

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

# SURVEY OF CURRENT BUSINESS

MARCH, 1928

No. 79



COMPILED BY  
**BUREAU OF THE CENSUS**  
IN COOPERATION WITH  
BUREAU OF FOREIGN AND DOMESTIC COMMERCE  
AND  
BUREAU OF STANDARDS

## IMPORTANT NOTICE

*In addition to figures given from Government sources, there are also incorporated for completeness of service figures from other sources generally accepted by the trades, the authority and responsibility for which are noted in the "Sources of Data" on pages 139-142 of the February semiannual issue.*

Subscription price of the SURVEY OF CURRENT BUSINESS is \$1.50 a year; single copies (monthly), 10 cents; semiannual issues, 25 cents. Foreign subscriptions, \$2.25; single copies (monthly issues), including postage, 14 cents; semiannual issues, 36 cents. Subscription price of COMMERCE REPORTS is \$4 a year; with the SURVEY, \$5.50 a year. Make remittances only to Superintendent of Documents, Washington, D. C., by postal money order, express order, or New York draft. Currency at sender's risk. Postage stamps or foreign money not accepted.

## INTRODUCTION

THE SURVEY OF CURRENT BUSINESS is designed to present each month a picture of the business situation by setting forth the principal facts regarding the various lines of trade and industry. At semiannual intervals detailed tables are published giving, for each item, monthly figures for the past two years and yearly comparisons, where available, back to 1913; also blank lines sufficient for six months have been left at the bottom of each table enabling those who care to do so to enter new figures as soon as they appear (see issue for February, 1928, No. 78). In the intervening months the more important comparisons only are given in the table entitled "Trend of business movements."

### WEEKLY SUPPLEMENT

Realizing that current statistics are highly perishable and that to be of use they must reach the business man at the earliest possible moment, the department has arranged to distribute supplements every week to subscribers in the United States. The supplements are usually mailed on Saturdays and give such information as has been received during the week ending on the preceding Tuesday. The monthly information contained in these bulletins is republished in the SURVEY, and the supplements also contain charts and tables of weekly data.

### BASIC DATA

The figures reported in the accompanying tables are very largely those already in existence. The chief function of the department is to bring together these data which, if available at all, are scattered in hundreds of different publications. A portion of these data are collected by Government departments, other figures are compiled by technical journals, and still others are reported by trade associations.

### RELATIVE NUMBERS

To facilitate comparison between different important items and to chart series expressed in different units, relative numbers (often called "index numbers," a term referring more particularly to a special kind of number described below) have been calculated.

In computing these relative numbers the last prewar year, 1913, or the first postwar year, 1919, have usually been used as a base equal to 100 wherever possible. More lately the average for 1923-1925 has been frequently taken as 100.

The relative numbers are computed by allowing the monthly average for the base year or period to equal 100. If the movement for a current month is greater than the base, the relative number will be greater than 100, and vice versa. The difference between 100 and the relative number will give at once the per cent increase or decrease compared with the base period. Thus a relative number of 115 means an increase of 15 per cent over the base period, while a relative number of 80 means a decrease of 20 per cent from the base.

Relative numbers may also be used to calculate the approximate percentage increase or decrease in a move-

ment from one period to the next. Thus, if a relative number at one month is 120 and for a later month it is 144 there has been an increase of 20 per cent.

### INDEX NUMBERS

When two or more series of relative numbers are combined by a system of weightings, the resulting series is denominated an index number. The index number, by combining many relative numbers, is designed to show the trend of an entire group of industries or for the country as a whole, instead of for the single commodity or industry which the relative number covers. Comparisons with the base year or with other periods are made in the same manner as in the case of relative numbers.

### RATIO CHARTS

In many instances the charts used in the SURVEY OF CURRENT BUSINESS are of the type termed "Ratio Charts" (logarithmic scale), notably the Business Indicator charts on page 2. These charts show the percentage increase and allow direct comparisons between the slope of one curve and that of any other curve regardless of its location on the diagram; that is, a 10 per cent increase in an item is given the same vertical movement whether its curve is near the bottom or near the top of the chart. The difference between this and the ordinary arithmetic form of chart can be made clear by an example. If a certain item, having a relative number of 400 in one month, increases 10 per cent in the following month, its relative number will be 440, and on an ordinary chart would be plotted 40 equidistant scale points higher than the preceding months. Another movement with a relative number of, say, 50 also increases 10 per cent, making its relative number 55. On the ordinary (arithmetic) scale this item would rise only 5 equidistant points, whereas the previous item rose 40 points, yet each showed the same percentage increase. The ratio charts avoid difficulty and give to each of the two movements exactly the same vertical rise, and hence the slopes of the two lines are directly comparable. The ratio charts compare percentage changes while the arithmetic charts compare absolute changes.

### RECORD BOOK

As an aid to readers in comparing present data with monthly statistics in previous years, the department is compiling a RECORD BOOK OF BUSINESS STATISTICS, in which data now carried in the SURVEY OF CURRENT BUSINESS are shown by months as far back as 1909, if available. Full descriptions of the figures and reports of how the data are used in actual practice by business firms are contained in the RECORD BOOK. The sections covering textiles and metals have already been issued and may be obtained for 10 cents per copy from the Superintendent of Documents, Government Printing Office, Washington, D. C. (Do not send stamps.) Notices of other sections will be given in the SURVEY as they are issued.

*This issue presents practically complete data for the month of January and contains text covering the early weeks of February (page 1), for which the basic figures in table and chart form are presented regularly in the weekly supplements. As most data covering a particular month's business are not available until from 15 to 30 days after the close of the month, a complete picture of that month's operations can not be presented at an early date, but the weekly supplements give every week the latest data available.*



UNITED STATES DEPARTMENT OF COMMERCE



# SURVEY OF CURRENT BUSINESS

COMPILED BY  
BUREAU OF THE CENSUS

IN COOPERATION WITH  
BUREAU OF FOREIGN AND DOMESTIC COMMERCE AND BUREAU OF STANDARDS

No. 79

WASHINGTON

March, 1928

## CONTENTS

SUMMARIES		INDEX BY SUBJECTS	
	Page		Text page    Table page
Preliminary summary for February .....	1	Textiles.....	10    22
Course of business in January .....	5	Metals and metal products.....	11    24
Business indicators (tables and charts).....	2, 3	Fuels.....	12    28
Wholesale prices (table and charts).....	7, 8, 9	Automobiles and rubber.....	12    27, 30
Indexes of business (production, prices, sales, etc.).....	17	Hides and leather.....	13    29
Automobiles, building, mining, manufacturing, electric power, and transportation (charts).....	4	Paper and printing.....	13    31
		Building construction and housing.....	13    32
		Lumber products.....	14    33
		Stone, clay, and glass products.....	14    34
		Chemicals and oils.....	15    35
		Foodstuffs and tobacco.....	15    37
		Transportation and public utilities.....	16    41
		Employment and wages.....	7    42
		Distribution movement (trade, advertising, etc.).....	16    43
		Banking and finance.....	16    44
		Foreign exchange and trade, gold and silver.....	16    47
NEW DETAILED TABLES			
Commercial steel castings (revised).....	20		
Fabricated structural steel (revised).....	21		
Stocks of clinker.....	21		
Electric railway fares.....	21		
Gasoline, tank-wagon price.....	21		
Steel bars, shipments.....	21		

### PRELIMINARY SUMMARY FOR FEBRUARY

Business during the early weeks of February was running higher than in the corresponding period of 1927, as seen from the volume of checks passing through the banks for payment. The volume of goods moving through primary channels, as seen from figures on car loadings, however, was smaller than last year, the principal declines occurring in loadings of mineral and agricultural products. The value of new building contracts awarded during the early weeks of February showed about the same volume as a year ago. Employment in factories of Detroit, largely indicative of the automobile industry, was greater than in either the previous month or February, 1927. The output of crude petroleum showed a decline from both the preceding month and February of last year. Lumber production was running larger than in either prior period. The production of bituminous coal was smaller than in either the previous month or the same month of last year.

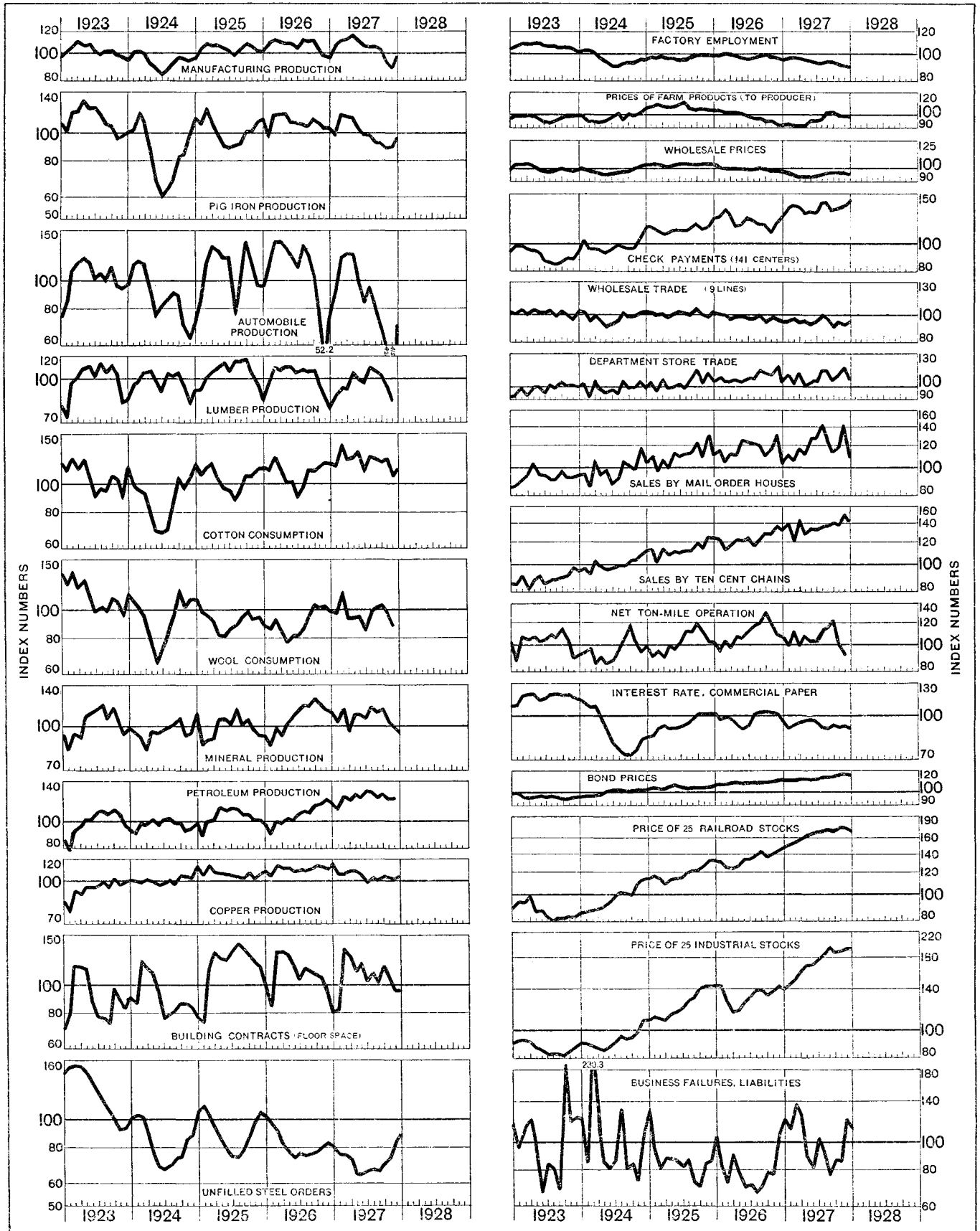
Wholesale prices averaged higher than in either the preceding month or February, 1927. Loans and discounts of Federal reserve member banks receded from the preceding month and reached a level lower than at any time in about three months. Prices of stocks listed on the New York Stock Exchange averaged lower than in the previous month but were higher than a year ago. Bond prices showed little change from the previous month but were above the level of last year. Loans to brokers and dealers by Federal reserve member banks in New York City receded from the high point reached early in the month.

Interest rates on call loans averaged higher than in either the previous month or February of last year. Time-money rates showed similar comparisons. Business failures were less numerous than in January, showing little change from a year ago.

**Now ready.**—Part II, Metals and Machinery, of the Record Book of Business Statistics, obtainable from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., at 10 cents per copy (no stamps).

## MONTHLY BUSINESS INDICATORS, 1920-1927

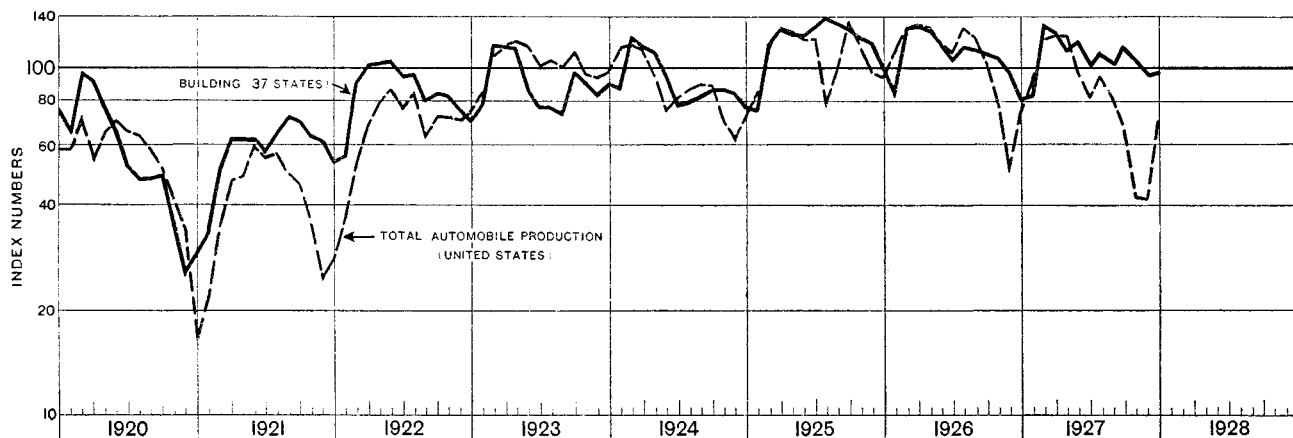
[Ratio charts—see explanations on inside front cover. The curves on check payments, wholesale trade, sales of mail-order houses and 10-cent chains, and department stores have been adjusted for normal seasonal variations, and that on manufacturing production for the varying number of working days in the month]





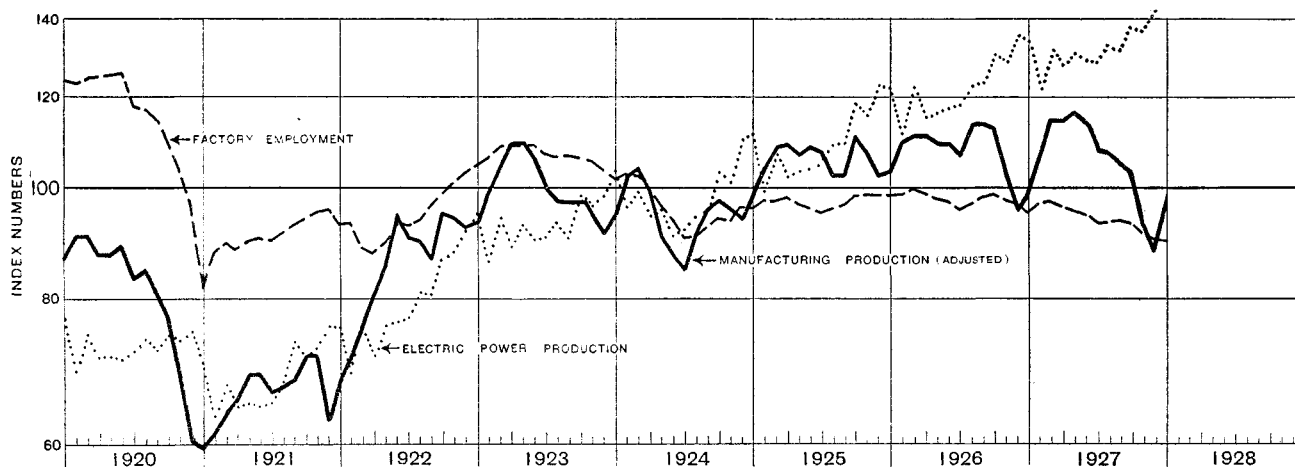
### NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION

[Relative numbers, monthly average, 1923-1925, taken as 100]



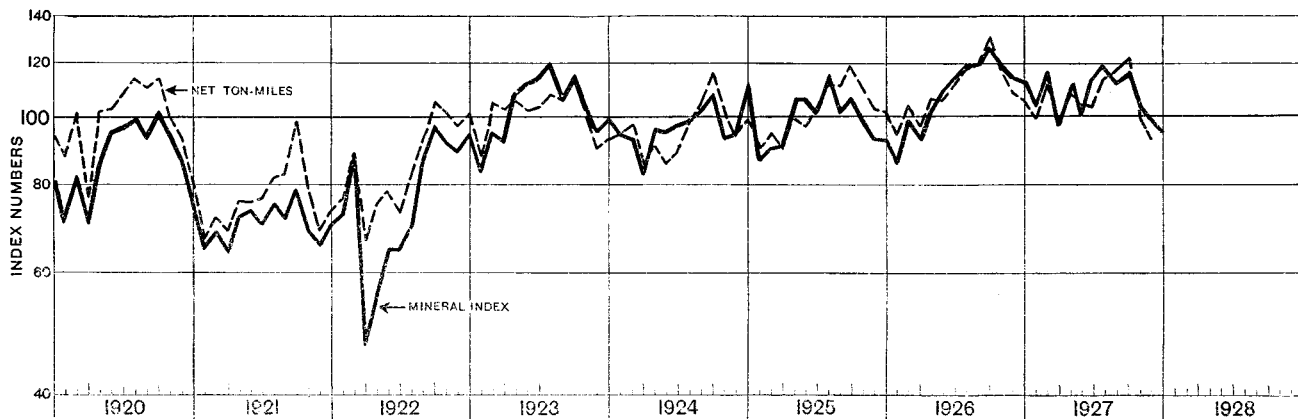
### FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC POWER PRODUCTION

[Relative numbers, monthly average, 1923-1925, taken as 100]



### MINERAL PRODUCTION AND RAILROAD TON-MILEAGE

[Relative numbers, monthly average, 1923-1925, taken as 100]



## BUSINESS CONDITIONS IN JANUARY

### PRODUCTION

Manufacturing production in January was generally higher than in the preceding month but lower than in January, 1927. The production of pig iron and the output of steel ingots were larger than in the previous month, with steel-ingot production showing an increase over a year ago, as well. The production of automobiles showed a gain over December, but was lower than in the corresponding month of 1927. Crude-petroleum production declined from the previous month and was slightly higher than a year ago. The output of bituminous coal showed a gain over the previous month but was lower than last year. Copper production was higher than in December but lower than in January, 1928. The production of cement, although lower than in the previous month, made a gain over the same month of last year. The output of lumber was greater in January than in either the previous month or January, 1927. The consumption of cotton was larger than in December but smaller than a year ago, while wool consumption made similar comparisons.

### COMMODITY STOCKS

Commodity stocks at the end of January were held in smaller quantities than at the end of either the preceding month or the same month of last year, after adjustments for seasonal variations. Stocks of cotton held at mills and in public storage were lower than in either prior periods. Stocks of finished cotton goods, although higher than a year ago, were lower than at the end of the preceding month, while stocks of cotton textiles were higher than in either prior period. Silk stocks held at warehouses and manufacturing plants were lower than in either the previous month or January a year ago.

Stocks of iron ore were lower than in either the previous month or January of last year. Stocks of steel sheets, however, showed increases over both prior periods. Stocks of sanitary enameled ware were generally lower than in either the previous month or January, 1927.

## SUMMARY OF INDEXES OF BUSINESS

### PRODUCTION

The output of raw materials in January was smaller than in either the previous month or January, 1927. Mineral output declined from a year ago but exceeded the December output, crop marketings declined from both prior periods, while the marketings of animal and forest products, although lower than in the previous month, were greater than a year ago. In the case of mineral output all products were produced in smaller quantities than a year ago, except petroleum, zinc, and silver, which increased.

