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Administrative Control

As Illustrated by The Hills Brothers Company

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Production Control

BOUT ten years ago, I attended a number of meetings of the Taylor Society. At that time, we started to establish procedures for control and some of our work was prompted by those meetings. Possibly some of the methods we have evolved may be of assistance to you.

In 1920 and 1921 most of us found ourselves badly overstocked due to post-war inflation and The Hills Brothers Company was no exception to the rule. A central Purchasing Department was instituted and one of the first steps taken was the establishment of perpetual inventories. It is not necessary to show the detail of the system, as it is the standard form. We use bin cards with central control in some instances, while in some others bin cards are superfluous. Al-

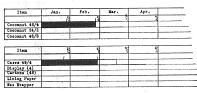


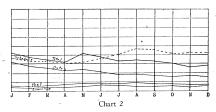
Chart 1

though we do not have as many articles to watch as some of you, nevertheless we have several thousand classifications. In conjunction with the perpetual inventory, we established maxima and minima quantities based upon time required for delivery, for use of the store clerk and Purchasing Department. This led to our first bar charts.

The filled-in bar showed the stock in terms of cases and weeks' production; the double line designated supplies en route and the single line showed additional orders already placed.

We next developed a line chart, showing dollar value of supplies by department and total. We laid this out

¹Paper presented before a meeting of the Taylor Society, New York, December 2, 1931. a year in advance and have continued to control the money tied up in inventory by this method.



In order that you may better understand our problems of control, you should know the products we manufacture and distribute. Our best-known product is Dromedary Dates. We import dates from our cherdaigh in Iraq at the head of the Persian Gulf. These are reselected, packed and pasteurized in our Brooklyn plant. We bring in from Italy, Greece and Sicily citron, orange and lemon peel which are preserved and sold in bulk or sliced and sold in packages. Cocoanuts are brought from the islands of the Caribbean to Brooklyn, where the meat is extracted and packed either in Dromedary packages, in small cans or in large tin cans or barrels. Our newest item is Dromedary Cranberry Sauce. Cranberries are brought from Cape Cod, crushed, strained, mixed with sugar and made into cranberry sauce. All of these products are packed in Brooklyn and are heavy sellers in the fall, which, as you can readily see, complicates our picture.

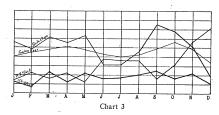
Our efforts have been directed to securing products which would sell in other seasons than the fall. A comparatively new line is Canned Grapefruit, which is packed in five plants in Florida and one in Porto Rico. This product sells in quantity the year 'round. We also have a cannery in Georgia, where we put up Red Pimientos—again a product which sells well throughout the year.

Back in 1880, 1890, 1900, we were at one time or another the onion kings, or the bean barons, or the lemon lords, but we have not done anything in this line for years. In connection with our grapefruit canning operations, we are returning to the fresh fruit battlefield and are selling fresh grapefruit, oranges and pineapple, some of which we grow in Florida but most of which comes from our own properties in Porto Rico.

Having given you this background, I should like to proceed more or less chronologically with the development of our control system.

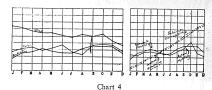
In 1921 there was constant friction between the Purchasing Department and our Cocoanut Department. Production was gauged by stocks on hand in New York so that either the packing was proceeding under pressure or else the department was shut down for lack of orders. Inasmuch as cocoanuts are a perishable product and take one month to purchase and deliver, our buying department either had too many cocoanuts on hand or too few. When production stopped suddenly, as it did, nuts would pile up; if production started up suddenly, there was a scramble to buy cocoanuts. In those days there were practically no spot stocks available, which situation also has been remedied.

We plotted our sales for several years back by months and found a very consistent sales curve, like this:



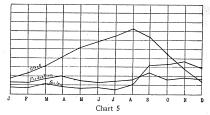
We plotted New York stocks and got the stock line on Chart 3. We then examined our shipping curve, which included both actual sales and consignments, and got the line so marked on the chart. It was then very obvious that stocks throughout the country needed more supervision and that a production schedule plotted a year in advance was a possibility. It was also evident that total stocks throughout the country were the only useful check—that New York stocks were worthless for that purpose. We, consequently, built up a sales schedule, then a stock schedule and then tried to fit a production schedule in between. We were, of course, confronted with a problem of personnel at the plant

and made certain concessions in our stock line to meet that situation. We then got the following chart:



This problem was the simplest to solve as our sales, although heavier in the fall, were fairly large during the balance of the year.

Our date schedule was much more difficult. Our sales chart looks like this:



In order to regularize we had to construct the production schedule shown on the chart. This gave a stock line with a tremendous peak in August. As you can readily see, an entirely different method of check was required here than was the case with cocoanut. Monthly sales in the former had a direct bearing on the situation which could be remedied promptly. In this latter instance we have to be guided entirely by percentage relationships examined each month. Inasmuch as one weak month or one strong month can distort the picture badly, great caution must be used before taking action. We have, however, had only one disastrous experience. In 1926 everything went according to schedule until the first of October. During that month there was a heavy influx of cheap dates and our sales skidded badly. We were caught with a large stock and could remedy the situation only by cutting our production practically to zero for five or six weeks. With that exception, we have had no serious adjustments to make

Please do not think that we set a schedule on