to the organization chart. The chief executive insisted that he already had this, that there was an account in the ledger for each major production department and for the sales, purchase, accounting, and in fact, every department. He was somewhat annoved and said he could not imagine how else one would keep one's ac- bilities which constitute the department.1 counts

Exhibit D.—General Ledger Accounting Classification for Operating Accounts

We have here the same organization units as appeared in the organization chart (Exhibit C), except responsibility for making it. that they are written in a single column as representing the Operating Accounts Classification for the same organization.

When such a list had been made from the organization chart of the chief executive mentioned above, we asked that he send for his accounting classification and compare the two. He tried for a while to prove that they were in effect the same, but he soon acknowledged that they were not.

It is true that most organizations have their accounts so arranged that all expenditures ultimately find their way to some one or another major responsibility. But I mean something very different. I mean that tion unit of which the head is responsible for the expenditure, and should stop there.

The name of the organization unit and the name of the ledger account should be the same, and they should be synonymous for John Smith or Bill Brown or whoquestion. Further, no part of any expenditure for rent, insurance, interest or any other item which the organization unit head himself does not arrange for, and in effect pass the bill for, should be prorated to him; and no part of any expenditure for which he is the price which we shall pay for our materials will be. responsible should be prorated to the unit of someone. Therefore, a budget or standard to be effective must else.

The individuals to whom responsibilities and duties are allocated are the principal sources of success or failure. Unless records are kept in terms of these sources, the chief executive has no effective means of judging the results in terms of responsibility.

Not many years ago chief executives spent most of their energies in worrying and struggling over results. To-day results receive principal consideration as a basis for determining causes. While the doctor of ten years ago treated rheumatism as such, the doctor to-day analyzes back to and treats the teeth or digestion as the cause of the rheumatism.

In the same way the chief executive of the past studied the cost and effectiveness of departments as such. To-day he studies the cost and effectiveness of the individuals charged with the duties and responsi-

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How often have you, finding the cost of certain results high, sought to place the responsibility for these costs and found yourself foiled at every turn by divided responsibility. Briefly stated, every expenditure should be definitely charged to the person having immediate

An accounting classification made by anyone other than the person who determines duties and responsibilities, or made in advance of the determination of duties and responsibilities, is prima facie an ineffective accounting classification.

355 SETTING OF MANAGEMENT STANDARDS

Assuming that it has been arranged that all expenditures shall be charged according to the organization unit, which is merely another way of saying the individual directly responsible for the expenditure, how then is the chief executive to judge the expenditure? He obviously cannot go sufficiently into detail to have a every expenditure should go at once to that organiza- valid opinion whether it should be say \$29,700 or \$32,500 for the month; yet the difference between these two figures multiplied by ten or one hundred responsibilities goes into a goodly sum.

What is needed is a budget or standard for each organization unit, which is another way of saying for ever is in responsible charge of the organization unit in each responsibility, which is easily adjustable to the varying conditions of industry. It is impossible to say in advance whether we shall do a business of one amount or another, and it is equally impossible to say what the price which we shall receive for our goods or be adjustable in all of these particulars.

The first standard which must be set is that for the expected volume of business in each of the various units of product. I cannot go into the method of setting this standard because it is in itself a subject big enough for an evening's talk, but I think most of you

COMMODITY A 1 : MATERIAL AND DIRECT LABOR COST TO LIST PRICE Revised to

| ang merapakan pada diga kelabah I | | List Price | | Material Cost | | Direct Labor Cost | | Mat. & Labor |
|--------------------------------------|------------|------------|--------------|---------------|--------------|-------------------|---------------|-----------------|
| Item | Item Quota | Unit | Total | Unit | Total | Unit | Total | To List |
| Com.AlA | 25,739 | \$1.85 | \$ 47,617.15 | \$.6675 | \$ 17,180.78 | \$.3448 | \$ 8,874.81 | .5472 |
| " AlB | | 1.70 | 162,163,00 | .5857 | 55,869.92 | .3411 | 32,537.53 | .5451 |
| " AlC | 101,510 | 1.55 | 157,340.50 | .4761 | 48,328.91 | .3372 | 34,229,17 | .5247 |
| " AlD | 15,915 | 1.70 | 27,055,50 | .5858 | 9,323.01 | .3356 | 5,341.07 | .5420 |
| " AlE | 5,773 | 1.45 | 8,370.85 | .4704 | 2,715.62 | .3078 | 1,776.93 | .5367 |
| " AlF | 31,238 | 1.35 | 42,171.30 | •3652 | 11,408.12 | .3056 | 9,546.33 | -4969 |
| Total A 1 | 275,565 | | \$444,718.30 | | \$144,826.36 | | \$92,305.84 | .5332 |
| E | | | | | 3256 to List | | .2076 to List | Managara. |

Exhibit E

have passed the point of arguing whether it can or remainder of the standards there is no prescribed secannot be done, for it is now being done by every concern which has made much progress in the evolution of a conscious technique of management.1

One point, however, I think I should stress because there is considerable misunderstanding with reference to it; and that is that in setting such a standard the purpose is not to guess what the result will be, but to establish a reasonable expectancy by which the actual result may be judged. This point cannot be overemphasized.

If you know certain conditions which should not exist but none the less probably will exist and affect results, even though you take these conditions into consideration in setting your standard, the setting of standards represents nothing more than a guessing contest and is of no value from a management standpoint.

The purpose of setting standards is to determine a reasonable expectancy under conditions which should and can be made to exist, as constituting a yard stick by means of which you may measure the degree of effectiveness of the individuals to whom certain responsibilities and duties have been assigned.

Assuming that we have established our expectations in the matter of sales, which constitute our standard for sales, we may proceed to the setting of other standards on the basis of these sales. In the setting of the

quence, for each one is useless without all the rest. Therefore, let us start with material and direct labor

Exhibit E-Sales Ouota and Material and Labor Costs by Groups

This exhibit represents a certain group of articles which we call Commodity A 1. All commodities should be grouped according to their general type and then sub-grouped according to the proportions of materials and labor contained in them. In this particular group we have six articles. In the first column we have the symbols of the different articles, in the second the number of each article which we have set as the. sales standard or quota, in the third the unit list price. and in the fourth the gross revenue to be received for. the standard quantity at the unit list price. The footing of the fourth column gives us the total of sales or the sales quota for this group of articles. In the fifth column we have the cost of the material in a single unit, and in the sixth the total cost of material for the quantity in column two. The footing of column six gives us the material cost of the standard total sale of this group of articles. Dividing this by the total sale, we find that the cost of material will be \$.3256 out of each dollar of sales. Direct labor is dealt with in the same way, and we find that the cost of direct labor will be \$.2075 out of every dollar of sales.

¹ This does not mean that each responsibility can have only one account, but that each of such accounts as it may have one account, but that each of such accounts as it may have shall have a prefix indicating the organization unit responsible for the expenditures charged to it. The fundamental thing behind the classification of an expenditure should be the responsibility for the expenditure rather than the expenditure itself

¹ See Bulletin of the Taylor Society, October, 1921, Vol. VI, No. 5, pp. 194-213.