The visible supply of wheat was lower than in the previous month but higher than a year ago, while the visible supply of corn showed an increase over the previous month, but a decline from last year. The visible supply of barley and oats was smaller than in either the previous month or January of last year. Storage holdings of meats showed an increase over both the previous month and January, 1927. Holdings of creamery butter in storage were lower than in the previous month but considerably greater than a year ago, while holdings of cheese showed declines from both prior periods. Stocks of raw sugar at refineries showed a decline from the previous month but were higher than a year ago.

### BUILDING AND CONSTRUCTION

New building contracts awarded in January, measured in value, were lower than in the previous month but higher than a year ago. Larger awards for industrial construction were let than in either the previous month or January a year ago. Fire losses in the United States and Canada were larger than in either prior period. Construction costs showed little change from the previous month, but were somewhat higher than last year.

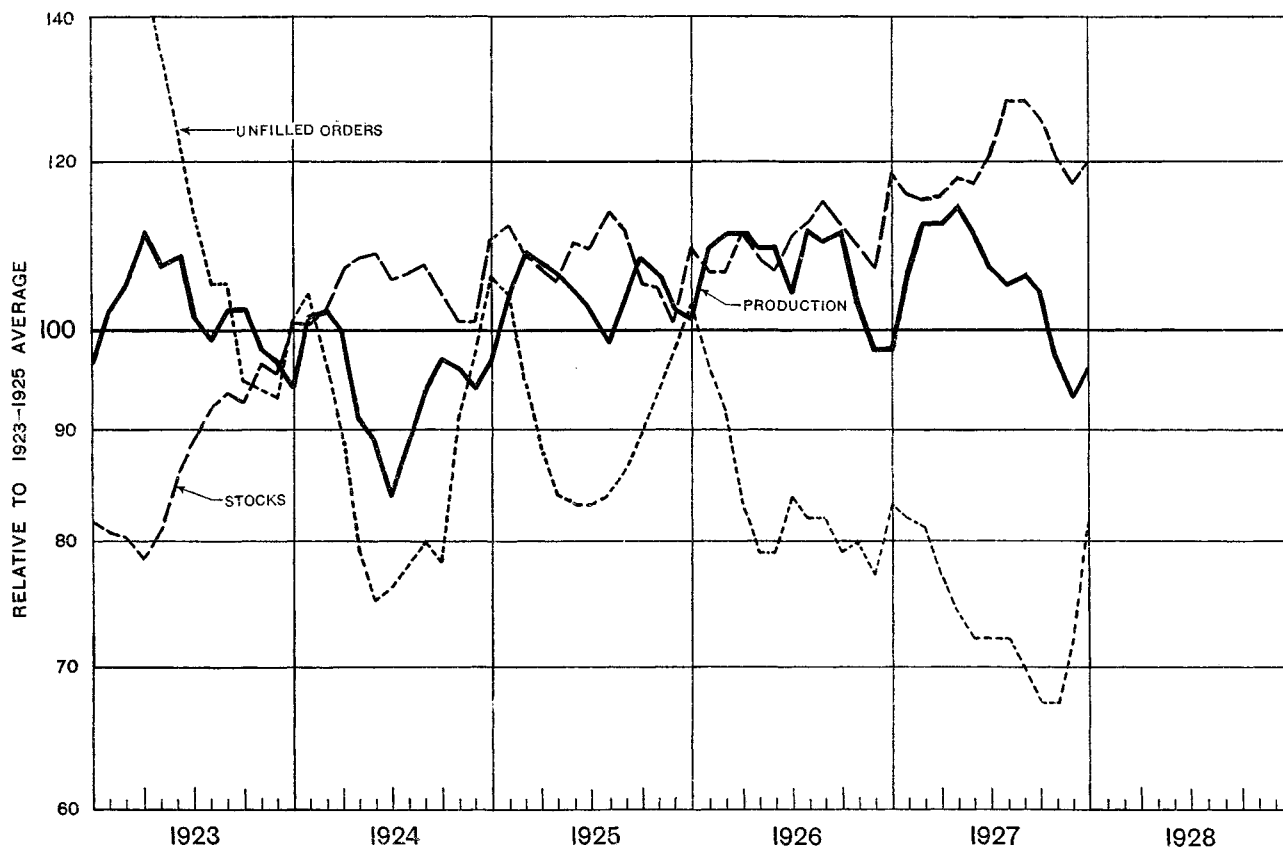
### BANKING AND FINANCE

Sales of stock on the New York Stock Exchange declined from the previous month but were larger than a year ago. Bond sales were lower in volume than in either prior period. Brokers' loans were higher at the end of January than at the end of January of last year. Loans and discounts of Federal reserve member banks receded from the previous month but were higher than a year ago. Interest rates on both time and call funds were lower than in the previous month; time-money rates were lower than a year ago and call rates were higher. New business of life-insurance companies was smaller than in the previous month but greater than a year ago. Defaulted liabilities of failing business firms were smaller than in either the previous month or January, 1927.

Manufacturing production, after adjustments for working-time differences, showed an increase over the preceding month but was lower than a year ago. The output of all manufacturing industries included in the index was greater than in the previous month, except chemicals and oils and stone and clay products, which declined, and paper and printing, which showed no change. Contrasted with a year ago increases were registered in the output of foodstuffs, iron and steel, lumber, leather, and stone and clay products, all other groups showing smaller production than a year ago.

## PRODUCTION, STOCKS, AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES

[1923-1925 monthly average=100. Adjustment has been made for the seasonal movement of stocks and relative number of working days for production. Unfilled orders are principally those of iron, steel, building materials, and textiles. January, 1928, is latest month plotted]



### COMMODITY STOCKS

Stocks of commodities, after adjustments for seasonal variations, showed a decrease from both the previous month and January of last year. As compared with the previous month, declines were reported in the holdings of foodstuffs, both raw and manufactured, sufficient to more than offset increases in stocks of manufactured commodities and raw materials other than foodstuffs. Contrasted with last year, stocks of commodities at the end of January were larger in all groups, except raw foodstuffs.

### SALES

Unfilled orders at the end of January were larger than at the end of the previous month but smaller than a year ago. All groups showed larger forward business than in the previous month, but as compared with last year unfilled orders for iron and steel alone were larger, the increase being insufficient to offset the declines in the other groups.

Wholesale trade showed larger volume than in December and no change from a year ago. As compared with the previous month wholesale business was greater in all lines except groceries and hardware, which declined. As compared with a year ago wholesale busi-

ness in dry goods, men's clothing, boots and shoes, drugs, and furniture was greater, while declines were registered in meats and women's clothing.

Retail trade in January, as measured by department store sales, was seasonally smaller than in December and slightly below a year ago. Stocks of merchandise held by department stores showed a decline from both prior periods. Sales by mail-order houses and 10-cent chain stores, although smaller than in the previous month, were larger than a year ago. Other chain stores showed larger business than a year ago except cigar chains, which declined.

### PRICES

The general index of wholesale prices declined from the previous month, being lower also than in the corresponding month of last year. Declines in the prices for food, fuel and lighting, and chemicals were more than sufficient to offset increased prices for farm products, hides and leather, and building materials. As compared with a year ago, prices for farm products, foods, hides and leather, textiles, and house-furnishing goods were higher, while prices for fuel and lighting, metals and metal products, building materials, chemicals, and miscellaneous items showed declines.



As reclassified, the general index of wholesale prices showed an increase over the previous week in producers' goods, while consumers' goods declined. Prices for raw materials showed no substantial change from the previous month. Contrasted with a year ago, prices for raw materials and consumers' goods were higher, while producers' goods were lower. Commercial indexes showed substantially the same comparisons with both prior periods.

The indexes of prices received by farmers for their produce showed no change from the preceding month, but was higher than a year ago. As compared with December, increased prices were registered in grains, fruits, and vegetables, and in certain unclassified items, while declines were reported in the prices for dairy and poultry products and cotton and cottonseed. As compared with January, 1927, prices for all groups were higher except meat animals, which showed a decline.

#### EMPLOYMENT

Factory employment in January showed a decline from both the preceding month and the same month of last year. As compared with December, employment in all industrial groups was lower, except leather and vehicles, which increased, and iron and steel, which showed no change. Contrasted with a year ago, the January employment was lower in all factories except paper and printing and tobacco products, which showed no change. The greatest declines from last

year in factory employment occurred in iron and steel and nonferrous metal mills.

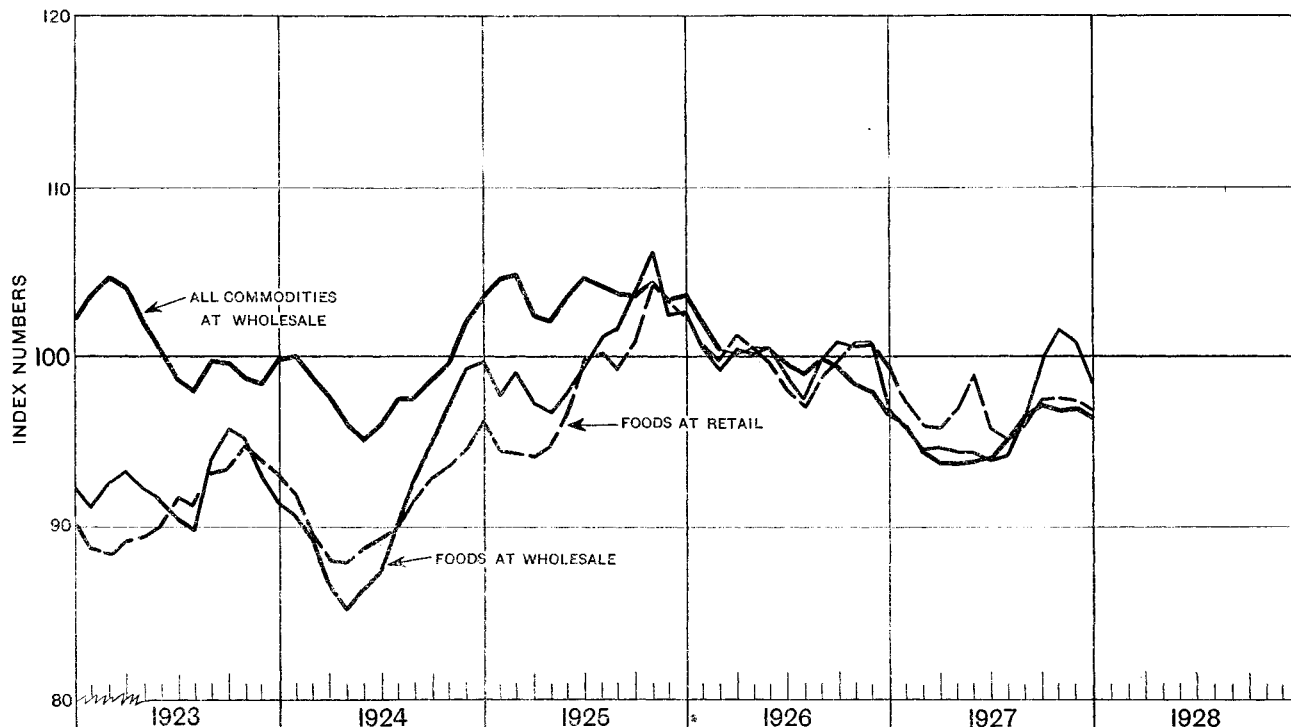
Factory pay-roll payments in January were also lower than in either the preceding month or January, 1927. As compared with the previous month, declines in pay-roll payments were registered in all groups except leather, which had larger payments. As compared with last year, pay-roll payments in all groups were lower except paper and printing, tobacco products, and vehicles, which showed larger payments. The cost of living was lower than in either the previous month or January of last year, all groups declining from the previous year, except light, which made a slight advance.

Reports from the American Federation of Labor covering unemployment show 18 per cent of union members in representative cities to be out of employment as compared with an average of 14 per cent during the last quarter of 1927. Voluntary quits of factory labor in January were larger than in the previous month but smaller than a year ago. Factory lay-offs made similar comparisons. Industrial accessions were larger than in either the previous month or the corresponding month of 1927. Employment in the Ohio construction industries showed a decline from both the preceding month and the corresponding month of last year. Wages of common labor averaged lower than in December but showed no change from 1927.

### COMPARISON OF WHOLESALE AND RETAIL FOOD PRICE INDEX NUMBERS

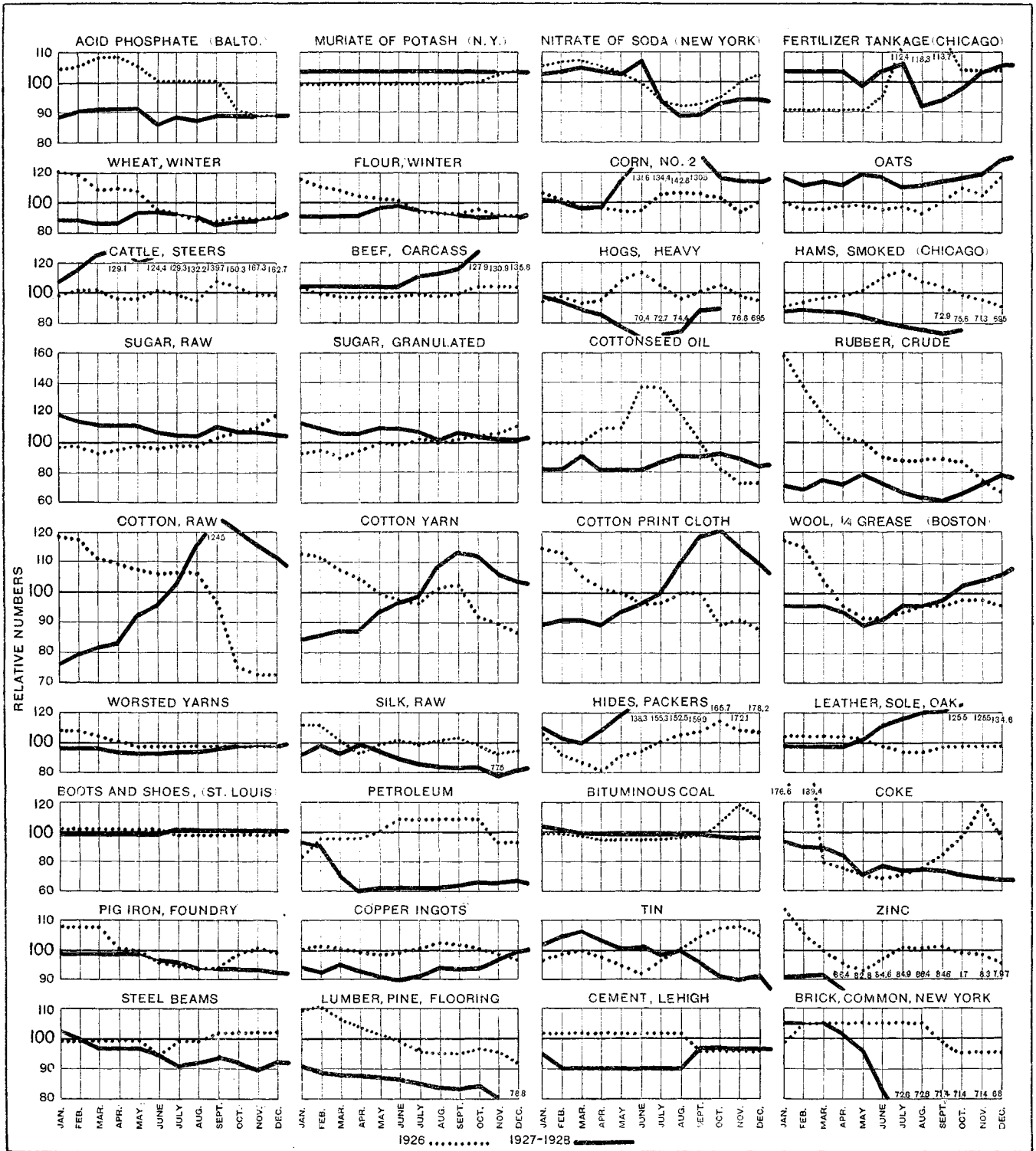
#### WITH INDEX OF ALL COMMODITIES AT WHOLESALE

[U. S. Department of Labor index numbers. Relative prices, 1926=100. January, 1928, is latest month plotted]



# WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. January, 1928, is latest month plotted]





## REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

### TEXTILES

Imports of wool in January were greater than in December but smaller than a year ago. The consumption of wool was larger than in either the previous month or January, 1927. Stocks of wool held at the end of 1927 were lower than at the end of the preceding year. Wool machines were more active in January than in either the previous month or the same month of last year.

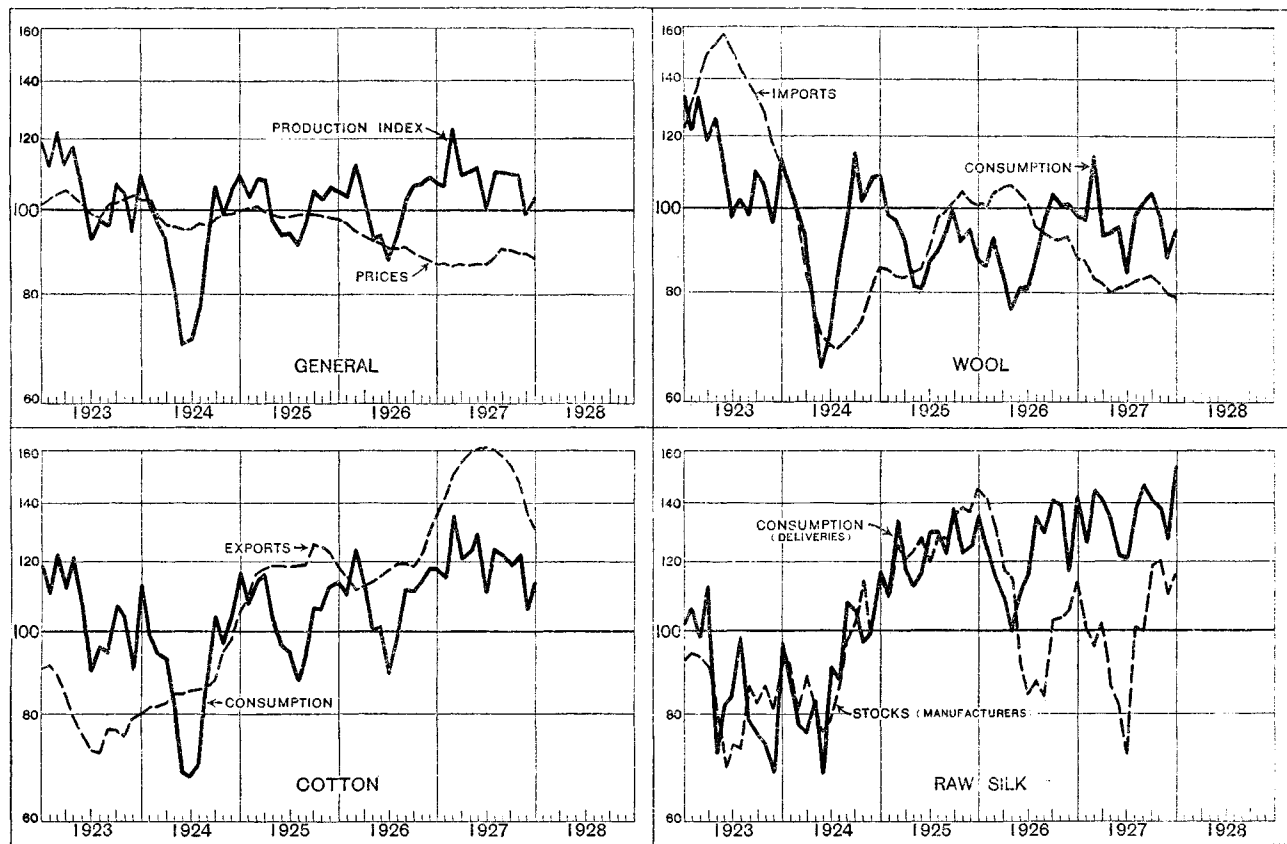
Receipts of cotton into sight were smaller than in either prior comparative period. Exports of raw

previous month or January, 1927. Prices for cotton cloth were generally lower than in December but higher than in January of the previous year.

