

1. *Purchasing.* Before going into the detailed mechanics of stores control, the importance of purchasing should be developed, especially in respect to prices and quality. Recently, when the price of rubber was fluctuating, one rubber company that followed the market very closely had only a thirty days' supply on hand when the price of rubber broke, whereas others with large inventories lost millions of dollars. On the other hand, here is a typical thought sent out by our purchasing department. A price war had been going on between the manufacturers of a certain article with the result that the cost was \$1.75 each delivered. The purchasing department investigated several points and found that the price was to be increased to \$2.95; that the approved budgets for the year called for a certain number of these articles at each mill; that the stores balance sheets, with consumption figures, warranted the purchasing of these amounts. The result was that we saved several hundred dollars on this one item.

To assist the purchasing department, we have two sources of information; one, a standards committee and the other a research department, both working hand in hand. These organizations make it possible for the purchasing department to obtain information for the mill managers as to the merits of any untried material upon which a report is requested. At the same time, it is to be remembered that no experimental materials are used without the approval of the chairman of the standards committee. Requisitions of this nature are passed along to him for approval by the purchasing agent. In addition to working up information on untried material, the purchasing department makes frequent reports on the length of service of, or savings in cost on, certain materials. These figures may cover several years' consumption and are based on such articles as cost of oil per spindle, shuttle per loom, check straps per loom, pickers per loom, roller covering per spindle, etc.

2. *Stores Control.* The chief function of the general stores room is to provide a stock of supplies and repair parts necessary to the operation of the mill. These items fall into two broad divisions, "classified stores," or those items regularly carried in stock, and "unclassified stores," or those items or pieces of equipment ordered for special purposes. The operation of the stores room involves two things: the physical handling and arrangement of

materials, and the record keeping necessary to maintain and account for the physical stock. In general, the "stores clerk" is responsible for the physical stock and the "balance of stores clerk" for the bookkeeping involved in accounting for that stock.

The stores room is arranged with a series of bins, each containing one item of material, although there may be several of the same items in the same bins. The bins carry bin tags for identification and are so arranged as to allow ready reference to book records. The inventory of classified stores is carefully controlled with the aid of the balance of stores record. This record shows at all times the quantity and value of each item of stock and provides certain control information to aid in maintaining inventories at the proper point. When it is necessary to order material, a requisition is filled out and mailed to the purchasing department; a purchase order is then sent to the vendor and copies to the requisitioner. When goods are received, that fact is reported to the purchasing department on a "notification of material received" form and entries are made on the balance of stores sheets. Prices are obtained from the invoice. If material is returned to the vendor for credit a "memorandum of material returned for credit" form is used. When material is needed in the mill, an order known as an "issue" is presented to the stores clerk, who uses this as his authority for supplying the items called for. If material is to be returned to stores for credit, a similar form known as the "stores credit" is used. In either case, entries must be made on the balance of stores sheet, reflecting the change in the quantity of goods on hand. Once a week, sheets and credits are classified by mill departments and summaries known as the "weekly issue report" and "stores accounts receivable" are prepared.

The balance of stores record is provided to record all data necessary for the control and valuation of classified stores. A separate sheet is used for each item of stock, arranged alphabetically by symbols, about which more will be said later. The control entries on the upper part of this sheet include a description of the article, the purchase time, the record of consumption, and the minimum amounts and amounts to order.

A concise description of the article is necessary as a means of identification. Since this description is to be used in the requisition of material, it is de-

sirable that the manufacturer's name for the article be used wherever possible.

A certain time elapses after receipt by the purchasing department of requisitions before the material can be delivered at the mill. This period is designated as the "purchase time." The purchasing department supplies this information, which is entered on the balance of stores sheet, for each item, along with the date on which the information was received.

In order to determine the point to which stocks may be allowed to drop before reordering, an accurate knowledge of the rate of consumption is necessary. Once a month the quantity of material issued (indicated on the lower part of the balance of stores sheet) should be recorded in the space provided for the rate of consumption. It is important to keep these records properly posted, as the figures are essential to the intelligent control of stocks.

The minimum amount is defined as the quantity of goods below which it is unsafe to go without taking steps to restock. The amount to order is defined as the amount of stock which should be requisitioned at any one time. Minimums and amounts to order cannot be set by arbitrary rules. If the monthly consumption is multiplied by the purchase time (expressed in months or fractions thereof), a useful basis for minimums is obtained. Similarly, a figure of twice the minimum has been found to be approximately correct. However, the importance of the article, its cost and the size of the standard package must also be borne in mind. There are, obviously, certain articles of stock, such as shuttles, picker stocks, etc., where the factor of safety must be large. On the other hand, in the majority of cases, minimums can and should be kept at a low figure. In general, frequent orders should be placed for expensive materials, infrequent for inexpensive. It costs about ten cents to do the clerical work incidental to the execution of a requisition and purchase order. This must be borne in mind and a reasonable balance struck, exclusive of rule, between the cost of an article and the cost of getting the order through. A very important factor in determining the amount to order is the size of the standard package, as in general broken packages are more expensive. This applies particularly when materials are sold by the dozen, gross, keg, box, barrel, gallon, ton, etc. However, care

must be taken that the advantage gained by full package ordering is not more than offset by the interest lost through money tied up in idle stock. The determination of minimums and amounts to order requires careful work. The stores clerk should not be called upon to assume full responsibility. When a store is first started, minimums and amounts to order must necessarily be approximate. However, as soon as possible the mill manager should arrange to give his personal attention and that of his overseer to the accurate resetting of these important factors. The stores clerk is expected to see that no new article is carried in stock without the written approval of the mill manager, and that no minimum or amount to order is altered without the approval of the mill manager, and that no article carried in stock is discontinued without the manager's specific approval.

The upper right hand corner of the stores sheet is marked with a large letter "S." This letter is part of the symbol, which is used as an identification of a given article of stock. The title can be used for this purpose but as it is often lengthy and as its use may result in complications in the systematic arrangement of the balance of stores sheets, and the materials which they represent, for certain purposes it has been found convenient to use a symbol which is so conceived as to afford not only a positive identification of the article in question, but also a description of it. This symbol appears not only on the balance of stores record, but also on the bin tag. It is further used on the requisition and purchase orders. The purpose in every case is to assure beyond doubt that there shall be no confusion in transferring records from one form to the other.

In all our stores, mnemonic symbols are used. This system needs no detailed explanation, but a few illustrations of its use are given.

All office supplies are indicated by the letter A with the usual prefix S, designating stores. Under A we have other letters, such as E denoting envelopes; F, forms, etc. SA (K-45) F is one of our standard forms. SA (K3½ x 6¼) E is a Kraft envelope, size 3½" x 6¼".

The weaving department is designated by the letters SW. This, in turn, has subletters or headings denoting different divisions within that department. For example, D means draw-in machine; L, looms; S, slashers. A further distribution