sales.
- 5. Put down your own unit costs.
- 6. Review all of the facts and make such unit prices as you believe necessary to the end of producing the most favorable aggregate result.

With this procedure in mind, it will readily be appreciated that certain items may be priced so as to make them leaders and others may be priced high or low according to various particular circumstances.

Exhibit F constitutes the basic information upon which the unit costs referred to in Item 5 above are based. It also serves in adjusting standards to current fluctuations in sales price and material and labor costs. This will be explained in connection with Exhibit M.

## Exhibit G-A Flexible Budget

This exhibit represents a budget covering the cost of exercising the responsibilities and performing the duties necessary to the supervision and direction of sales of Commodity A to jobbers.

You will notice that each item on this exhibit has been extended twice, once under "Cost of Minimum Sales" (representing the smallest volume of business there is probability of doing), and once under "Cost of Maximum Sales" (representing the practical capacity of the plant). The reason for this will be explained when we come to set standards; but apart from everything else, the fact of having to set standards for two different volumes of business is a good check in itself.

You will also notice that the items of cost have been

subdivided in each case under three headings, the meaning of which is explained at the bottom of the exhibit.

The reason for this subdivision of cost is because they present the items in which we necessarily think of cost in connection with the functioning of an organization unit of this character, and we are always seeking to resolve things into the elements of which they are composed and to avoid artificial subdivisions containing a variety of elements.

Whatever other subdivision of expenditures we might make would necessarily be composed of the following three elements: First, the individuals necessary to carry out the work; second, the physical things consumed in the doing of the work; and third, the services of one kind or another rendered by outside agencies for which we must pay. If these are the elements with which we must deal, why not simplify matters by accepting them as our subdivision of expense?

A recent experience illustrates a by-product advantage of making budgets of this character,

In connection with an investigation and report on an enterprise of considerable size, we recommend, along with other things, the making of budgets similar to this exhibit for each organization unit.

In talking with one of the executives about six months later, he said that the company had made a substantial reduction in its clerical and miscellaneous expenses in the process of making these budgets; that the chief executive had made each one of them figure out with him why it should cost so much to fulfill the different responsibilities and duties he had assigned, and had expressed some surprise that we had not said anything of the possibility of this saving in our report.

To have criticised the department heads for their clerical and miscellaneous costs would have accomplished nothing. In doing so, we would have been dealing with a result. Our recommendations dealt with the causes back of the result.

FORMULA FOR EXPRESSING UNIT COSTS IN TERMS OF PER CENT OF SALES.

## Exhibit H-Operating Standards

The first column of this exhibit is a list of the organization units, which is merely another way of saying a list of the individuals to whom the responsibilities and duties necessary to the conduct of the enterprise have been assigned. You will remember we are using these as the accounting classification.

The figures under the heading "Range" are taken from Exhibit F and a number of sheets, one for each