Imports of raw silk in January were smaller than in either the previous month or the corresponding month of last year. Deliveries of silk to mills, indicative of consumption, were greater than in either prior period. Stocks of silk held at warehouses at the end of the month showed declines from both the previous month and the corresponding month of 1927. Manufacturers' stocks were larger than in either prior period. Silk prices averaged higher than in the previous month

### THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. January, 1928, is latest month plotted. Curves covering imports of wool and exports of cotton are plotted from 12 months' moving monthly averages centered on the end month]



cotton also showed declines from both periods. The consumption of cotton was greater than in December but smaller than in January, 1927. Stocks of cotton held by mills and warehouses were lower than in either prior period. Prices for cotton averaged lower than in December but were considerably higher than a year ago. Prices for cotton yarns showed little change from the previous month, but were higher than in January of the preceding year.

Production of cotton textiles was smaller than in December but considerably greater than a year ago. Stocks of textiles at the end of the month showed increased holdings over both prior comparative periods. Exports of cotton cloth were lower than in either the

but were generally lower than in the corresponding month of the previous year. Imports of rayon were lower than in December, being almost twice as large, however, as in January, 1927. Rayon prices showed no change from the preceding month but were generally higher than in January a year earlier.

Productive activity of manufacturers of fresh-water pearl buttons was greater than in either the previous month or January a year ago. Stocks of buttons were also larger than in either prior period. Imports of burlaps and fibers were greater than in December, fibers showing an increase over a year ago also.

The production of hosiery in December was smaller than in either the previous month or December, 1926.

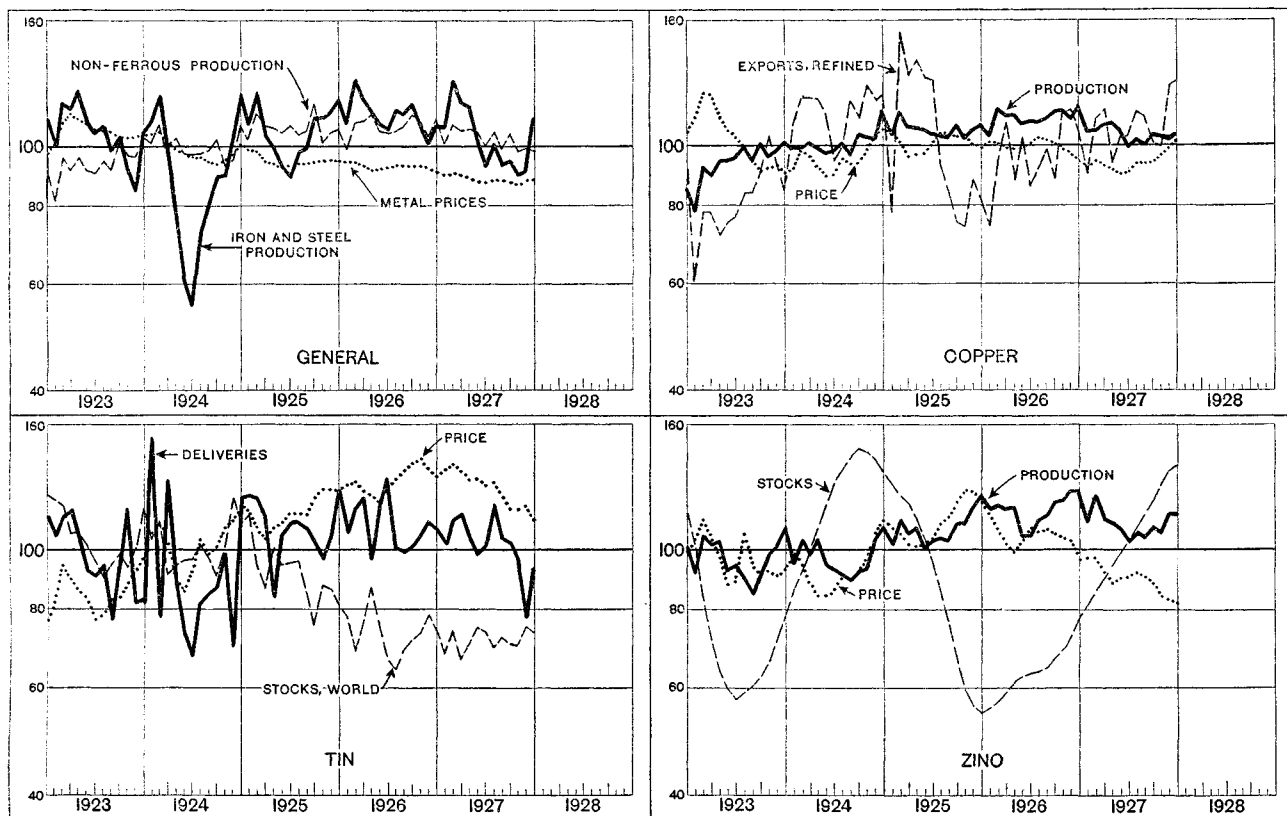
Shipments of hosiery, however, declining from the previous month, were larger than in December, 1926. Stocks of hosiery at the end of 1927 were greater than at the end of the preceding year.

Men's and boys' suits cut in December showed an increase over the preceding month but a decline from December, 1926. The number of overcoats cut in December declined from the preceding month, but were larger than in the corresponding month of the previous year. More work clothing was cut in Decem-

The output of malleable castings was larger than in either the previous month or January of last year. Operating activity of reporting mills, however, showed declines from both prior periods. The production of steel ingots was larger than in either the previous month or the corresponding month of 1927, while the operating ratio of steel mills made similar increases over both periods. Unfilled orders for steel at the end of January were larger than at the end of either prior comparative period.

### THE METAL INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. January, 1928, is latest month plotted. Curve covering zinc stocks is plotted from 12 months' moving monthly averages centered on the end month]



ber than in the same month of 1926, while net shipments also showed an increase.

### METALS

The consumption of iron ore was larger than in December but smaller than in January, 1927. Stocks of iron ore, both at furnaces and at Lake Erie docks, held at the end of the month, showed declines from both prior comparative periods. The output of pig iron in January was greater than in December, but smaller than a year ago. The production by merchant furnaces made similar comparisons. More furnaces were in blast at the end of January than at the end of either the preceding month or the same month of last year, while the capacity of furnaces in blast also increased over the previous month and showed a decline from a year ago.

New orders for steel castings in January showed an increase over the previous month, but were smaller than a year ago. The production of steel castings made similar comparisons with both periods. The production of steel sheets by independent manufacturers was greater than in either prior period with the operating ratio of mills showing similar comparisons. Shipments of sheets were likewise greater than in either the preceding month or January of last year. Unfilled orders for sheets, however, showed a decline from the previous month, but were considerably larger than a year ago.

New orders for fabricated structural steel were lower than in December but higher than in January, 1927. Structural-steel shipments made similar comparisons with both periods. New orders for fabricated steel plate showed declines from both the

previous month and January of last year, while new orders for steel boilers, although declining from the previous month, were slightly in excess of those produced a year ago. More steel barrels were produced than in the previous month, but the output was lower than in January of last year, shipments making similar comparisons. Exports of iron and steel products were greater than in December but smaller than a year ago, while imports were lower than in December and greater than January, 1927.

Mine production of copper was greater in January than in the previous month but smaller than a year ago. The production of copper by smelters, however, was smaller than in either period. Stocks of

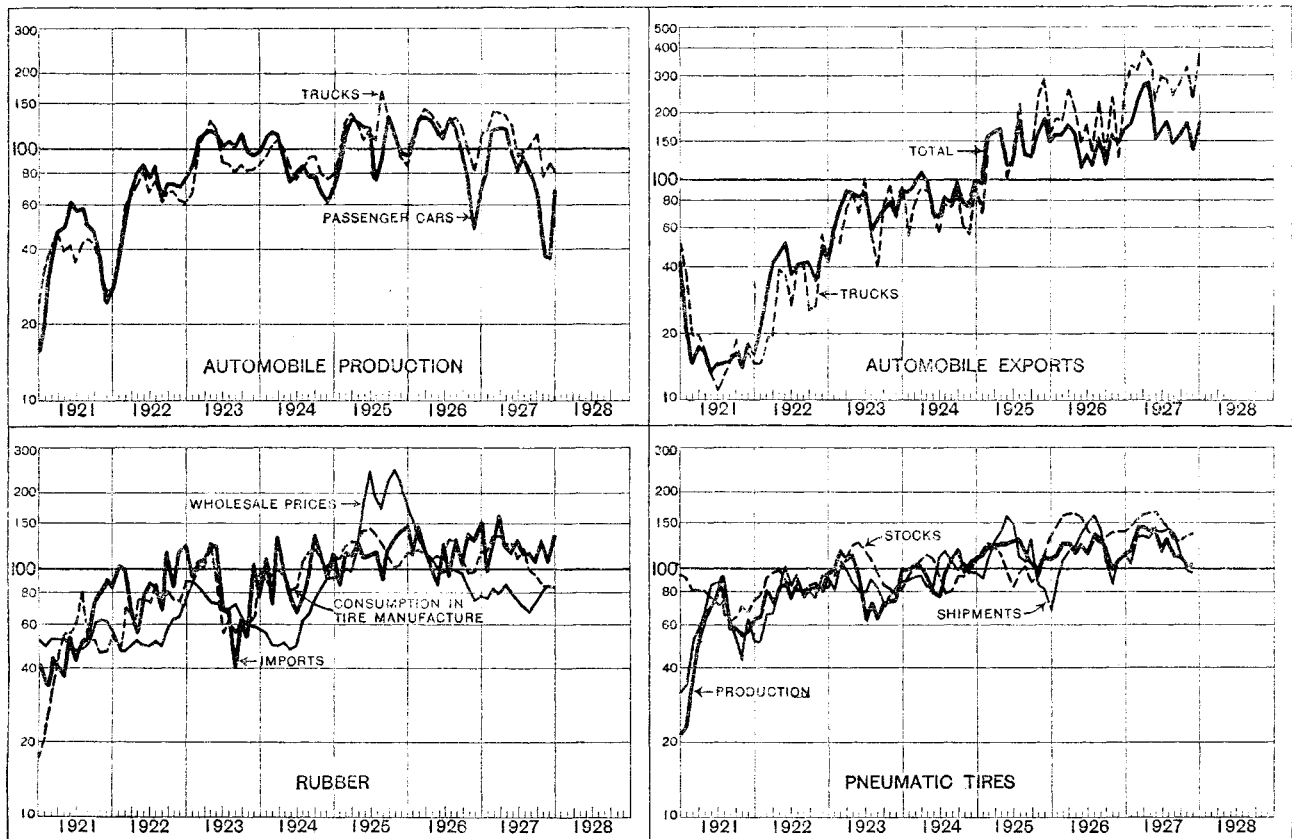
averaged lower than in either prior period. The output of lead was smaller than in the previous month, showing a decline also from a year ago. Lead prices, showing no change from the previous month, were lower than in the corresponding month of last year.

#### AUTOMOBILES AND RUBBER

The production of automobiles was larger than in the previous month and smaller than a year ago, the increase over December being solely due to larger production of passenger cars. Exports of assembled automobiles from the United States were larger than in either the previous month or January, 1927, both trucks being exported in larger volume than in either

#### THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. Where available, January, 1928, is latest month plotted]



refined copper in North and South America held at the end of January were larger than at the end of either prior period, but blister stocks showed declines from both periods. The wholesale price of copper continued to average higher, being higher also than a year ago.

Deliveries of tin to consuming establishments were larger than in the previous month but smaller than a year ago. The visible supply of tin showed declines from both periods, while the wholesale price of tin also receded. The production of zinc was larger than in the previous month but smaller than a year ago. Stocks of zinc at the end of the month were larger than in either prior period. The price of zinc

period while passenger car exports showed a decline from a year ago. Shipments of accessories and parts were larger than in the previous month, showing an increase also over a year ago. Automobile rim production was greater than in either prior period. Imports of crude rubber were larger than during the previous month but smaller than a year ago. Rubber prices declined from December but were still above those which prevailed in January, 1927.

#### FUELS

The production of coal, both bituminous and anthracite, was smaller than in the preceding year, while as compared with the previous month bituminous coal production was greater. Coke production

was larger than in the previous month but smaller than a year ago. Coke prices averaged lower than in either prior period. The production of crude petroleum was smaller than in December but greater than in January, 1927. Prices for petroleum, showing no change from the previous month, were considerably lower than a year ago.

#### HIDES AND LEATHER

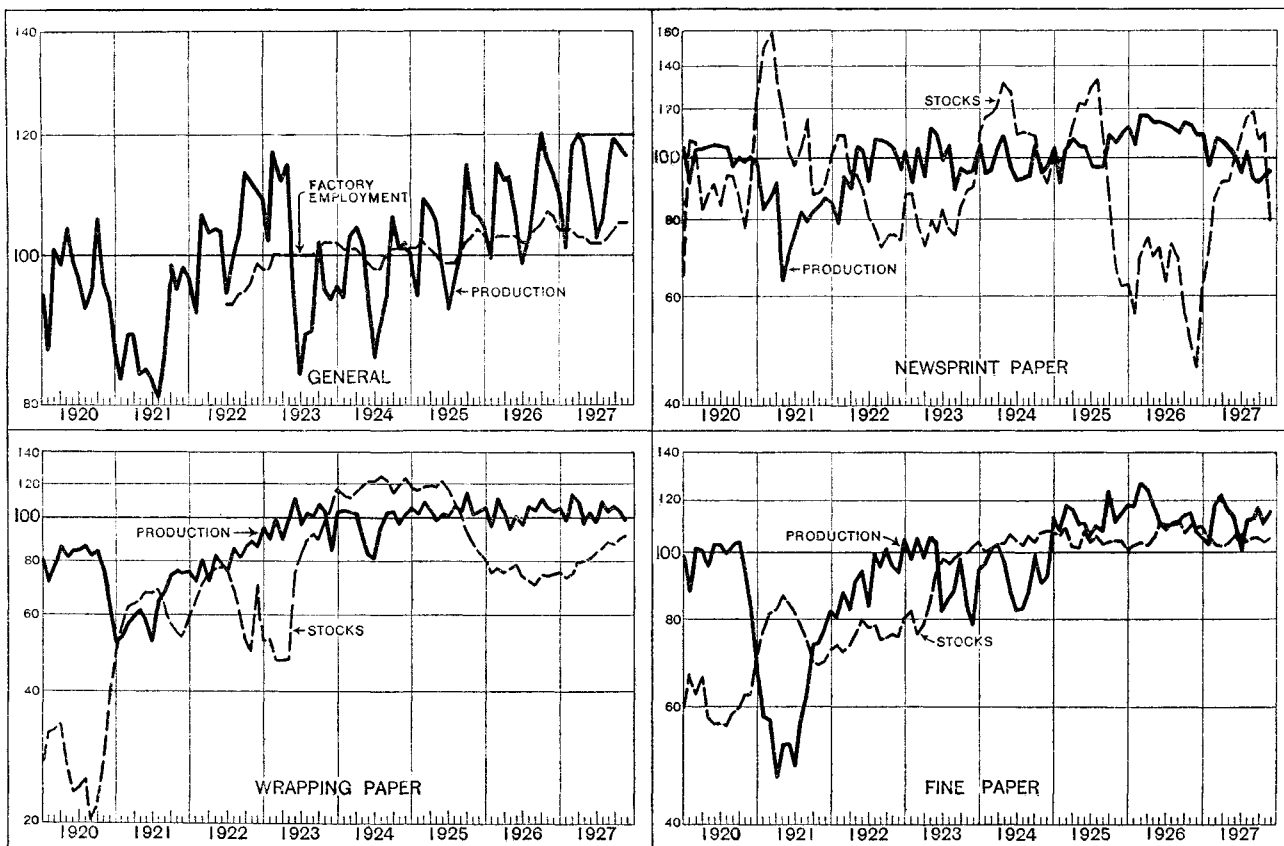
Imports of hides and skins, although smaller than in December, were greater than a year ago. All classes of skins showed larger importation than in January, 1927, except goatskins, which declined.

production of wood pulp, both chemical and mechanical, was smaller than a year ago. Prices for chemical pulp, although showing no change from the previous month averaged lower than last year.

Production of newsprint paper was greater than in December but considerably smaller than a year ago. The output of newsprint by Canadian mills, however, showed increases over both comparative periods. The consumption of newsprint by domestic publishers was smaller than in the corresponding month but greater than a year ago. Imports of newsprint, although greater than a year ago, were considerably

#### THE PAPER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. December, 1927, is latest month plotted]



Prices for hides averaged higher than in either the previous month or January of last year. The production of sole leather, declining from the previous month, showed an increase over a year ago.

Exports of sole leather were larger than in either prior period. Prices for leather showed no change from the previous month and averaged considerably higher than in January, 1927. Shoe production in January was larger than a year ago. Wholesale prices for shoes averaged higher than in either prior period.

#### PAPER AND PRINTING

Imports of wood pulp, both chemical and mechanical, were larger than a year ago, with chemical imports increasing also over the previous month. The

smaller than in 1927. Stocks of newsprint, held at both Canadian and domestic mills, were considerably larger than a year ago, while publishers' stocks were lower. Prices of newsprint, showing no change from the previous month, averaged lower than a year ago.

The production of boxboard was greater than in either prior period, while stocks, although greater than in the previous month, were smaller than a year ago. Fewer titles were published by American book publishers than in either the previous month or the corresponding month of last year.

#### BUILDING

Contracts awarded for new buildings showed larger contemplated floor space than was reported in either the previous month or January, 1927. Measured

in value, the January awards were lower than in December but considerably higher than a year ago. Construction costs showed little change from the previous month but in general were lower than a year ago. Fire losses in the United States and Canada were greater than in December, being larger also than in January, 1927.

### LUMBER AND LUMBER PRODUCTS

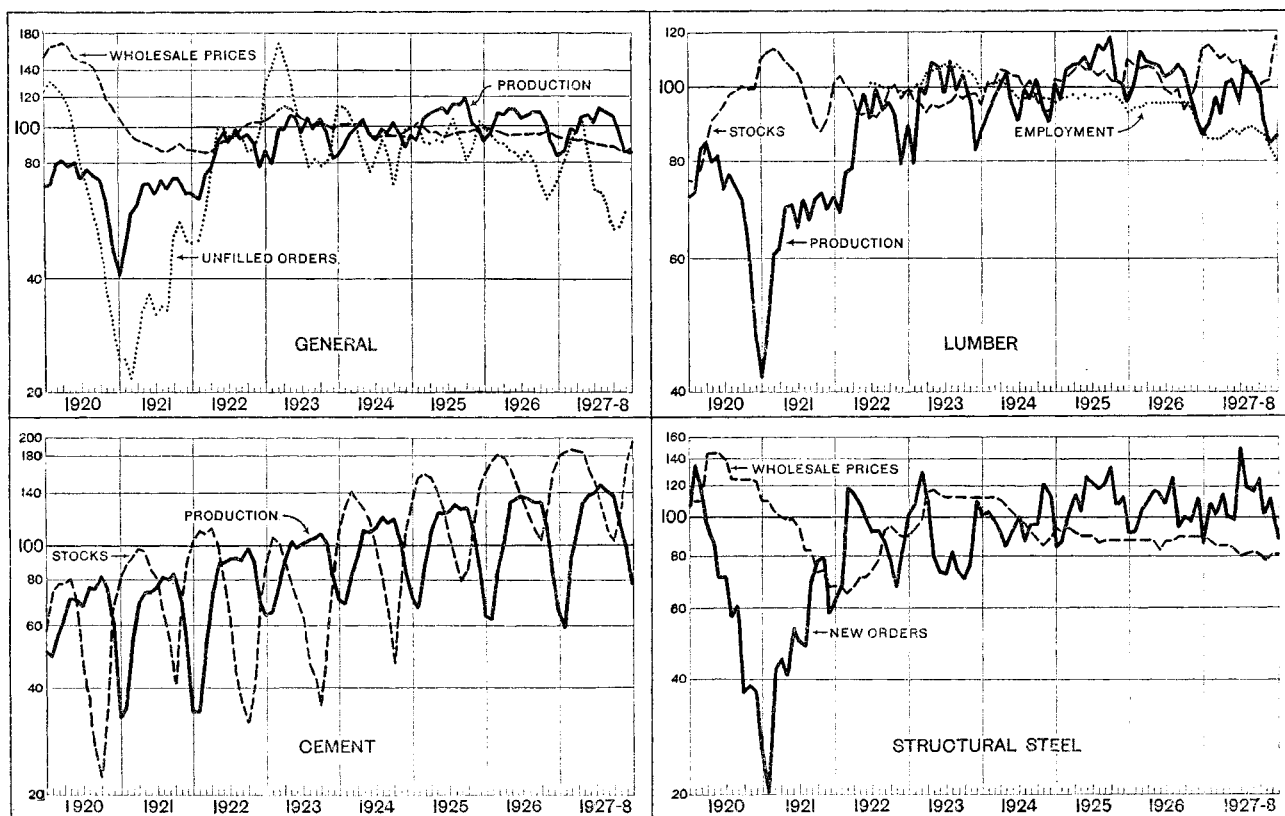
The production of southern pine lumber was greater than in either the previous month or January of last year, shipments being smaller than a year ago. Prices of southern pine were generally lower than in

likewise greater than in either prior period. Total exports of lumber were substantially greater than in either the previous month or in January, 1927. Composite lumber prices of both softwoods and hardwoods were higher than in the previous month but lower than a year ago. The production of flooring showed maple output smaller than in either the previous month or January of last year and oak flooring greater than in either prior period. Stocks of oak were larger than a year ago, while maple stocks were smaller.

