

26. Copies should be made for each person concerned, and two extra for the data file. The copy for Mr. Stewart, Jr., should be on red lined paper punched to fit his binder, the copies for distribution on paper punched to fit a three-ring binder, the two for the file on unpunched, thin white paper. All should be standard 8½" x 11" sheets.

July 19, 1921.

Signed

Approved

Each investigation is classified and a central file of all investigations is kept. This file is thoroughly cross-indexed, and as years pass it will become a very valuable mine of information on department store practice.

### 3. INVESTIGATION IN THE BANK

All standardization so far accomplished has proceeded along the lines outlined above.

COMPARISON OF PRESENT AND PROPOSED PLAN OF REGISTERING STOCK CERTIFICATES																					
PRESENT PLAN					ROUTINE OF REGISTRATION					PROPOSED PLAN											
PERSONNEL					A	B	C	D	E	F	G	TOTAL	PERSONNEL								
OPERATIONS					TELLER	REGISTRAR	OFFICIALS	MANAGER	BOOKKEEPERS	RECORDS OFFICER			PERSONNEL	REGISTRAR	CALCULATOR	RECORDER	AUDITORS	ISSUING OFFICERS			
Old and new certificates received					1								Received and assorted								
Registered					2								Entered								
Balanced					3								Stamps checked								
Checked					4								Audit ticket filled in								
Old certificates dated off					5								New certificates dated								
New certificates dated					6								Old and new certificates proved								
Entries called and checked					7								Examined								
Prove old and new certificates					8								Cancelled								
Inspected					9								New certificates signed								
Cancelled					10								Sorted								
Signed					11								Sorted								
Sorted					12								Filed								
Filed					13								Delivered								
Delivered					14								Books filed								
Books filed					15																

Fig. 11. Result of Analysis of an Operation in a Bank.

In Figure 11 we have shown a typical method of charting the comparative value of one routine over another. When a routine is charted in this manner its weaknesses become apparent. The new routine shows four operations eliminated, nine simplified, and one created. Of course the example shown is only illustrative of a method of analysis.

## V. INSPECTION AND MAINTENANCE OF QUALITY

It is folly to adopt standards of output and leave out of consideration inspection for the maintenance of quality. In devising any standards, therefore, quality is given first consideration and inspection methods devised.

### 1. INSPECTION IN THE FACTORY OFFICE

All letters leaving the stenographic department are first proof-read for minor corrections, typographical errors, etc. This enables the department to maintain quality.

Orders are finally inspected at one source.

A periodical check of all filing, whether on cards or

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THIS REPORT IS TO BE MADE OUT AND HANDED TO FLOOR SUPT. DAILY

### DAILY REPORT OF SECTION MANAGER

Date \_\_\_\_\_ 192\_\_

Report of Mr. \_\_\_\_\_ Supervising

Departments No. \_\_\_\_\_

#### ABSENT

Buyers \_\_\_\_\_ Asst. Buyers \_\_\_\_\_

Salespersons \_\_\_\_\_ Stock Clerks \_\_\_\_\_

Packers \_\_\_\_\_ Misc. \_\_\_\_\_

#### EQUIPMENT

Pneumatic Carriers \_\_\_\_\_

Is there a proper number of red carriers? \_\_\_\_\_

Is there a proper number of green carriers? \_\_\_\_\_

Is there a proper number of grey carriers? \_\_\_\_\_

Is tube service satisfactory? \_\_\_\_\_

If not, in what respect does it need correction? \_\_\_\_\_

Counters \_\_\_\_\_ Chairs \_\_\_\_\_

Floor fixtures \_\_\_\_\_ Stock boxes \_\_\_\_\_

Cash registers \_\_\_\_\_ Electric lights \_\_\_\_\_

Are fire extinguishers in order? \_\_\_\_\_ Is sprinkler system in order? \_\_\_\_\_

Condition of wash rooms? \_\_\_\_\_ Is access to electrical switches clear? \_\_\_\_\_

Time clocks \_\_\_\_\_ Is way to shut off valves clear? \_\_\_\_\_

Fire towers \_\_\_\_\_ Is the floor clean? \_\_\_\_\_

Report of Accidents: If more room is needed for report write on other side \_\_\_\_\_

#### MERCHANDISE

Is advertised merchandise displayed on time? \_\_\_\_\_

Are signs correct? \_\_\_\_\_

Are there sufficient signs? \_\_\_\_\_

Use other side for additional remarks and report if necessary

Fig. 12. Inspection Report.

### 2. INSPECTION IN THE DEPARTMENT STORE

In the bookkeeping department ledgers are kept in balance constantly, which is an unusual thing in department stores. Periodical test audits are made to prove the correctness of entries. Periodical tests are also made of billing work in the same manner.

In all departments methods are in use to record errors. These errors are classified, and where there is a sufficient quantity of a certain type to justify an investigation, the matter is studied and the proper standard practice methods applied to minimize that error in the future. In addition, special stress is laid upon this type of error by the training department. As a result of this work, the errors have, as stated previously, been reduced from about three to one-half of one per cent. As a further result of the reduction of errors, complaints from customers, as has been before

stated, have been reduced forty-two per cent.

Another interesting item is the method of daily plant inspection reports, giving the management a systematic check on conditions. A copy of the daily report follows (Figure 12).

If, as a result of this inspection, certain maintenance work is to be done in addition to the regular daily schedule, a work order is made out (Figure 13) and the work scheduled. A close follow-up is kept.

This has resulted in much better up-keep throughout the store.

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### WORK ORDER

Carpeting	Painting	Electrician's & Fitters	Furniture	Handy-Man	Workmen

INDICATE ABOVE DIVISION BY CROSS

Date \_\_\_\_\_ 192\_\_ Department \_\_\_\_\_

Job \_\_\_\_\_

Special Instructions \_\_\_\_\_

Total No. of \_\_\_\_\_ Charge to \_\_\_\_\_ Ordered by \_\_\_\_\_

Total Material \_\_\_\_\_ Taken From \_\_\_\_\_ Taken By \_\_\_\_\_

Total Cost \_\_\_\_\_ Performed \_\_\_\_\_

Fig. 13. Work Order.

### 3. INSPECTION IN THE BANK

The work has not progressed far enough to cover this phase of the subject.

## VI. SCIENTIFIC OFFICE ARRANGEMENT

Not one per cent of the offices with which we have come in contact are planned; most of them are the result of growth. Arrangement is usually not logical in any respect, and many fundamental requirements for good work are ignored.

Scientific office arrangement implies a careful analysis; first, of the needs of the particular office in question; and second, the planning of that office arrangement so as to most thoroughly and economically satisfy those needs. The result of such analysis and synthesis is invariably a better arrangement in every way, and besides most liberally pays for the expenses in reduced space, better working conditions, and elimination of much lost energy.

Violation of the fundamental requirements of good office working conditions is most common. The sub-

correspondence, shows just how well the work is being done. It is not necessary to inspect all filing at one inspection, just as it is unnecessary in checking Taylor stores-room balances to check all stores. Tests are made of certain units of the work, and results found are considered a measure of the entire work.

Other examples of inspection are unnecessary.