Unfilled orders for flooring, both species, were greater at the end of January than at the end of either prior period. New orders for plywood were greater

### THE BUILDING-MATERIAL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. January, 1928, is latest month plotted]



either the previous month or January, 1927. The production of Douglas fir showed a decline from the previous month, but was larger than a year ago. California redwood production was greater than in either the previous month or the same month last year, while the output of western pine and North Carolina pine showed declines from both periods. The production of northern pine lumber was greater than in either prior period, while the output of northern pine lath made a similar comparison with both periods.

Total stocks of hardwoods at the end of January were considerably larger than at the end of either the previous month or January of last year. Unfilled orders for hardwoods at the end of the month were

than in the previous month, but smaller than a year ago, while new orders for piano benches and stools showed declines from both prior periods.

### STONE AND CLAY PRODUCTS

The production of face brick was smaller than in either the previous month or January of last year, but shipments and unfilled orders were larger than in either prior period. Prices for common brick averaged higher than in the previous month, but were still considerably lower than a year ago. The production of Portland cement was lower than in December but higher than in January, 1927. Portland cement shipments were larger than in either comparative period, while stocks made similar comparisons. New orders for terra cotta were greater than in either the



preceding month or January of last year. New orders for vitreous china plumbing fixtures were greater than in either the previous month or the same month of 1927, while shipments although larger than in December, were smaller than a year ago. New orders for porcelain plumbing fixtures were greater than in December. The production of sand-lime brick, although smaller than in December, was substantially greater than a year ago. Stocks of sand-lime brick at the end of the month were smaller than at the end of either the preceding month or January, 1927.

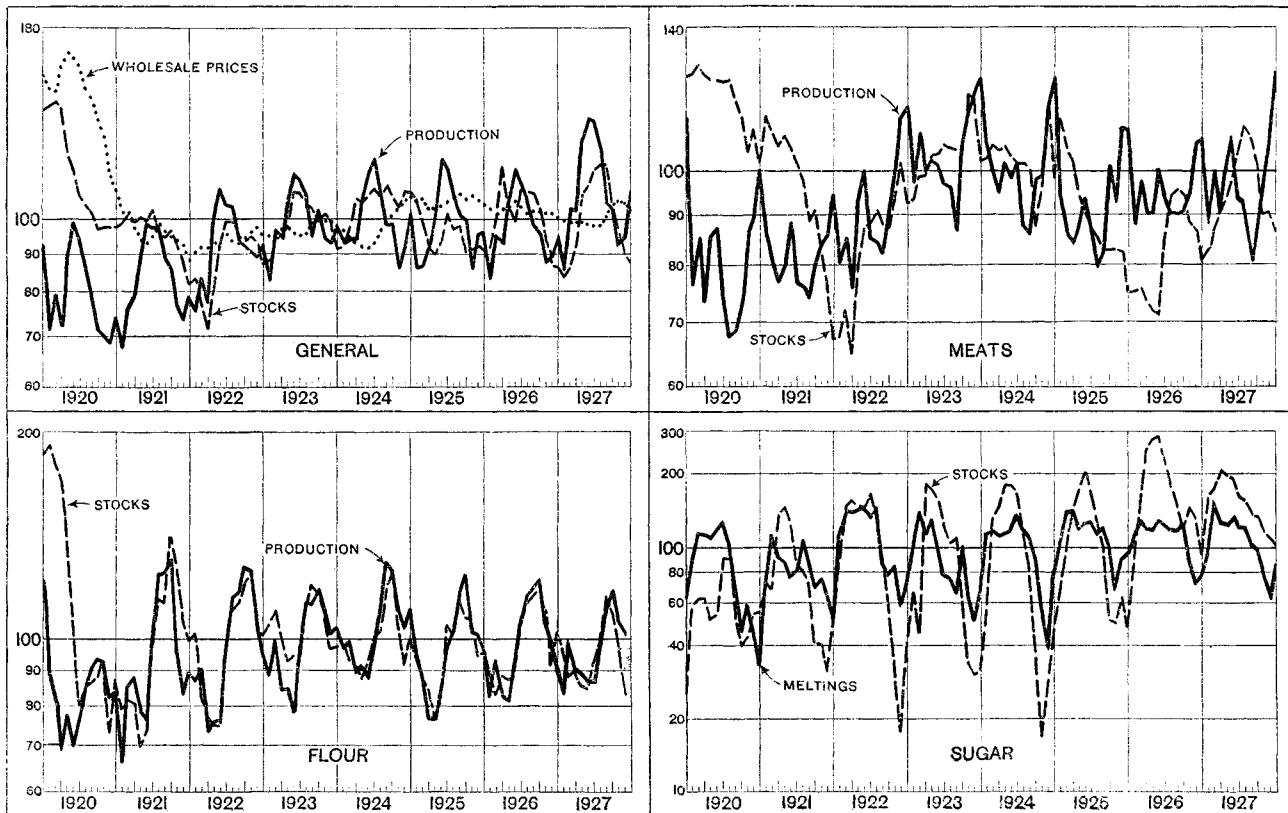
higher than a year ago. The output of acetate of lime declined from both previous periods. More turpentine and rosin from gum were received at ports than a year ago, but production of naval stores from wood declined. Both exports and imports of vegetable oils were higher than a year ago. Production of cottonseed oil declined from January, 1927.

#### FOODSTUFFS AND TOBACCO

The visible supply of wheat was considerably larger than a year ago, exports were smaller, while receipts

#### THE FOODSTUFFS INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. January, 1928, is latest month plotted]



New contracts awarded for concrete pavements, although smaller than in the preceding month, were considerably larger than a year ago. Production of glass containers, although smaller than in the previous month, was greater than a year ago. New orders for containers, although greater than in the preceding month, were smaller than a year ago. Stocks of containers at the end of the month were smaller than at the end of either the preceding month or January of last year.

#### CHEMICALS AND OILS

Larger imports were made in January of both potash and nitrate of soda than in either the previous month or a year ago. Fertilizer consumption in Southern States was seasonally larger than in December and

and shipments at the principal markets showed little change. The flour output increased over a year ago, as did exports. Corn exports and stocks were less than in January, 1927, but receipts, shipments, and grindings increased. Stocks of oats were much smaller than a year ago, as were receipts, while exports increased. Grain prices were generally higher than in December and considerably above a year ago. Flour prices showed little change from January, 1927.

Receipts of cattle and sheep declined slightly from a year ago, but hog receipts were much larger. Slaughter increased over a year ago for hogs and sheep but declined for cattle, but, for all meats, inspected production was greater. Cold-storage holdings declined for beef, increased for pork and lard and showed little

change for lamb, both as compared with the end of December and with a year ago. While beef exports declined, those of pork and lard increased. Prices of cattle and beef were generally higher than in December and far above a year ago, hog and ham prices tending downward from December and decreasing decidedly from January, 1927. Price movements for sheep were mixed.

Meltings of sugar at refineries were larger than a year ago, as were stocks, but exports of refined sugar declined. Sugar prices showed little change from December but were lower than a year ago. Cuban receipts and stocks were much less than at the end of January, 1927, but exports were greater. Coffee imports were higher than a year ago, as was the world visible supply, but stocks in the United States were lower.

Cigarette consumption continued to increase, while cigars fell behind the previous January. Cigarette exports also gained over a year ago.

#### TRANSPORTATION

Panama Canal traffic was lighter than in December but heavier than a year ago. More traffic was carried on the Monongahela River than a year ago, but less on the Ohio and Allegheny Rivers. Carloadings declined from a year ago, grains alone showing an increase. Both shipments and orders for freight cars were far below last January. Locomotive shipments were less than a year ago, though domestic shipments increased, and unfilled orders declined almost half.

#### DISTRIBUTION

Sales by the leading mail-order houses were seasonally smaller than in December but showed a substantial gain over the preceding year. Sales by 10-cent stores were likewise smaller than in December, showing a gain over January, 1927. Newspaper advertising was smaller in January than in either the preceding month or the corresponding month of last year. Postal receipts, although smaller than in the previous month, were larger than in the same month a year ago.

#### BANKING AND FINANCE

Check payments, both in and outside New York City, declined from the preceding month but were

larger than in January, 1927. Loans and discounts of Federal reserve member banks receded from the preceding month but were larger than a year ago. The Federal reserve ratio averaged higher than in December but was lower than a year ago. Brokers' loans, made by Federal reserve member banks in New York City, showed an increase over both the preceding month and January of last year.

Interest rates on both time and speculative funds averaged lower than in December. As compared with a year ago time money-rates were also lower but rates on call loans averaged higher. Prices of stocks averaged higher than in either the previous month or January, 1927. Bond prices made similar comparisons with both periods.

Business failures were more numerous than in either the previous month or January of last year but liabilities of failing business firms showed declines from both prior comparative periods. Dividend and interest payments scheduled for February showed a decline from the preceding month but were larger than a year ago. New paid-for life insurance, although declining from the preceding month, was larger than in January, 1927. The increase over a year ago was solely due to larger sales of industrial insurance, other forms declining.

#### GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were smaller than in either the previous month or January, 1927. Exports of gold, declining from the preceding month, were more than three times as large as a year ago. Foreign trade in gold showed an export balance in January as contrasted with an import balance a year ago. Domestic production of silver was larger than in either prior period, while silver exports showed declines from both periods. The price of silver averaged lower than in December but higher than a year ago. Merchandise exports were larger than in December but smaller than a year ago, with imports making a similar comparison. Exchanges on the principal foreign countries showed few changes from the previous month but as compared with a year ago, most currencies averaged higher. Exchanges on Japan and France, however, were lower than a year ago.

## INDEXES OF BUSINESS

The index numbers presented in this table are designed to show the detailed trend in production, prices, trade, etc., in various groups of industry and commerce. They consist in general of weighted combinations of series of individual relative numbers; often the individual relative numbers making up the series are also given. The function of index and relative numbers is explained on the inside front cover. Many of the index numbers have been reworked to a comparable basis on the average of the years 1923 to 1925, while maxima and minima are given only since 1923, except on this page, thus eliminating the abnormal period prior to 1923.

	Maximum since Jan. 1, 1920	Minimum since Jan. 1, 1920	1926		1927			1928	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1928, from December, 1927	January, 1928, from January, 1927
<b>PRODUCTION</b>										
(Relative to 1919 monthly average as 100)										
<b>RAW MATERIALS</b>										
Grand total.....	180	73	165	140	122	148	127	113	-12.4	-7.4
<b>MINERALS</b>										
Total.....	165	62	158	150	147	135	130	131	+0.8	-10.9
Petroleum.....	256	105	220	229	227	234	235	229	-2.6	+0.9
Bituminous coal.....	155	41	154	149	147	105	106	114	+7.5	-22.4
Anthracite coal.....	122	0	101	103	89	94	82	77	-6.2	-13.5
Iron ore*.....	273	0	100	1	0	51	0	0	0.0	0.0
Copper.....	152	17	148	143	151	135	133	136	+2.3	-9.9
Lead.....	193	78	183	191	183	184	182	175	-3.8	-4.4
Zinc.....	149	38	138	146	136	130	139	139	0.0	+2.2
Gold.....	131	57	106	90	82	93	77	78	+1.3	-4.9
Silver.....	145	80	101	119	110	106	106	113	+6.6	+2.7
<b>ANIMAL PRODUCTS (marketings)</b>										
Total.....	138	80	125	126	111	124	123	117	-4.9	+5.4
Wool*.....	314	19	47	56	34	51	49	45	-8.2	+32.4
Cattle and calves.....	143	58	120	90	89	114	82	86	+4.9	-3.4
Hogs.....	177	64	95	105	114	98	113	142	+25.7	+24.6
Sheep.....	153	54	85	75	77	84	71	75	+5.6	-2.6
Eggs*.....	245	30	49	63	82	51	51	73	+43.1	-11.0
Poultry.....	390	21	353	388	140	310	355	148	-58.3	+5.7
Fish.....	192	45	115	77	105	122	79	113	+43.0	+7.6
Milk (New York).....	190	94	136	141	142	145	145	146	+0.7	+2.8
<b>CROPS (marketings)</b>										
Total.....	246	49	199	149	122	173	129	104	-19.4	-14.8
Grains*.....	242	43	108	90	104	130	122	115	-5.7	+10.6
Vegetables*.....	254	58	137	104	127	149	102	143	+40.2	+12.6
Fruits*.....	405	50	202	104	96	152	89	70	-21.3	-27.1
Cotton products*.....	346	12	343	251	150	244	155	87	-43.9	-42.0
Miscellaneous crops*.....	170	18	142	117	113	147	106	111	-4.7	-1.8
<b>FOREST PRODUCTS</b>										
Total.....	136	61	113	106	98	117	106	101	-4.7	+3.1
Lumber.....	137	59	110	102	101	110	101	102	+1.0	+1.0
Pulp wood.....	164	51	108	97	79	120	119	107	-10.9	+34.2
Gum (rosin and turpentine)*.....	356	20	184	209	61	251	198	64	-67.7	+4.9
Distilled wood.....	149	24	107	102	116	103	94	97	+3.2	-16.4
<b>MANUFACTURING</b>										
Grand total (adjusted for working days).....	138	71	121	113	117	111	105	115	+9.5	-1.7
Grand total (unadjusted).....	142	68	121	113	117	111	105	115	+9.5	-1.7
Foodstuffs.....	135	77	101	102	103	107	107	120	+12.1	+16.5
Textiles.....	133	54	113	116	115	118	103	111	+7.8	-3.5
Iron and steel.....	152	32	127	119	126	104	106	130	+22.6	+3.2
Lumber.....	166	57	137	127	123	127	118	124	+5.1	+0.8
Leather.....	115	63	84	82	80	83	79	83	+5.1	+3.8
Paper and printing.....	127	69	123	118	118	102	104	104	0.0	-11.9
Chemicals, oils, etc.....	211	92	205	210	198	206	199	187	-6.0	-5.6
Stone and clay products.....	190	69	144	115	90	155	131	104	-20.6	+15.6
Metals, excepting iron and steel.....	195	71	154	142	160	139	129	139	+7.8	-13.1
Tobacco.....	147	70	128	104	115	135	103	112	+8.7	-2.6
Miscellaneous.....	164	37	105	86	105	74	77	93	+20.8	-11.4

\* Fluctuations between maximum and minimum due largely to seasonal conditions.

## INDEXES OF BUSINESS—Continued

	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1926		1927			1928	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1928, from December, 1927	January, 1928, from January, 1927
<b>STOCKS</b>										
(Relative to 1923-1925 monthly average as 100)										
(Corrected for seasonal variation)										
Total.....	153	84	151	141	140	140	141	137	-2.8	-2.1
Raw foodstuffs.....	222	72	222	194	164	164	166	134	-19.3	-18.3
Raw materials for manufacture.....	159	71	148	145	159	158	157	170	+8.3	+6.9
Manufactured foodstuffs.....	118	84	94	87	86	94	89	88	-1.1	+2.3
Other manufactured commodities.....	132	73	115	114	130	130	127	142	+11.8	+9.2
(Unadjusted index)										
Total.....	147	77	144	144	144	141	145	142	-2.1	-1.4
Raw foodstuffs.....	197	60	174	176	176	138	157	155	-1.2	-11.9
Raw materials for manufacture.....	196	64	185	177	165	196	185	168	-9.2	+1.8
Manufactured foodstuffs.....	132	79	93	83	87	92	84	87	+3.6	0.0
Other manufactured commodities.....	133	74	116	123	127	133	136	137	+0.7	+7.8
<b>UNFILLED ORDERS</b>										
(Relative to 1923-1925 monthly average as 100)										
Total.....	157	67	80	77	83	67	72	81	+12.5	-2.4
Textiles.....	154	62	79	70	85	76	69	77	+11.6	-9.4
Iron and steel.....	157	66	80	81	80	71	85	89	+4.7	+11.3
Vehicles.....	204	53	86	87	91	51	57	64	+12.3	-29.7
Lumber.....	142	61	79	68	73	61	56	79	+41.1	-4.8
<b>WHOLESALE TRADE</b>										
(Relative to 1923-1925 monthly average as 100)										
Grand total, all classes.....	124	82	97	84	87	93	82	87	+6.1	0.0
Groceries.....	119	86	102	94	86	100	91	85	-6.6	-1.2
Meats.....	125	87	112	106	113	101	102	105	+2.9	-7.1
Dry goods.....	128	71	98	71	78	88	70	85	+21.4	+9.0
Men's clothing.....	167	43	61	44	68	63	50	80	+60.0	+17.6
Women's clothing.....	188	26	45	42	71	45	39	65	+66.7	-8.5
Boots and shoes.....	128	68	104	76	92	110	82	93	+13.4	+1.1
Hardware.....	118	82	100	93	82	98	90	82	-8.9	0.0
Drugs.....	125	88	112	100	102	112	99	106	+7.1	+3.9
Furniture.....	129	72	111	94	88	104	85	91	+7.1	+3.4
<b>RETAIL TRADE</b>										
(Relative to 1923-1925 monthly average as 100)										
MAIL-ORDER HOUSES (4 houses).....	156	64	142	154	100	149	167	105	-37.1	+5.0
CHAIN STORES:										
Ten-cent (5 chains).....	250	62	133	250	95	142	274	102	-62.8	+7.4
Music (4 chains).....	199	64	130	199	84	114	157	86	-45.2	-2.4
Grocery (27 chains).....	192	77	156	168	156	190	203	188	-7.4	+20.5
Drug (9 chains).....	169	82	128	169	135	144	181	153	-15.5	+13.3
Cigar (3 chains).....	160	79	108	160	97	105	155	90	-41.9	-7.2
Candy (5 chains).....	161	70	123	161	95	125	164	100	-39.0	+5.3
Shoe (6 chains).....	163	55	114	163	81	118	178	84	-52.8	+3.7
DEPARTMENT STORES:										
Sales (359 stores).....	185	70	124	185	90	123	199	105	-47.2	+16.7
Stocks (314 stores).....	118	81	118	97	94	116	99	90	-9.1	-4.3
<b>EMPLOYMENT</b>										
(Relative to 1923-1925 monthly average as 100)										
Number employed, by industries:										
Total, all classes.....	109	90	97	97	95	92	91	90	-1.1	-5.3
Food products.....	112	90	97	95	93	95	94	91	-3.2	-2.2
Textiles.....	114	85	93	95	95	94	94	93	-1.1	-2.1
Iron and steel.....	114	87	99	99	97	88	87	87	0.0	-10.3
Lumber.....	107	86	94	92	98	87	83	80	-3.6	-9.1
Leather.....	112	88	98	97	97	90	88	92	+4.5	-5.2
Paper and printing.....	106	97	106	106	104	105	105	104	-1.0	0.0
Chemicals.....	111	88	104	102	103	96	95	94	-1.1	-8.7
Stone, clay, and glass.....	107	91	103	98	91	95	91	85	-6.6	-6.6
Metal products other than iron and steel.....	110	87	99	97	96	90	89	87	-2.2	-9.4
Tobacco products.....	108	82	91	91	82	93	89	82	-7.9	0.0
Vehicles.....	110	82	91	89	87	82	83	85	+2.4	-2.3
Miscellaneous.....	115	86	106	109	108	96	97	96	-1.0	-11.1

## INDEXES OF BUSINESS—Continued

	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1926		1927			1928	PER CENT INCREASE (+) OR DECREASE (-)	
			November	December	January	November	December	January	January, 1928,	January, 1928,
									from December, 1927	from January, 1927
<b>EMPLOYMENT—Continued.</b>										
(Relative to 1923-1925 monthly average as 100)										
Amount of pay roll, by industries:										
Total, all classes.....	111	85	101	101	96	93	94	91	-3.2	-5.2
Food products.....	108	90	99	98	96	98	97	95	-2.1	-1.0
Textiles.....	115	78	92	97	96	94	95	93	-2.0	-3.1
Iron and steel.....	117	79	104	104	99	88	90	87	-3.3	-12.1
Lumber.....	107	88	102	98	88	94	89	81	-9.0	-8.0
Leather.....	117	84	94	93	94	81	83	88	+6.0	-6.4
Paper and printing.....	114	94	112	114	110	112	114	111	-2.6	+0.9
Chemicals.....	114	89	108	108	106	101	102	100	-2.0	-6.7
Stone, clay, and glass.....	111	84	107	103	90	97	93	86	-7.5	-4.4
Metal products other than iron and steel.....	114	81	99	99	95	88	90	87	-3.3	-8.4
Tobacco products.....	111	81	96	93	81	95	92	82	-10.9	+1.2
Vehicles.....	114	79	94	88	79	84	86	83	-3.5	+5.1
Miscellaneous.....	119	86	108	115	113	97	105	100	-4.8	-11.5
<b>PRICE INDEX NUMBERS</b>										
<b>FARM PRICES</b>										
(Relative to 1909-1914 average as 100)										
All groups.....	152	125	130	127	126	137	137	137	0.0	+8.7
Grains.....	178	108	121	120	120	120	123	125	+1.6	+4.2
Fruits and vegetables.....	253	108	136	137	140	136	141	144	+2.1	+2.9
Meat animals.....	154	98	142	140	140	141	138	138	0.0	-1.4
Dairy and poultry.....	166	122	157	161	152	153	158	154	-2.5	+1.3
Cotton and cottonseed.....	252	81	88	81	85	162	153	152	-0.7	+78.8
Unclassified.....	108	79	97	91	87	86	90	91	+1.1	+4.6
<b>WHOLESALE PRICES</b>										
<b>Department of Labor Indexes</b>										
(Relative to 1926)										
All commodities.....	105	94	98	98	97	97	97	96	-1.0	-1.0
Farm products.....	114	94	95	95	97	104	104	106	+1.9	+9.3
Food, etc.....	106	85	101	101	97	102	101	99	-2.0	+2.1
Hides and leather products.....	113	98	100	100	101	114	117	121	+3.4	+19.8
Textile products.....	114	94	96	95	94	98	97	97	0.0	+3.2
Fuel and lighting.....	112	84	103	99	98	83	83	81	-2.4	-17.3
Metals and metal products.....	113	97	101	100	99	97	98	98	0.0	-1.0
Building materials.....	116	92	100	99	98	90	90	91	+1.1	-7.1
Chemicals.....	104	95	99	99	98	97	97	96	-1.0	-2.0
House-furnishing goods.....	111	98	99	99	98	99	99	99	0.0	+1.0
Miscellaneous.....	127	88	91	90	90	88	89	89	0.0	-1.1
(Relative to 1913)										
Classified by state of manufacture:										
Producers' goods.....	150	119	126	126	125	119	120			
Consumers' goods.....	169	150	159	158	157	161	160			
Raw materials.....	169	146	150	149	150	155	155			
<b>Commercial Indexes</b>										
(Relative to 1926 monthly average as 100)										
Dun's.....	105	85	100	100	98	103	102	102	0.0	+4.1
Bradstreet's.....	112	95	99	99	97	105	105	105	0.0	+8.2
<b>COST OF LIVING</b>										
<b>National Industrial Conference Board Indexes</b>										
(Relative to July, 1914)										
All items weighted.....	172	158	168	168	167	164	164	163	-0.6	-3.4
Food (Dept. Labor).....	167	141	162	162	159	157	156	155	-0.6	-2.5
Shelter.....	186	167	174	173	173	167	166	166	0.0	-4.0
Clothing.....	177	160	173	174	173	171	171	172	+0.6	-0.6
Fuel and light (combined).....	179	156	170	169	168	163	163	163	0.0	-3.0
Fuel.....	208	174	195	194	192	184	184	184	0.0	-4.2
Light.....	123	118	121	121	121	122	122	122	0.0	+0.8
Sundries.....	176	171	173	174	174	173	173	172	-0.6	-1.1















## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per. ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
	<p><b>IRON AND STEEL—Continued</b></p> <p><b>Machinery—Continued</b></p> <p>Electric hoists:</p> <p>New orders—</p> <p>Quantity.....number.....278 300 270 223 272 346 262</p> <p>Value.....dollars.....162,594 147,323 114,835 102,238 122,663 160,852 134,006</p> <p>Shipments.....dollars.....128,331 151,674 121,445 139,066 102,206 133,842 139,522</p> <p>Electric overhead cranes:</p> <p>Shipments.....thous. of dolls.....729 653 764 637 762 432 704</p> <p>New orders.....thous. of dolls.....483 684 566 525 586 358 888</p> <p>Unfilled orders, end mo.....thous. of dolls.....2,278 2,273 2,117 1,975 1,792 1,735 3,971</p> <p>Electric industrial trucks and tractors:</p> <p>Shipments, domestic—</p> <p>Tractors.....number of vehicles.....3 8 11 15 8 5 6</p> <p>All other types.....number of vehicles.....87 66 81 64 77 98 67</p> <p>Exports.....number of vehicles.....2 5 17 19 11 9 17</p> <p>Fire-extinguishing equipment, shipments:</p> <p>Motor vehicles.....number.....143 122 108 111 114 71 93</p> <p>Hand types.....number.....48,101 46,255 48,472 43,723 47,870 43,175 47,354</p> <p>Patents issued:</p> <p>Total, all classes.....number.....3,815 2,792 3,185 4,232 3,170 3,501 3,029</p> <p>Agricultural implements.....number.....46 37 57 61 42 45 42</p> <p>Internal-combustion engines.....number.....67 34 73 60 33 51 64</p> <p><b>NONFERROUS METALS</b></p> <p><b>Copper</b></p> <p>Production:</p> <p>Mines.....short tons.....67,248 65,936 68,959 68,080 67,222 68,728 76,198</p> <p>Smelter.....short tons.....78,245 74,418 83,551 79,878 85,868 77,429 89,719</p> <p>Refined (North and South America).....short tons.....119,786 119,100 124,927 118,269 128,923 122,723 133,110</p> <p>World production, blister.....short tons.....135,015 133,291 145,278 141,975 148,961 140,546 143,337</p> <p>Domestic shipments, refined.....short tons.....71,736 71,578 68,619 59,264 60,862 64,824 76,499</p> <p>Exports.....short tons.....46,571 46,137 41,317 41,129 51,322 52,095 43,879</p> <p>Stocks (North and South America), end mo.:</p> <p>Refined.....short tons.....93,654 86,493 83,882 90,874 95,298 96,476 93,982</p> <p>Blister.....short tons.....253,886 246,517 246,354 250,014 248,420 237,881 276,316</p> <p>Wholesale price, electrolytic.....dols. per lb......1297 .1294 .1296 .1332 .1377 .1385 .1299</p> <p><b>Copper Products</b></p> <p>Plumbing fixtures:</p> <p>New orders, tubular—</p> <p>Quantity.....number.....229,923 230,978 200,298 238,034 211,779 371,125</p> <p>Value.....dollars.....207,013 209,702 178,280 162,871 187,767 248,094</p> <p>Wholesale price, 6 pieces.....dollars.....104.39 104.51 104.71 104.33 99.44 98.59 105.91</p> <p>Wire cloth:</p> <p>Production.....thous. of sq. ft.....422 409 432 464 492 449 501</p> <p>Shipments.....thous. of sq. ft.....426 417 446 470 404 425 424</p> <p>Stocks, end of mo.....thous. of sq. ft.....1,320 1,242 1,187 1,161 1,213 1,189 1,149</p> <p>New orders.....thous. of sq. ft.....413 440 442 381 414 414 414</p> <p>Unfilled orders, end of mo.....thous. of sq. ft.....256 265 332 292 316 315 286</p> <p>Make and hold orders, end of mo.....thous. of sq. ft.....398 396 412 366 413 441 341</p> <p><b>Tin</b></p> <p>Deliveries (consumption).....long tons.....6,895 6,110 6,005 5,665 4,535 5,415 6,295</p> <p>Stocks, end of month:</p> <p>World visible supply.....long tons.....14,487 15,083 14,684 14,594 15,733 15,244 15,342</p> <p>United States.....long tons.....2,201 1,973 3,158 2,003 1,573 2,768 3,304</p> <p>Imports.....long tons.....8,560 4,938 7,179 4,876 3,958 5,727 7,966</p> <p>Wholesale price, pig (New York).....dols. per lb......6352 .6074 .5756 .5709 .5805 .5518 .6479</p> <p><b>Zinc</b></p> <p>Retorts in operation, end of month.....number.....76,851 74,429 76,067 76,627 77,064 72,204 88,908</p> <p>Production.....short tons.....49,012 47,725 50,185 49,217 52,347 52,414 56,898</p> <p>Stocks, end of month.....short tons.....34,587 34,277 36,223 39,320 40,751 42,163 29,912</p> <p>Ore, Joplin, district:</p> <p>Shipments.....short tons.....61,749 55,308 76,430 49,830 54,586 49,835</p> <p>Stocks, mines, end of month.....short tons.....24,934 28,806 29,776 39,296 43,147 25,515</p> <p>Price, slab, prime western.....dols. per lb......0634 .0621 .0600 .0575 .0572 .0564 .0666</p> <p><b>Lead</b></p> <p>Production.....short tons.....55,830 53,204 56,134 57,703 56,812 54,820 59,383</p> <p>Ore shipments:</p> <p>Joplin district.....short tons.....8,540 6,439 7,864 8,207 13,079 10,812</p> <p>Utah.....short tons.....63,721 80,362 66,157 70,752 83,003 75,855 84,768</p> <p>Receipts in U. S. ore.....short tons.....56,479 50,995 53,017 57,035 57,027 55,970 56,345</p> <p>Stocks, U. S. and Mexico, end mo.....short tons.....162,866 160,134 155,868 155,568 156,280 134,682</p> <p>Price, pig, desilverized (New York).....dols. per lb......0668 .0630 .0625 .0626 .0650 .0650 .0758</p> <p><b>Enameled Ware</b></p> <p>Baths:</p> <p>Shipments.....pieces.....110,220 93,172 85,163 72,424 55,974 70,633 83,117</p> <p>Stocks, end of month.....pieces.....120,903 123,880 137,830 146,113 157,868 156,020 182,363</p> <p>New orders.....pieces.....106,502 96,352 82,762 69,356 66,504 78,494 86,802</p> <p>Unfilled orders, end of month.....pieces.....38,829 41,407 33,154 28,993 33,160 36,473 47,343</p>											

Revised.











## TREND OF BUSINESS MOVEMENTS—Continued

	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct in-crease (+) or de-crease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
	<i>The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"</i>											
<b>RUBBER—Continued</b>												
<b>Other Rubber Products—Continued</b>												
Rubber heels:												
Production.....thous. of pairs..	18,363	18,452	21,151	20,556			13,660					
Shipments—												
To shoe manufacturers.....thous. of pairs..	10,624	8,882	10,546	10,245			6,685					
To repair trade.....thous. of pairs..	8,676	8,170	9,305	7,129			4,013					
For export.....thous. of pairs..	908	722	913	1,415			793					
Stocks, end of month.....thous. of pairs..	38,849	38,696	39,723	41,727			46,355					
Rubber soles:												
Production.....thous. of pairs..	2,333	2,634	3,697	3,347			1,475					
Shipments—												
To shoe manufacturers.....thous. of pairs..	1,768	1,390	2,169	2,520			749					
To repair trade.....thous. of pairs..	849	996	1,096	976			152					
For export.....thous. of pairs..	119	27	46	142			216					
Stocks, end of month.....thous. of pairs..	3,170	3,068	3,899	3,872			3,247					
Mechanical rubber goods:												
Shipments—												
Total.....thous. of dolls..	5,863	5,467	5,244	4,941			5,327					
Belting.....thous. of dolls..	1,778	1,497	1,368	1,175			1,263					
Hose.....thous. of dolls..	1,934	1,837	1,837	1,840			2,351					
All other.....thous. of dolls..	3,712	2,007	2,039	2,925			1,713					
<b>PAPER AND PRINTING</b>												
<b>Wood Pulp</b>												
Mechanical:												
Production.....short tons..	102,995	92,025	121,051	137,245	133,788	141,155	146,077	+5.5	-3.4	1,849,139	1,589,684	-14.0
Consumption and shipments.....short tons..	136,569	120,326	130,465	143,220	135,632	139,795	163,466	+3.1	-14.5	1,841,944	1,650,716	-10.4
Stocks, end of month.....short tons..	185,222	156,574	147,160	168,717	156,872	158,802	183,011	+1.2	-13.2			
Imports.....short tons..	18,596	28,389	21,190	28,308	24,976	21,082	18,378	-15.6	+14.7	302,324	246,914	-18.3
Chemical:												
Production.....short tons..	220,138	209,776	213,472	214,936	210,388	209,512	229,580	-4	-8.7	2,675,248	2,587,992	-3.3
Consumption and shipments.....short tons..	220,162	211,744	213,524	213,772	207,064	209,952	229,382	+1.4	-8.5	2,683,166	2,582,166	-3.8
Stocks, end of month.....short tons..	40,254	38,286	38,234	41,552	45,198	45,150	38,730	-1	+16.6			
Imports.....short tons..	119,121	119,970	133,170	142,736	152,764	156,164	153,584	+2.2	+1.7	1,425,709	1,434,952	+6
Price, sulphite.....dolls. per 100 lbs..	2.60	2.60	2.53	2.53	2.53	2.53	2.75	0.0	-8.0			
<b>Newsprint Paper</b>												
Production:												
United States, total.....short tons..	127,065	114,659	113,126	117,166	119,312	119,525	135,395	+2	-11.7	1,677,484	1,485,300	-11.5
Ratio to capacity.....per cent..	80	80	77	79	81	84	84	+3.7				
Canada.....short tons..	180,116	178,815	191,171	190,293	181,600	186,721	161,724	+2.8	+15.5	1,877,737	2,082,113	+10.9
Consumption by publishers.....short tons..	154,167	169,286	184,805	185,202	182,027	172,952	168,241	-5.0	+2.8	2,001,357	2,075,972	+3.7
Shipments:												
United States.....short tons..	123,926	114,003	116,885	116,468	123,883	114,211	130,973	-7.8	-12.8	1,678,056	1,474,326	-12.1
Canada.....short tons..	180,666	177,195	188,769	187,766	181,439	186,829	158,866	+3.0	+17.6	1,874,746	2,057,913	+9.8
Imports.....short tons..	167,475	168,630	173,540	187,796	180,467	177,808	166,102	-1.5	+7.0	1,851,339	1,984,191	+7.2
Exports:												
United States.....short tons..	1,215	704	739	847	535	1,758	1,360	+228.6	+29.3	19,321	12,411	-35.8
Canada.....short tons..	163,115	168,855	159,284	179,969	169,202	157,466	142,329	+6.9	+10.6	1,731,986	1,881,866	+8.7
Stocks, end of month:												
At mills—												
United States.....short tons..	30,335	30,751	27,939	28,543	20,877	25,905	15,968	+24.1	+62.2			
Canada.....short tons..	31,743	33,384	35,774	38,074	38,117	37,731	17,255	-1.0	+118.7			
At publishers.....short tons..	231,992	225,310	214,872	214,639	218,177	207,449	232,944	-4.9	-10.9			
In transit to publishers.....short tons..	40,916	45,570	45,789	46,176	46,708	46,522	43,624	-4	+6.6			
Price, roll, f. o. b. mill.....dolls. per 100 lbs..	3.30	3.30	3.25	3.25	3.25	3.25	3.30	0.0	-1.5			
<b>Printing</b>												
Book publication:												
American manufacture.....no. of titles..	636	830	981	738	720	507	722	-29.6	-29.8	8,168	8,799	+7.7
Imported.....no. of titles..	129	89	143	102	102	118	132	+15.7	-10.6	1,646	1,354	-17.7
Sales books:												
New orders.....thous. of books..	12,739	12,277	13,851	12,126	10,671	12,329	12,919	+15.5	-4.6	142,957	145,599	+1.8
Shipments.....thous. of books..	13,446	12,387	12,898	13,086	12,934	11,897	11,178	-8.0	+6.4	143,602	143,172	-3
Printing activity.....weighted index number..	93	99	105	104	105		104					
Cash checks, shipments.....thous. of checks..	74,469	76,364	71,625	82,093	70,413		73,841					
<b>Box Board</b>												
Operation.....thous. of inch hours..	8,886	8,675	8,902	8,275	7,444	7,800	6,999	+4.8	+11.4	103,626	96,536	-6.8
Operation.....per ct. of capacity..	82.3	86.8	85.6	82.8	71.6	78.0	70.0	+8.9	+11.4			
Production.....short tons..	232,723	225,633	226,141	212,319	186,920	203,031	173,629	+8.6	+16.9	2,528,911	2,473,832	-2.2
New orders.....short tons..	227,726	235,960	221,548	183,576	178,224	202,627	194,285	+13.7	+4.3	2,506,285	2,469,628	-1.5
Unfilled orders, end of month.....short tons..	112,393	120,331	105,600	76,471	74,430	82,561	105,669	+10.6	-22.1			
Consumption of waste paper.....short tons..	227,763	216,101	220,974	202,646	177,329	188,580	163,337	+6.3	+15.5	2,421,947	2,367,597	-2.2
Shipments.....short tons..	229,437	228,393	228,222	212,375	181,400	195,714	175,528	+7.9	+11.5	2,521,942	2,477,222	-1.8
Stocks, end of month.....short tons..	52,713	43,115	41,863	41,317	42,610	49,502	53,562	+16.2	-7.6			
Stocks of waste paper, end of month:												
On hand.....tons..	280	127,649	128,443	133,184	145,549	157,176	163,023	+8.0	-3.6			
In transit and unshipped purchases.....tons..	72,087	53,875	65,008	52,161	34,612	62,791	38,062	+81.9	+65.0			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>PAPER AND PRINTING—Continued</b>												
<b>Other Paper</b>												
Binders' board, production..... short tons.....	2, 112	2, 461	2, 537	2, 400	1, 940	2, 547	2, 306	+31. 3	+10. 5	36, 798	29, 686	-19. 3
Book paper:												
Production..... short tons.....	112, 984	106, 205	109, 391	111, 579	110, 463	121, 509	119, 965	+10. 0	+1. 3	1, 346, 180	1, 331, 551	-1. 1
Ratio to capacity..... per cent.....		84	83	85	83	90		+8. 5				
Shipments..... short tons.....	111, 176	106, 417	110, 813	109, 347	*113, 225	123, 210	117, 565	+8. 8	+4. 8	1, 334, 642	1, 324, 016	-0. 8
Stocks, end of month..... short tons.....	75, 749	75, 749	74, 234	76, 461	*73, 403	68, 265	64, 847	-7. 0	+5. 3			
New orders—												
Coated..... p. ct. of normal production.....	70	76	76	77	82	83	87	+1. 2	-4. 6			
Uncoated..... p. ct. of normal production.....	76	82	85	77	79	87	93	+10. 1	-6. 5			
Unfilled orders—												
Coated..... p. ct. of normal production.....	7	7	8	9	8	11	7	+37. 5	+57. 1			
Uncoated..... p. ct. of normal production.....	8	9	9	8	8	9	10	+12. 5	-10. 0			
Wrapping paper:												
Production..... short tons.....	94, 193	89, 696	92, 795	*93, 479	*88, 863	95, 600	91, 760	+7. 6	+4. 2	1, 074, 980	1, 087, 155	-1. 1
Ratio to capacity..... per cent.....		94	87	82	78	91						
Shipments..... short tons.....	92, 215	86, 646	92, 424	*91, 329	*85, 220	93, 019	90, 934	+9. 2	+2. 3	1, 084, 988	1, 057, 469	-2. 5
Stocks, end of month..... short tons.....	78, 626	81, 737	80, 907	*79, 653	*84, 916	88, 425	68, 465	+4. 1	+29. 2			
Fine paper:												
Production..... short tons.....	37, 098	37, 329	38, 814	36, 665	38, 136	37, 421	35, 148	-1. 9	+6. 5	459, 111	446, 717	-2. 7
Ratio to capacity..... per cent.....		92	92	87	91	93		+2. 0				
Shipments..... short tons.....	35, 688	36, 769	38, 892	37, 398	37, 259	35, 587	35, 043	-4. 5	+1. 6	456, 415	447, 803	-1. 9
Stocks, end of month..... short tons.....	50, 199	50, 756	50, 903	50, 173	51, 044	52, 385	52, 794	+2. 6	-8			
All other grades:												
Production..... short tons.....	103, 623	101, 157	103, 058	*98, 749	*97, 718	101, 658	100, 755	+4. 0	+9	1, 233, 482	1, 197, 894	-2. 9
Shipments..... short tons.....	102, 358	102, 311	103, 040	*99, 251	*97, 335	100, 835	99, 762	+3. 6	+1. 1	1, 232, 945	1, 192, 956	-3. 2
Stocks, end of month..... short tons.....	74, 302	73, 357	72, 591	*69, 106	*68, 751	69, 069	67, 593	+5	+2. 2			
Total paper (inc. newsprint and box board):												
Production..... short tons.....	*707, 687	*674, 679	*683, 325	*669, 957	*641, 410	678, 744	*656, 652	+5. 8	+3. 4	8, 320, 148	8, 022, 448	-3. 6
Ratio to capacity..... per cent.....		85	81	79	72	82		+13. 9				
Shipments..... short tons.....	*695, 082	*674, 539	*690, 276	*666, 168	*638, 307	662, 576	649, 492	+3. 8	+2. 0	8, 319, 088	7, 973, 556	-4. 2
Stocks, end of month..... short tons.....	361, 494	355, 465	348, 440	*345, 253	*341, 601	353, 551	323, 229	+3. 5	+0. 4			
<b>Paperboard Shipping Boxes</b>												
Production:												
Total..... thous. of sq. ft.....	400, 806	386, 039	427, 263	395, 491	342, 376	347, 622	371, 748	+1. 5	-6. 5	4, 858, 302	4, 720, 249	-2. 8
Corrugated..... thous. of sq. ft.....	317, 529	308, 585	348, 835	320, 511	272, 807	277, 280	293, 677	+1. 6	-5. 6	3, 858, 061	3, 784, 861	-1. 9
Solid fiber..... thous. of sq. ft.....	83, 277	77, 454	78, 428	74, 980	69, 569	70, 342	78, 071	+1. 1	-10. 9	1, 000, 241	935, 388	-6. 5
Operating activity:												
Total..... per cent of normal.....	72	80	85	77	66	69	71	+4. 5	-2. 8			
Corrugated..... per cent of normal.....	76	79	85	76	64	67	72	+4. 7	-6. 9			
Solid fiber..... per cent of normal.....	82	84	83	81	72	75	68	+4. 2	+10. 3			
Paper boxes:												
Shipments..... dollars.....	1, 214, 888	1, 375, 977	1, 566, 848	1, 705, 380	1, 470, 669		1, 039, 429			15, 342, 456	14, 903, 480	-2. 9
Pay roll..... dollars.....	317, 485	340, 692	356, 032	355, 935	337, 403		285, 521			3, 993, 078	3, 774, 711	-5. 5
<b>Other Paper Products</b>												
Abrasive paper and cloth:												
Domestic sales..... reams.....	89, 622	85, 379	85, 155	72, 726	58, 265	80, 505	76, 717	+38. 2	+4. 9	1, 015, 612	979, 981	-3. 5
Foreign sales..... reams.....	13, 584	14, 361	18, 389	16, 392	16, 034	17, 071	12, 575	+6. 5	+35. 8	162, 784	192, 596	+18. 3
Labels, orders..... per ct. of capacity.....	79. 0	77. 7	98. 2	54. 4	78. 1		84. 5					
<b>BUILDING CONSTRUCTION AND HOUSING</b>												
Rental advertisements:												
Minneapolis, Minn..... number.....	8, 347	7, 800	6, 711	4, 290	2, 564	2, 473	3, 131	-3. 5	-21. 0	61, 917	60, 243	-2. 7
Real estate conveyances (41 cities)..... number.....	146, 345	140, 441	149, 667	*145, 167	143, 731		135, 935					
<b>Building Costs</b>												
Building materials:												
Frame house, 6-room..... rel. to 1913.....	187	194	181	180	182	178	190	-2. 2	-6. 3			
Brick house, 6-room..... rel. to 1913.....	188	187	185	184	187	183	190	-2. 1	-3. 7			
Concrete factory costs (Aberthaw)..... rel. to 1914.....	192	191	191	191	191	192	194	5	-1. 0			
Building costs (Engineering News Record)..... rel. to 1913.....	204	204	202	204	204	205	210	5	-2. 4			
Building costs (A. G. C.)..... rel. to 1913.....	199	201	201	200	200	199	197	0	+1. 0			
Construction costs (Am. Appraisal):												
Frame..... rel. to 1913.....	205	205	205	205	205	205	204	0	+5			
Brick, wood frame..... rel. to 1913.....	214	215	215	215	214	214	213	0	+5			
Brick, steel frame..... rel. to 1913.....	197	197	196	196	197	196	198	-5	-1. 0			
Reinforced concrete..... rel. to 1913.....	200	200	201	200	201	200	200	-5	0			
<b>Building Construction and Losses</b>												
Contracts awarded (36 States):												
Commercial buildings..... thous. of sq. ft.....	10, 880	9, 723	11, 821	7, 451	9, 082	10, 803	10, 037	+18. 9	+7. 6	141, 496	132, 143	-6. 6
Industrial buildings..... thous. of sq. ft.....	5, 839	5, 453	5, 544	6, 382	4, 496	4, 412	3, 721	+1	+18. 6	78, 790	68, 095	-13. 6
Residential buildings..... thous. of sq. ft.....	39, 354	38, 046	45, 698	41, 002	38, 747	37, 516	29, 757	-3. 2	+26. 1	498, 928	474, 277	+4. 9
Educational buildings..... thous. of sq. ft.....	5, 784	4, 114	4, 103	4, 477	3, 582	3, 380	2, 329	-5. 6	+45. 1	52, 208	53, 063	+1. 6
Other public and semi-public buildings..... thous. of sq. ft.....	7, 310	6, 810	6, 393	6, 014	4, 381	3, 955	3, 266	-9. 7	+21. 1	66, 148	74, 972	+13. 3
Grand total..... thous. of sq. ft.....	69, 863	64, 858	73, 765	66, 560	60, 889	60, 271	50, 568	-1. 0	+19. 2	842, 935	812, 393	-3. 6
Contracts awarded, value (36 States):												
Commercial buildings..... thous. of dolls.....	73, 698	56, 938	77, 726	41, 893	85, 286	65, 981	77, 829	-22. 6	-15. 2	880, 102	897, 172	+1. 9
Industrial buildings..... thous. of dolls.....	40, 047	48, 052	50, 370	49, 203	27, 938	34, 833	27, 134	+24. 7	+28. 4	677, 106	475, 614	-29. 8
Residential buildings..... thous. of dolls.....	201, 743	196, 501	236, 870	207, 308	202, 447	186, 904	160, 029	-7. 7	+16. 8	2, 597, 327	2, 489, 588	-4. 1
Educational buildings..... thous. of dolls.....	40, 144	28, 344	29, 690	30, 642	22, 480	22, 554	16, 675	+1. 7	+37. 1	367, 060	368, 794	+0. 5
Other public and semi-public buildings..... thous. of dolls.....	61, 951	52, 742	48, 555	45, 744	35, 823	30, 055	31, 625	-16. 1	-5. 0	580, 163	639, 519	+10. 2
Public works and utilities..... thous. of dolls.....	117, 053	123, 254	105, 932	68, 716	90, 194	69, 676	53, 638	-22. 7	+29. 9	1, 068, 239	1, 211, 252	+13. 4
Grand total..... thous. of dolls.....	534, 639	505, 830	549, 152	443, 506	464, 167	410, 535	368, 930	-11. 6	+11. 3	6, 102, 994	6, 083, 949	-0. 3

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>BUILDING CONSTRUCTION AND HOUSING—Continued</b>												
<b>Building Construction and Losses—Con.</b>												
Contracts awarded, Canada.....thous. of dolls.	29,881	32,783	47,135	30,260	36,682	20,480	16,772	-44.2	+22.1	372,946	418,951	+12.3
Building volume (A. G. C.).....rel. to 1913	238	236	222	215	162	125	129	-22.8	-3.1			
Fire losses:												
United States and Canada (Journal of Commerce).....thous. of dolls.	24,300	21,875	22,327	18,992	31,935	43,261	37,911	+35.5	+14.1	393,010	320,597	-18.4
Canada (Monetary Times).....thous. of dolls.	1,561	1,789	1,778	1,309	1,947	2,959	2,378	+52.0	+24.4	32,903	22,667	-31.1
<b>LUMBER PRODUCTS</b>												
<b>Softwood Lumber</b>												
Southern pine:												
Production (computed).....M ft. b. m.	455,796	457,587	438,708	439,773	419,297	462,571	422,022	+10.3	+9.6	5,374,288	5,173,558	-3.7
Shipments (computed).....M ft. b. m.	473,029	477,046	446,696	442,920	395,239	470,837	382,751	+19.1	+23.0	5,431,747	5,135,886	-5.4
New orders (computed).....M ft. b. m.	487,599	483,097	453,811	436,385	398,192	523,508	426,558	+31.5	+22.7	5,348,988	5,241,265	-2.0
Stocks, end of mo. (computed).....M ft. b. m.	1,220,663	1,193,268	1,190,112	1,194,404	1,207,534	1,309,864	1,219,779	+8.5	+7.4			
Unfilled orders, end mo. (comp.).....M ft. b. m.	328,561	320,096	346,715	305,164	287,741	385,054	299,314	+33.8	+28.6			
Exports, lumber.....M ft. b. m.	66,790	48,260	48,637	43,550	52,930	66,332	64,492	+25.3	+2.9	581,578	711,441	+22.3
Exports, timber.....M ft. b. m.	210	179	113	183	308	870	261	+182.5	+233.3	20,001	3,743	-81.3
Price, flooring.....dolls. per M ft. b. m.	37.68	37.49	37.98	36.42	35.54	25.26	40.81	-8	-13.6			
Douglas fir:												
Production (computed).....M ft. b. m.	529,120	542,102	538,968	497,337	437,352	410,493	410,045	-6.1	+1	6,322,127	5,972,070	-5.5
Shipments (computed).....M ft. b. m.	521,958	492,860	491,070	411,389	386,768	397,571	411,836	+2.8	-3.5	6,357,936	5,878,066	-7.5
New orders (computed).....M ft. b. m.	519,719	487,936	464,211	452,124	397,511	444,514	458,839	+11.8	-3.1	6,437,618	5,937,153	-7.8
Exports, lumber.....M ft. b. m.	65,121	73,717	56,204	61,999	51,072	85,299	48,025	+77.6	+77.6	695,119	685,855	-1.3
Exports, timber.....M ft. b. m.	48,864	64,781	15,498	47,711	46,492	2,280	26,449	-95.1	-91.4	555,764	519,887	-6.5
Price, No. 1 common, dolls. per M ft. b. m.	16.51	16.39	15.17	15.48	14.90	15.23	16.43	+2.9	-7.3			
Price, flooring, 1 x 4, "B" and better, V. G.....M ft. b. m.	35.83	35.83	35.47	35.08	34.50	34.04	36.06	-1.3	-5.6			
California redwood:												
Production (computed).....M ft. b. m.	53,977	42,343	43,142	52,925	36,029	39,454	32,099	+9.5	+22.9	507,909	487,314	-4.1
Shipments (computed).....M ft. b. m.	53,022	41,418	42,676	40,578	26,882	30,201	35,851	+12.3	-15.8	469,979	507,591	+8.0
New orders (computed).....M ft. b. m.	42,373	39,630	36,492	41,376	23,398	38,763	42,600	+65.6	-9.0	508,453	515,918	+1.5
California white pine:												
Production (computed).....M ft. b. m.	159,670	150,088	122,029	92,762	72,552	51,187	55,821	-29.4	-8.3	1,484,006	1,203,530	-18.9
Shipments (computed).....M ft. b. m.	122,064	119,652	123,538	92,568	82,057	90,891	75,706	+10.7	+20.1	1,362,985	1,226,242	-10.0
Stocks, end of month.....M ft. b. m.	603,451	629,284	623,671	624,651	667,618	609,181	591,017	-8.8	+3.1			
Western pine:												
Production (computed).....M ft. b. m.	169,338	145,101	134,691	118,704	77,348	52,371	69,113	-32.3	-24.2	1,729,128	1,555,726	-10.0
Shipments (computed).....M ft. b. m.	150,979	160,768	153,019	124,083	99,454	123,524	114,579	+24.2	+7.8	1,782,459	1,633,443	-8.4
Stocks, end of mo. (computed).....M ft. b. m.	1,095,370	1,069,825	1,068,630	1,068,630	1,039,839	997,431	1,069,835	-4.0	-6.8			
North Carolina pine:												
Production (computed).....M ft. b. m.	53,781	52,129	57,295	53,522	48,139	40,019	47,712	-16.9	-16.1	593,691	613,851	+3.4
Shipments (computed).....M ft. b. m.	52,934	52,234	56,133	50,813	47,845	37,030	47,054	-22.6	-21.3	586,817	613,655	+4.6
Northern pine:												
Lumber—												
Production.....M ft. b. m.	51,054	46,852	41,148	32,815	24,300	33,550	32,493	+38.1	+3.3	488,244	486,440	-0.4
Shipments.....M ft. b. m.	42,501	39,195	39,175	32,857	24,680	29,451	30,557	+19.3	-3.6	541,957	451,720	-16.7
New orders.....M ft. b. m.	36,884	32,098	33,698	27,569	22,156	32,703	29,184	+47.6	+12.1	493,324	411,144	-16.7
Lath—												
Production.....thousands..	14,272	11,979	9,034	6,144	4,472	7,315	7,251	+63.6	+9	126,324	118,894	-5.9
Shipments.....thousands..	15,612	11,819	7,941	5,377	3,994	5,900	6,261	+32.7	-15.3	128,815	119,970	-6.9
Northern hemlock:												
Production.....M ft. b. m.	21,369	14,277	9,188	11,026	13,949	19,811	19,811			209,229	192,678	-7.9
Shipments.....M ft. b. m.	22,693	19,187	17,914	14,261	10,014	14,474	14,474			228,478	228,074	-0.2
<b>Hardwood Lumber</b>												
Walnut lumber:												
Production.....M ft. b. m.	3,314	3,000	2,921	3,234	3,376	3,063	2,417	-9.3	+26.7	33,158	35,545	+7.2
Shipments.....M ft. b. m.	3,127	2,798	2,967	2,824	2,548	2,687	2,809	+5.5	-4.3	38,642	34,768	-10.0
Stocks, end of month.....M ft. b. m.	11,498	11,796	11,739	12,149	13,037	13,264	11,810	+1.7	+12.3			
New orders.....M ft. b. m.	2,461	3,046	2,335	3,127	2,158	2,623	3,621	+21.8	-27.4	37,495	34,782	-7.2
Unfilled orders, end of month.....M ft. b. m.	7,522	7,364	6,982	6,282	5,395	5,389	7,591	-1	-20.0			
Walnut logs:												
Purchased.....M ft. log measure..	3,308	3,773	2,549	3,515	2,709	2,255	2,441	-16.8	-7.6	30,129	35,262	+17.0
Made into lumber and veneer.....M ft. log measure..	2,937	2,995	2,814	3,035	2,656	2,416	2,088	-9.0	+15.7	29,253	31,742	+8.5
Stocks, end of month.....M ft. log measure..	3,687	3,465	3,166	3,646	3,615	3,041	2,260	-15.9	+34.6			
Northern hardwoods:												
Production.....M ft. b. m.	27,077	18,536	15,488	15,469	20,707	38,053	38,053			359,771	347,236	-3.5
Shipments.....M ft. b. m.	29,750	20,475	27,623	24,556	19,269	25,178	25,178			352,453	329,100	-6.6
Lower Michigan hardwoods:												
Production.....M ft. b. m.	4,893	4,257	5,388	5,124	4,996	9,135	9,135			93,184	80,339	-13.8
Shipments.....M ft. b. m.	7,507	7,035	7,348	6,344	5,895	8,024	8,024			90,045	90,045	
Stocks, end of month.....M ft. b. m.	40,552	35,491	33,532	21,350	30,902	40,804	40,804					
All hardwoods:												
Total stocks, end of month—												
Total hardwoods.....M ft. b. m.	843,886	853,948	873,696	889,772	930,398	1,021,295	898,606	+9.8	+13.7			
Gum.....M ft. b. m.	221,167	231,300	237,395	241,868	263,649	297,464	235,364	+12.8	+24.8			
Oak.....M ft. b. m.	308,723	313,817	318,944	321,900	321,900	321,900	304,723	+8.8	+18.3			
Unsold stocks—												
Total hardwoods.....M ft. b. m.	664,677	683,762	697,288	705,678	740,914	805,780	698,475	+8.8	+15.4			
Gum.....M ft. b. m.	170,437	179,246	180,899	184,015	197,437	219,301	168,645	+11.1	+30.0			
Oak.....M ft. b. m.	242,208	257,604	259,794	259,053	272,082	296,720	252,811	+9.1	+17.4			
Unfilled orders—												
Total hardwoods.....M ft. b. m.	210,432	196,757	204,701	214,616	225,388	256,464	232,338	+13.8	+10.4			
Gum.....M ft. b. m.	66,409	64,384	68,494	70,282	83,126	100,560	83,627	+21.0	+20.2			
Oak.....M ft. b. m.	72,736	62,011	65,499	68,699	65,343	69,392	59,143	+6.2	+17.3			
Production (computed).....M ft. b. m.	94,000	96,000	93,000	87,000	75,000	84,000	84,000			1,055,000	967,000	-8.7
Shipments (computed).....M ft. b. m.	82,000	82,000	83,000	77,000	69,000	84,000	84,000			1,066,000	987,000	-7.4
New orders (computed).....M ft. b. m.	85,000	85,000	87,000	79,000	76,000	90,000	90,000			1,093,000	1,012,000	-7.4

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
	<b>LUMBER PRODUCTS—Continued</b>											
<b>Total Lumber</b>												
Production, 10 species.....M ft. b. m.	2,576,986	2,487,733	2,374,882	2,358,209	2,085,371	2,143,125	2,098,788	+2.8	+2.1	29,520,313	27,992,530	-5.2
Exports, planks, joists, etc.....M ft. b. m.	191,764	188,579	171,074	167,986	168,289	239,145	178,697	+42.1	+33.8	1,940,563	2,156,316	+11.1
Retail yards, Minneapolis district:												
Sales.....M ft. b. m.	16,618	14,435	16,247	12,554	4,742	5,042	4,762	+6.3	+5.9	195,494	152,822	-21.8
Stocks, end of month.....M ft. b. m.	87,656	86,248	80,397	74,658	80,690	89,035	90,307	+10.3	-1.4			
Composite lumber prices:												
Hardwood.....dolls. per M ft. b. m.	42.40	41.64	40.02	39.04	39.74	40.42	41.11	+1.7	+1.7			
Softwoods.....dolls. per M ft. b. m.	29.49	29.74	31.77	28.29	26.84	27.37	29.74	+2.0	-8.0			
<b>Flooring</b>												
Maple flooring:												
Production.....M ft. b. m.	11,557	10,283	10,558	8,073	7,820	7,846	9,842	-6.1	-25.4	112,201	112,825	+6
Shipments.....M ft. b. m.	10,939	9,843	8,124	7,238	6,797	7,252	7,880	+6.7	-8.0	110,345	111,274	+8
Stocks, end of month.....M ft. b. m.	26,338	25,921	26,897	27,610	29,527	28,721	29,034	-2.7	-1.1			
New orders.....M ft. b. m.	7,344	7,748	7,493	6,233	6,883	8,161	6,587	+18.6	+23.9	105,677	87,055	-17.6
Unfilled orders, end of month.....M ft. b. m.	11,027	9,619	8,202	7,843	8,736	9,154	6,224	+4.8	+47.1			
Oak flooring:												
Production.....M ft. b. m.	40,426	39,498	38,540	33,389	32,113	35,947	35,215	+11.9	+2.1	533,053	451,733	-15.3
Shipments.....M ft. b. m.	38,932	38,084	38,349	30,998	29,266	38,080	31,929	+30.1	+19.3	505,079	442,309	-12.1
Stocks, end of month.....M ft. b. m.	66,253	66,416	67,244	69,449	74,773	82,239	70,629	+10.0	+16.4			
New orders.....M ft. b. m.	36,139	37,430	35,716	31,425	34,715	53,888	37,497	+55.2	+43.7	482,331	435,257	-9.8
Unfilled orders, end of month.....M ft. b. m.	27,036	25,127	22,764	24,080	27,887	45,925	41,061	+64.7	+11.8			
<b>Wooden Furniture</b>												
Grand Rapids district:												
Unfilled orders, end of month.....No. of days' production..	53	50	41	45			57					
New orders.....No. of days' production..	25	30	24	35			46					
Shipments.....No. of days' production..	27	29	30	28			25					
Outstanding accounts, end of month.....No. of days' sales..	55	58	58	59			52					
Cancellations.....per cent of new orders..	9.0	7.5	11.0	13.0			6.0					
Plant operation.....per cent of full time..	98.0	99.0	100.0	99.0			98.0					
Piano benches and stools:												
New orders (av. per firm).....dollars..	9,597	10,988	14,395	12,291	7,784	7,043	8,427	-9.5	-16.4	136,634	107,819	-21.1
Unfilled orders, end of month (av. per firm).....dollars..	2,773	3,884	5,331	4,883	1,803	2,851	3,490	+58.1	-18.3			
Shipments—												
Value (av. per firm).....dollars..	8,342	9,863	12,935	12,667	10,338	5,918	7,259	-42.8	-18.5	134,004	106,180	-20.8
Quantity (total).....pieces..	10,879	12,469	17,401	16,661	13,072	7,617	9,347	-41.7	-18.5	165,949	137,005	-17.4
<b>Plywood and Veneer</b>												
Plywood:												
New orders.....thous. of sq. ft. of surface..	2,890	3,415	2,773	2,245	2,114	2,469	3,219	+16.8	-23.3	43,138	34,509	-20.0
Shipments.....thous. of sq. ft. of surface..	2,616	3,310	3,516	3,424	3,219	2,575	3,348	-20.0	-23.1	46,860	34,956	-25.4
Unfilled orders, end of month.....thous. of sq. ft. of surface..	3,162	3,767	3,502	2,765	2,719	2,863	3,591	+5.3	-20.3			
Rotary-cut veneer:												
Receipts.....number of carloads..	122	112	101	102	94	80	116	-14.9	-31.0			
Purchases.....number of carloads..	162	105	79	96	86	132	59	+53.5	+123.7	2,309	1,161	-49.7
<b>Barrel Headings</b>												
Circled headings for wooden barrels:												
Production (rough).....sets..	855,308	7627,07	480,438	753,053	585,774	353,674	508,827	-39.6	-30.5	8,489,116	8,505,694	+2
Shipments (finished).....sets..	805,059	703,532	831,402	871,742	619,607	407,094	617,160	-34.3	-34.0	8,860,093	8,990,777	+1.5
New orders (finished).....sets..	413,443	542,291	746,657	226,918	698,474	456,145	568,835	-34.7	-19.8	8,109,745	6,281,940	-22.5
Unfilled orders, end of month.....sets..	1,923,653	1,131,618	1,175,241	1,064,723	1,079,568	1,037,375	1,993,216	-3.9	-48.0			
Stocks on hand, end of month.....sets..	3,169,910	3,821,508	3,396,865	3,203,704	3,205,147	3,341,371	2,924,016	+4.3	+14.3			
<b>STONE, CLAY, AND GLASS PRODUCTS</b>												
<b>Clay Products</b>												
Face brick, averages per plant:												
Production.....thousands..	842	798	809	723	626	482	489	-23.0	-1.4	8,661	8,929	+3.1
Shipments.....thousands..	825	693	724	622	368	402	282	+9.2	+42.6	8,007	7,959	-6
Stocks, end of month.....thousands..	2,564	2,465	2,679	2,777	2,832	2,958	2,409	+4.4	+22.8			
Unfilled orders, end of month.....thousands..	1,069	880	801	783	730	761	727	+4.2	+4.7			
Common brick:												
Stocks, end of month—												
Burned.....thousands..	427,277	489,566	561,367	538,698	504,836		462,565					
Unburned.....thousands..	178,357	158,761	169,238	91,424	76,601		58,331					
Shipments.....thousands..	194,971	176,315	214,169	187,448	168,282		93,806			1,754,834	2,211,243	+26.0
Unfilled orders, end of month.....thousands..	231,637	219,244	182,462	211,961	224,255		324,837					
Plants closed down.....number..	10	59	71	70	77		68					
Price, red, New York.....dolls. per thous..	11.75	11.75	11.75	11.75	11.25	12.75	17.00	+13.3	-25.0			
Porcelain plumbing fixtures:												
Net new orders.....pieces..	20,046	14,065	14,939	6,024	13,953			+131.6				
Shipments.....pieces..	21,870	19,582	16,251	12,242	13,239			+8.1				
Unfilled orders, end of month.....pieces..	34,972	29,455	28,143	21,925	22,639			+3.3				
Stocks on hand, finished glost, end of month.....pieces..	25,863	29,044	29,998	33,353	33,552			+6				
Vitreous china plumbing fixtures:												
New orders.....pieces..	249,169	223,980	227,896	168,138	223,188	235,816	200,988	+5.7	+17.3	3,105,489	2,685,034	-13.5
Shipments.....pieces..	279,539	235,883	245,725	180,015	189,684	240,971	281,896	+27.0	-14.5	3,011,784	2,933,371	-2.6
Unfilled orders, end of month.....pieces..	337,956	325,069	307,240	295,363	328,867	323,712	497,700	-1.6	-35.0			
Stocks, end of month.....pieces..	520,364	518,452	500,868	526,773	557,483	544,471	558,121	-2.3	-2.4			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1927 from 1926
	August	Septem-ber	October	Novem-ber	Decem-ber			January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	
<i>The cumulatives shown are through De-cember except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the Feb-ruary, 1928, "Survey"</i>												
<b>STONE, CLAY, AND GLASS PRODUCTS—Continued</b>												
<b>Clay Products—Continued</b>												
Floor and wall tile:												
Production.....thous. of sq. ft.	5,489	5,537	5,877	5,018	4,490	5,514				64,885	63,563	-2.0
Shipments, quantity.....thous. of sq. ft.	5,366	5,588	5,242	4,321		4,331						
Shipments, value.....thous. of dolls.	2,048	2,124	1,975	1,638		1,648						
Stocks, end of month.....thous. of sq. ft.	11,307	11,285	11,991	12,087	13,029	10,010						
Terra cotta, new orders:												
Quantity.....net tons	15,643	13,440	11,907	11,134	9,898	10,850	9,851	+9.6	+10.1	160,188	147,135	-8.1
Value.....thous. of dolls.	1,557	1,342	1,049	1,008	836	949	1,138	+13.5	-16.6	19,340	14,479	-25.1
Sand lime brick:												
Production.....thousands	21,300	21,680	18,928	18,086	13,912	10,652	8,307	-23.4	+28.2			
Shipments by rail.....thousands	7,375	6,729	5,134	6,558	4,189	3,307	3,824	-21.1	-13.5			
Shipments by trucks.....thousands	13,294	11,815	13,623	11,833	8,694	6,777	5,378	-22.0	+26.0			
Stocks, end of month.....thousands	12,547	18,689	14,423	13,468	18,538	14,282	16,465	-23.0	-13.2			
Unfilled orders, end of month.....thousands	19,800	16,094	15,318	14,845	14,772	10,830	17,908	-26.7	-39.5			
<b>Portland Cement</b>												
Production.....thous. of bbls.	18,315	17,505	17,174	14,449	11,999	9,782	8,258	-18.5	+18.5	164,070	171,908	+4.8
Shipments.....thous. of bbls.	21,411	19,828	18,105	11,619	6,200	6,531	5,908	+5.3	+9.4	161,781	170,922	+5.7
Stocks, end of month.....thous. of bbls.	16,292	13,996	13,141	16,022	21,821	25,193	22,914	+15.5	+9.9			
Stocks, clinkers, end of month.....thous. of bbls.	7,887	6,490	5,960	6,374	7,599	9,349	9,989	+23.0	-6.4			
Wholesale price, composite.....dolls. per bbl.	1.683	1.683	1.683	1.683	1.683	1.683	1.713	0	-1.8			
<b>Highways</b>												
Concrete pavements, new contracts:												
Total.....thous. of sq. yds.	13,528	11,581	9,800	7,984	6,542	5,902	4,236	-9.8	+39.3	107,303	125,768	+17.2
Roads.....thous. of sq. yds.	7,445	6,872	5,527	5,102	4,657	4,103	2,656	-11.9	+54.5	61,134	73,952	+21.0
Federal-aid highways:												
Completed—												
Cost.....thous. of dolls.	15,301	23,354	29,206	29,712	17,886	10,728	8,115	-40.0	+32.2	214,514	189,349	-11.7
Distance.....miles	750	927	1,151	1,104	758	458	508	-39.6	-9.8	9,444	8,285	-12.3
Under construction, end of month.....miles	10,005	9,921	9,466	8,879	8,517	8,480	9,839	-0.4	-13.8	130,674	115,918	-11.3
<b>Plate Glass</b>												
Production, polished.....thous. of sq. ft.	10,616	9,353	8,703	8,573	7,446	8,484				128,858	111,390	-13.6
<b>Glass Containers</b>												
Actual production:												
Quantity.....thous. of gross.	2,142	1,999	1,969	2,045	2,224	2,207	2,032	-8	+8.6	24,557	25,316	+3.1
Relation to capacity.....per cent.	69.3	69.6	66.3	68.5	74.6	76.9	71.3	+3.1	+7.9			
New orders.....thous. of gross.	1,850	2,340	2,314	2,574	2,474	2,680	2,725	+8.3	-1.7	25,741	27,068	+5.2
Shipments.....thous. of gross.	2,120	2,325	2,054	1,928	1,724	1,958	1,803	+13.6	+8.6	23,844	25,495	+6.9
Unfilled orders, end of month.....thous. of gross.	8,765	8,606	8,681	9,043	9,616	10,140	10,274	+5.4	-1.3			
Stocks, end of month.....thous. of gross.	6,217	5,925	5,878	6,049	6,551	6,327	6,541	-3.4	-3.7			
<b>Illuminating Glassware</b>												
Production:												
Total.....number of turns.	2,410	3,609	3,814	3,454	2,353	2,948				37,766	34,916	-7.5
Ratio to capacity.....per ct. of capacity.	32.0	40.7	50.6	47.8	33.2	35.6						
New orders.....per ct. of capacity.	38.3	43.4	44.0	40.2	32.9	35.5						
Shipments.....per ct. of capacity.	31.4	45.7	45.2	40.7	36.7	40.5						
Unfilled orders end of month.....number of weeks' supply.	1.3	1.5	1.4	1.3	1.0	.6						
Stocks, end of month.....number of weeks' supply.	3.5	3.6	3.8	4.1	4.0	3.7						
<b>CHEMICALS AND OILS</b>												
<b>Chemicals</b>												
Sulphuric acid:												
Exports.....thous. of lbs.	517	454	474	417	541	560	519	+3.5	+7.9	9,224	7,512	-18.6
Price, wholesale.....dolls per lb.	.75	.75	.75	.76	.78	.78	.75	0	+4.0			
Nitrate of soda:												
Imports.....long tons.	71,904	64,753	55,154	67,091	66,546	69,867	47,240	+5.0	+47.9	904,986	736,025	-18.7
Production in Chile—												
Quantity.....metric tons.	142,800	143,700	189,200	210,000	233,849	242,800	79,151	+3.8	+206.8	2,014,031	1,611,342	-20.0
Units reporting.....number of plants.	38	41	46	56	62	62	25	0	+148.0			
Potash, imports.....long tons.	43,572	28,822	27,884	17,039	16,227	31,646	30,189	+95.0	+4.8	303,652	268,997	-11.4
Superphosphate (acid phosphate):												
Production.....short tons.	256,980	267,516	340,411	342,400	350,587		289,095			3,421,944	3,249,032	-5.1
Stocks, end of month.....short tons.	1,468,286	1,361,529	1,580,756	1,806,877	2,016,311		2,302,048					
Shipments.....short tons.	79,347	198,547	109,447	75,260	83,988		9,181			1,165,786	1,257,606	+7.9
Fertilizer:												
Exports.....long tons.	100,659	113,322	96,672	95,605	80,319	87,632	67,678	+9.1	+29.5	1,096,101	1,273,176	+16.2
Consumption in Southern States.....short tons.	109,954	250,971	121,075	87,965	157,858	603,343	526,771	+282.2	+14.6	5,248,436	4,694,665	-10.6
Dyes and dyestuff, exports:												
Vegetable.....thous. of lbs.	237	229	359	377	422	239	227	-43.4	+5.3	2,597	3,771	+45.2
Coal tar.....thous. of lbs.	2,254	4,469	1,838	1,920	2,222	1,715	1,865	-22.8	-8.0	25,812	26,763	+3.7
<b>Arsenic</b>												
Crude:												
Production.....short tons.	972	1,472	1,004	1,269	1,125	1,414				5,498	13,929	+153.3
Stocks, end of month.....short tons.	1,009	1,422	1,260	1,326	1,375	2,725						
Refined:												
Production.....short tons.	986	873	937	822	782	913				6,221	10,315	+65.8
Stocks, end of month.....short tons.	1,346	1,787	2,321	2,255	2,101	1,983						
Price index numbers:												
Crude drugs.....rel. to Aug., 1914.	192	202	207	206	201	208	203	+3.5	+2.5			
Essential oils.....rel. to Aug., 1914.	121	203	123	126	128	130	126	+1.6	+3.2			
Drugs and phar-maceuticals.....rel. to Aug., 1914.	156	156	160	169	169	169	155	0	+9.0			
Chemicals.....rel. to 1913-14.	112	113	112	112	112	112	114	0	-1.8			
Oils and fats.....rel. to 1913-14.	127	134	134	133	128	130	128	+1.6	+1.6			

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926	
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927		
	<b>CHEMICALS AND OILS—Continued</b>												
<b>Wood Chemicals</b>													
Acetate of lime:													
Production—													
United States.....	thous. of lbs..	13,325	12,958	13,912	13,519	12,376	12,152	14,181	-1.8	-14.3	157,077	156,667	-0.3
Canada.....	thous. of lbs..	172	427	1,091	1,106	1,186	1,109	1,200	-6.5	-7.6	8,681	9,700	+11.7
Shipments—													
United States.....	thous. of lbs..	13,516	13,298	16,959	13,611	11,779	11,440	10,067	-2.9	+13.6	156,139	155,339	-.5
Canada.....	thous. of lbs..	513	830	1,462	808	395	782	509	+98.0	+53.6	8,585	7,899	-8.0
Stocks, end of month—													
United States.....	thous. of lbs..	20,110	19,704	16,524	16,274	15,465	16,978	19,910	+9.8	-14.7			
Canada.....	thous. of lbs..	2,222	1,823	1,283	1,560	2,462	2,888	2,187	+17.3	+32.1			
Exports.....	thous. of lbs..	283	None.	915	676	2,078	1,630	1,630	-21.6	0	18,583	12,134	-34.7
Price, wholesale.....	dolls. per cwt..	3.50	3.50	3.50	3.50	3.50	3.50	3.50	0	0			
Methanol, crude:													
Production—													
United States.....	gallons..	582,710	576,947	643,491	662,505	617,627	632,883	805,473	+2.5	-21.4	8,095,953	7,820,426	-3.4
Canada.....	gallons..	12,058	17,777	48,179	47,750	49,107	47,234	49,885	-3.8	-5.3	364,091	414,495	+13.8
Stocks at crude plants, end of month—													
United States.....	gallons..	367,657	320,231	375,965	365,584	354,398	341,722	397,999	-3.5	-14.1			
Canada.....	gallons..	27,057	31,824	39,414	33,414	50,299	39,249	48,446	-22.0	-19.0			
Stocks at refineries and in transit—													
United States.....	gallons..	1,408,637	1,467,460	1,181,225	1,407,745	1,165,544	1,126,152	341,444	-3.4	+229.8			
Canada.....	gallons..	28,610	1,590	27,995	31,987	43,458	56,104	15,913	+29.1	+252.6			
Exports.....	gallons..	18,796	20,526	57,983	48,624	39,369	33,384	11,012	-15.2	+203.1	417,265	309,060	-25.9
Wood at chemical plants:													
Consumption—													
United States.....	cords..	82,581	79,670	73,219	70,855	65,150	67,012	80,233	+2.9	-16.5	853,164	859,224	-.6
Canada.....	cords..	1,154	2,401	5,121	5,937	5,700	5,858	6,096	+2.8	-3.9	49,413	49,086	-.7
Stocks, end of month—													
United States.....	cords..	603,463	613,771	595,591	589,605	529,141	554,488	500,818	+4.8	+10.7			
Canada.....	cords..	68,693	66,624	74,942	71,695	75,124	74,440	34,872	-9	+103.5			
Daily capacity—													
Total.....	cords..	3,395	3,395	3,339	3,323	3,329	3,293	3,553	-1.1	-7.3			
Shutdown.....	cords..	425	391	145	145	330	277	155	-16.1	+78.7			
Methanol, refined:													
Production—													
United States.....	gallons..	317,521	441,771	688,435	529,552	470,969	496,073	480,448	+5.3	+3.3	7,402,715	5,414,154	-26.9
Canada.....	gallons..	None.	28,293	6,700	38,600	41,000	38,700	35,290	-5.6	+9.7	291,925	300,138	+2.8
Stocks, end of month—													
United States.....	gallons..	428,194	382,876	396,137	452,246	419,812	455,316	436,656	+8.5	+4.3			
Canada.....	gallons..	50,687	58,312	26,443	32,854	43,458	29,198	58,596	-32.8	-50.2			
Shipments—													
United States.....	gallons..	389,033	506,914	698,476	626,643	506,310	482,666	374,530	-4.7	+28.9			
Canada.....	gallons..	8,440	23,982	38,569	28,629	16,937	17,775	26,037	+4.9	-31.7			
Price, wholesale, N. Y.....	dolls. per gal..	.58	.55	.53	.48	.48	.48	.83	0	-42.2			
<b>Ethyl Alcohol</b>													
Production.....	thous. of gals..	15,587	14,129	16,584	18,051	19,502		13,235			194,653	173,630	-10.8
Withdrawn for denaturation.....	thous. of gals..	12,212	14,130	17,759	17,329	18,760		8,907			179,936	162,087	-9.9
Warehouse stocks, end of month.....	thous. of gals..	11,122	9,838	7,931	8,211	8,158		3,563					
<b>Explosives</b>													
(Black powder, permissible, and other high explosives)													
Production.....	thous. of lbs..	36,304	36,858	38,918	34,695	29,490	29,607	33,847	+4	-12.5	436,215	408,889	-6.3
Shipments.....	thous. of lbs..	35,736	36,964	38,261	34,645	27,839	31,332	33,726	+12.5	-7.1	436,335	406,045	-6.9
New orders.....	thous. of lbs..	34,680	35,304	36,747	32,111	27,398	29,879	33,616	+9.1	-11.1	416,580	390,540	-6.2
Stocks, end of month.....	thous. of lbs..	17,344	17,152	17,807	17,847	19,196	17,973	17,303	-6.4	+3.9			
<b>Naval Stores</b>													
Turpentine (gum):													
Net receipts, southern ports.....	barrels..	47,809	45,775	39,115	35,795	28,154	7,764	7,386	-72.4	+5.1	303,347	406,514	+34.0
Stocks at 3 ports, end of month.....	barrels..	58,915	73,019	80,473	77,676	81,939	72,035	48,998	-12.1	+47.0			
Price, southern, in barrels, New York.....	dolls. per gal..	.59	.55	.53	.51	.54	.60	.83	+11.1	-27.7			
Rosin (gum):													
Net receipts, southern ports.....	barrels..	158,514	151,045	132,059	144,892	115,397	41,160	39,136	-64.3	+5.2	1,097,111	1,406,414	+28.2
Stocks at 3 ports, end of month.....	barrels..	198,833	229,426	222,167	247,954	248,755	200,262	160,120	-19.5	+25.1			
Price, common to good (B), New York.....	dolls. per bbl..	10.62	10.08	9.24	8.55	8.70	9.54	12.38	+9.7	-22.9			
Rosin (wood):													
Production.....	barrels..	35,521	34,839	35,963	35,187	28,483	29,200	35,168	+2.5	-17.0	326,561	414,858	+27.0
Stocks, end of month.....	barrels..	71,982	76,327	82,717	87,179	85,553	85,413	33,513	-2	+154.9			
Turpentine (wood):													
Production.....	barrels..	6,347	6,562	6,901	6,820	5,291	5,771	7,053	+9.1	-18.2	62,654	79,778	+27.3
Stocks, end of month.....	barrels..	8,256	10,232	12,163	13,385	12,869	10,631	5,531	-17.4	-80.8			
Pine oil:													
Production.....	gallons..	242,050	244,445	237,625	235,695	192,141	198,646	241,563	+3.4	-17.8	2,341,995	2,782,356	+18.8
Stocks, end of month.....	gallons..	524,246	558,818	588,778	561,363	588,571	605,771	305,151	+2.9	+98.5			
<b>Roofing</b>													
Roofing felt:													
Production, dry felt.....	tons..	27,441	27,902	27,512	25,680	25,853	21,743	19,266	-15.9	+12.9	276,362	303,311	+9.8
Stocks, end of month, dry felt.....	tons..	3,166	2,907	3,748	3,810	3,118	3,088	3,628	-.9	-14.9			
Prepared roofing:													
Shipments.....	thous. of roof squares..	2,992	3,287	3,218	3,280	3,386	1,587	1,405	-53.1	+13.0	32,040	33,993	+6.1

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>CHEMICALS AND OILS—Continued</b>												
<b>Fats and Oils</b>												
Total vegetable oils and copra:												
Exports.....	1,767	2,086	5,307	6,484	8,481	9,405	6,967	+10.9	+36.4	43,720	70,713	+61.7
Imports.....	50,092	55,985	55,387	68,589	60,010	59,870	51,953	-2	+15.2	669,782	704,365	+5.2
Copra, imports.....	19,311	21,694	15,660	23,422	29,582	26,872	19,681	-9.2	+36.5	228,799	225,519	-1.4
Copra or coconut oil:												
Imports.....	21,469	25,936	22,702	30,095	29,339	32,751	31,588	+11.6	+3.7	245,130	294,369	+20.1
Consumption in oleomargarine.....	8,840	10,436	12,286	12,373	13,549	13,191	9,837	-2.6	+34.1	97,640	121,594	+24.5
Oleomargarine:												
Production.....	20,672	23,495	26,041	25,913	27,461	26,205	22,748	-4.6	+15.2	243,511	276,504	+13.5
Consumption.....	19,387	23,981	26,823	26,256	26,717	27,729	21,859	+3.8	+26.9	242,710	274,577	+13.1
Animal glues, shipments.....	6,076	6,075	7,113	6,061	6,100		6,731			80,090	75,140	-6.2
<b>Cottonseed</b>												
Cottonseed:												
Receipts at mills.....	290,422	1,007,261	1,282,625	848,706	483,281	339,212	581,856	-29.8	-41.7	5,842,105	5,595,930	-4.2
Consumption (crush).....	161,423	581,090	876,630	782,681	605,206	570,408	849,721	-5.7	-32.9	5,945,675	5,899,751	-0.8
Stocks at mills, end of month.....	217,894	644,954	1,050,949	1,113,974	992,049	763,353	1,035,766	-23.1	-26.3			
Cottonseed oil, crude:												
Production.....	46,212	178,018	272,547	247,523	192,057	181,022	250,368	-5.7	-27.7	1,764,288	1,806,450	+2.4
Stocks, end of month.....	26,322	87,474	146,567	165,069	157,578	168,519	175,190	+6.9	-3.8			
Cottonseed oil, refined:												
Production.....	32,210	100,849	194,676	205,888	176,051	143,378	205,929	-18.6	-30.4	1,476,947	1,592,597	+7.8
Stocks, end of month.....	274,711	225,782	310,330	415,833	502,901	538,257	395,022	+7.0	+36.3			
Price, yellow, prime, New York.....	.100	.107	.109	.106	.100	.101	.085	+1.0	+18.8			
Consumption in oleomargarine.....	1,745	2,113	2,228	2,260	2,154	2,162	2,013	+0.4	+7.4	23,448	24,621	+5.0
Cottonseed cake and meal:												
Production.....	72,659	258,685	391,037	344,591	268,757	259,275	377,425	-3.5	-31.3	2,719,433	2,647,543	-2.6
Stocks, end of month.....	45,116	109,591	186,997	205,008	190,354	177,118	147,144	-7.0	+20.4			
Exports.....	15,122	26,306	53,834	63,790	43,327	53,249	81,099	+22.9	-34.3	421,058	440,550	+4.6
<b>Flaxseed</b>												
Minneapolis and Duluth:												
Receipts.....	717	5,512	8,230	4,088	1,079	925	787	-14.3	+17.5	17,260	23,284	+34.9
Shipments.....	496	1,102	2,008	3,241	2,035	576	540	-71.7	+6.7	8,018	11,726	+172.1
Stocks, end of month.....	589	1,583	5,246	4,671	3,997	3,312	2,372	-17.1	+39.6			
Imports.....	1,123	1,716	1,758	1,491	1,029	1,181	2,237	+14.8	-47.2	22,550	21,820	-3.2
Lined oil:												
Shipments from Minneapolis.....	10,859	12,970	13,202	9,253	8,878	13,023	9,660	+46.7	+34.8	132,689	127,407	-4.0
Price, New York.....	.107	.104	.099	.099	.096	.098	.105	+2.1	-6.7			
Lined cake and meal:												
Shipments from Minneapolis.....	10,145	19,420	31,492	34,857	22,581	27,056	20,682	+19.8	+30.8	200,897	203,257	+1.2
Exports.....	58,947	52,984	48,625	58,522	53,999	44,367	61,103	-17.8	-27.4	589,784	663,299	+12.5
<b>FOODSTUFFS</b>												
<b>Wheat</b>												
Visible supply, end of month:												
United States.....	67,273	84,630	94,607	96,468	90,506	82,368	59,731	-9.0	+37.9			
Canada.....	28,264	22,958	62,492	121,009	147,506	152,560	116,613	+3.4	+30.8			
Stocks, millers', end of quarter.....		115,728		115,637	115,637		116,413	-1	-7			
Receipts, principal markets.....	81,632	79,740	73,244	44,823	26,522	23,542	24,595	-11.2	-4.3	390,231	481,256	+23.3
Shipments, principal markets.....	46,583	50,374	49,252	35,156	19,440	14,284	13,757	-26.5	+3.8	232,661	314,495	+35.2
Exports:												
United States—												
Wheat only.....	23,402	33,748	29,236	20,731	6,917	5,956	8,078	-13.9	-26.3	138,042	168,164	+21.2
Including wheat flour.....	28,137	39,509	36,045	26,696	11,986	11,560	12,619	-3.6	-8.4	191,676	225,824	+17.8
Canada—												
Wheat only.....	12,197	14,071	19,430	52,805	44,809	15,201	12,571	-66.1	+20.9	250,117	255,063	+2.0
Including wheat flour.....	14,510	17,118	23,475	57,976	49,114	18,647	16,054	-62.0	+16.2	297,181	296,741	-1
Prices:												
No. 2, red winter, Chicago.....	1.40	1.32	1.34	1.35	1.38	1.43	1.37	+3.6	+4.4			
No. 1, northern spring, cash Minneapolis.....	1.427	1.323	1.275	1.264	1.275	1.293	1.413	+1.4	-8.5			
<b>Wheat Flour</b>												
Grindings of wheat:												
United States (census).....	44,099	48,131	49,792	44,882	42,604	42,028	39,354	-1.4	+6.8	494,286	501,130	+1.4
Canada.....	5,276	6,925	9,138	9,656	8,115		6,819			85,317	80,788	-5.3
Production:												
United States, actual (census).....	9,617	10,470	10,817	9,735	9,235	9,050	8,624	-2.0	+4.9	107,474	109,167	+1.6
United States, prorated (Russell).....	10,458	11,816	12,540	11,337	10,877		9,676			127,236	123,812	-2.7
Canada.....	1,158	1,528	2,005	2,120	1,767		1,496			18,965	17,702	-6.7
Production, grain offal.....	761,468	833,108	866,428	782,841	745,242	736,907	676,292	-1.1	+9.0	8,680,610	8,666,451	-2
Capacity operated, flour mills.....	54	63	59	53	53	55	53	+3.8	+3.8			
Consumption (computed).....	8,906	9,346	11,617	11,111	10,451		7,867			115,514	111,596	-3.4
Stocks, all positions, end of month (computed).....	7,300	8,490	7,900	6,800	6,100		7,500					
Stocks, millers', end of quarter.....	4,267	4,267		4,540	4,540		4,336	+6.4	+4.7			
Exports:												
United States.....	1,052	1,280	1,513	1,326	1,126	1,245	1,009	+10.6	+23.4	11,930	12,813	+7.4
Canada.....	514	677	899	1,149	957	766	774			10,457	9,262	-11.4
Wholesale prices:												
Standard patents, Minneapolis.....	7.60	7.07	7.23	7.15	7.10	7.45	7.46	-14.9	-1			
Winter straights, Kansas City.....	6.77	6.64	6.54	6.58	6.56	6.70	6.55	+2.1	+2.3			

<sup>3</sup> Quarter ending December 31, 1926.

<sup>4</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

	1927					1928		1927		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927		1926	1927	
<b>FOODSTUFFS—Continued</b>													
<b>Corn</b>													
Exports, including meal.....thous. of bush..	475	571	538	861	1,205	1,661	2,017	+37.7	-17.6	25,217	14,994	-40.5	
Visible supply, end month.....thous. of bush..	23,805	25,119	21,847	20,439	28,390	30,078	40,616	+5.9	-25.9				
Receipts, principal markets.....thous. of bush..	16,758	22,116	18,448	16,971	37,088	36,001	27,638	-2.9	+30.3	237,977	247,412	+4.0	
Shipments, prin. markets.....thous. of bush..	11,762	12,257	9,665	10,256	16,064	19,551	10,638	+21.7	+8.8	121,783	137,093	+12.6	
Grindings (starch, glucose).....thous. of bush..	7,304	7,561	8,613	8,064	6,301	8,330	6,095	+32.2	+36.7	76,095	83,290	+9.3	
Prices, contract grades, No. 2, Chicago.....dolls. per bush..	1.09	.99	.88	.87	.87	.89	.77	+2.3	+15.6				
<b>Oats</b>													
Receipts, principal markets.....thous. of bush..	21,413	17,223	13,914	11,961	10,733	10,495	14,377	-2.2	-27.0	162,170	148,787	-8.3	
Visible supply, end month.....thous. of bush..	22,501	26,430	25,182	24,429	22,982	21,519	46,890	-6.4	-54.1				
Exports, including meal.....thous. of bush..	1,795	1,038	891	672	724	838	614	+15.7	+36.5	18,734	12,518	-27.8	
Prices, contract grades, Chicago.....dolls. per bush..	.48	.49	.50	.51	.55	.56	.50	+1.8	+12.0				
Grindings, Canada.....thous. of bush..	791	1,107	1,027	1,110	1,202		791			10,717	10,245	-4.4	
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	9,785	13,357	11,650	13,565	14,734		8,890			140,596	121,336	-13.7	
<b>Barley</b>													
Receipts, principal markets.....thous. of bush..	11,108	15,547	10,908	7,654	4,199	6,401	2,663	+52.4	+140.4	41,979	65,597	+56.0	
Visible supply, end mo.....thous. of bush..	3,532	4,900	4,398	4,338	2,707	2,359	4,180	-12.9	-43.6				
Exports.....thous. of bush..	4,065	6,637	6,927	4,490	3,425	1,701	1,006	-51.7	+69.1	13,566	37,362	+179.8	
Price, fair to good, malting, Chicago.....dolls. per bush..	.80	.83	.82	.84	.88	.93	.74	+5.7	+25.7				
<b>Rye</b>													
Receipts, principal markets.....thous. of bush..	4,293	10,512	7,496	4,619	2,386	1,477	1,281	-38.1	+15.3	20,605	41,751	+102.6	
Visible supply, end mo.....thous. of bush..	3,083	2,207	1,595	2,412	3,275	3,656	12,591	+11.6	-71.0				
Exports, including flour.....thous. of bush..	1,325	7,743	6,425	2,889	1,309	519	804	-60.4	-35.4	12,035	36,173	+200.6	
Price, No. 2, Chicago.....dolls. per bush..	.97	.97	1.00	1.06	1.09	1.09	1.02	0	+6.9				
<b>Total Grains</b>													
Total grain exports, incl. flour.....thous. of bush..	35,796	55,498	50,826	37,608	18,650	16,279	17,060	-12.7	-4.0	261,228	328,470	+25.7	
<b>Rice</b>													
Southern paddy, receipts at mills.....bbls..	762,345	1,167,281	1,719,740	1,266,278	831,633	853,581	817,939	+2.7	+4.4	7,568,035	9,208,835	+21.7	
Shipments: Total from mills.....pockets (100 lbs.)..	423,559	849,908	1,200,174	1,162,603	1,006,759	1,118,120	1,120,252	+11.1	-2	7,628,436	9,634,198	+26.3	
New Orleans.....pockets (100 lbs.)..	109,951	193,155	239,453	232,725	234,740	158,323	249,175	-32.6	-36.5	1,924,998	2,101,510	+9.2	
Stocks, end of month.....pockets (100 lbs.)..	1,235,674	1,581,097	2,247,038	2,409,940	2,290,857	2,106,310	2,095,911	-8.1	+0.5				
Exports.....pockets (100 lbs.)..	109,992	134,032	203,350	160,871	267,294	469,435	368,895	+76.9	+27.3	1,174,923	3,197,537	+172.2	
Imports.....pockets (100 lbs.)..	19,503	27,217	21,888	22,808	54,723	52,744	56,818	-3.6	-7.2	1,168,974	522,671	-55.3	
<b>Other Crops</b>													
Apples: Cold-storage holdings, end of month.....thous. of bbls..	33	1,038	5,992	7,831	4,845	5,296	7,335	-22.6	-27.8				
Car-lot shipment.....carloads..	3,352	11,039	31,612	16,607	5,881	5,305	7,827	-9.8	-32.2	124,561	98,505	-20.9	
Potatoes, car-lot shipments.....carloads..	17,418	23,674	37,410	20,318	13,206	19,665	17,408	+48.9	+13.0	226,740	246,151	+8.6	
Onions, car-lot shipments.....carloads..	2,313	4,473	5,754	2,924	2,234	3,114	2,797	+39.4	+11.3	32,221	32,368	+0.5	
Citrus fruit, car-lot shipments.....carloads..	4,492	3,853	5,618	7,487	12,123	9,057	11,725	-25.3	-22.8	97,139	105,993	+9.1	
Hay, all tame, receipts.....tons..	51,652	64,440	69,233	55,161	51,806	63,009	78,088	+21.6	-19.3	796,457	696,008	-12.6	
<b>Cattle and Beef</b>													
Cattle movements, primary markets: Receipts.....thousands..	2,065	1,988	2,635	2,346	1,691	1,771	1,832	+4.7	-3.3	23,872	22,766	-4.6	
Shipments, total.....thousands..	802	906	1,259	1,156	729	660	657	-9.5	+5	9,405	9,172	-2.5	
Shipments, stocker and feeder.....thousands..	269	407	675	615	319	234	205	-6.6	+14.1	3,710	3,613	-2.6	
Local slaughter.....thousands..	1,231	1,085	1,291	1,240	980	1,080	1,136	+10.2	-4.9	14,349	15,459	+6.2	
Beef products: Production, inspected.....thous. of lbs..	465,597	453,993	475,455	459,364	403,660	387,750	443,918	-3.9	-12.7	5,756,513	5,277,227	-8.3	
Apparent consumption.....thous. of lbs..	470,490	455,239	474,078	443,800	394,808	394,936	448,614	-1	-12.0	5,735,880	5,324,238	-7.2	
Exports.....thous. of lbs..	1,899	1,609	1,165	1,085	1,097	974	1,975	-11.2	-50.7	24,777	19,358	-21.9	
Cold-storage holdings, end of month.....thous. of lbs..	33,440	35,878	43,916	65,345	76,947	70,660	95,254	-8.2	-25.8				
Prices: Cattle, corn-fed, Chicago.....dolls. per 100 lbs..	12.58	13.31	14.33	15.94	15.50	15.80	10.30	+1.9	+53.4				
Steer rounds No. 2.....dolls. per lb..	.203	.199	.190	.190	.196	.220	.145	+12.2	+51.7				
Western dressed native steers, New York.....dolls. per lb..	.200	.213	.225	.234	.238	.230	.178	-3.4	+29.2				
<b>Hogs and Pork</b>													
Hog movements, primary markets: Receipts.....thousands..	3,041	2,565	3,039	3,666	4,209	5,306	4,252	+23.1	+21.8	39,772	41,410	+4.1	
Shipments, total.....thousands..	1,192	1,051	1,137	1,284	1,485	1,849	1,527	+24.5	+21.1	15,172	15,044	-0.8	
Shipments, stocker and feeder.....thousands..	38	48	78	113	95	77	99	-18.9	-22.2	917	922	+0.5	
Local slaughter.....thousands..	1,846	1,512	1,883	2,382	2,745	3,443	2,694	+25.4	+27.8	24,579	26,345	+7.2	
Pork products, total: Production, inspected.....thous. of lbs..	580,606	458,919	497,128	596,842	793,789	935,467	783,758	+17.8	+19.4	7,272,534	7,730,761	+6.3	
Apparent consumption.....thous. of lbs..	595,110	576,349	615,065	603,579	594,140	676,373	564,328	+13.8	+19.9	6,163,881	6,705,435	+9.0	
Exports.....thous. of lbs..	72,958	89,529	72,251	67,764	87,955	98,794	85,134	-12.3	+16.0	1,119,757	934,349	-12.1	
Cold-storage holdings, total, end of month.....thous. of lbs..	933,436	726,941	539,240	465,976	573,280	738,938	653,647	+27.8	+12.2				
Fresh and cured in storage, end of month.....thous. of lbs..	766,418	608,767	467,119	419,822	523,425	655,158	589,071	+25.2	+11.2				

\* Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1927 from 1926
	August	Septem-ber	October	Novem-ber	Decem-ber	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>FOODSTUFFS—Continued</b>												
<b>Hogs and Pork—Continued</b>												
Lard (included in pork products):												
Production.....thous. of lbs.	117,871	89,704	92,860	110,525	155,157	154,592	154,592			1,513,385	1,556,747	+2.9
Exports.....thous. of lbs.	50,816	59,736	50,355	49,636	62,855	70,660	59,842	+12.4	+18.1	698,976	681,303	-2.5
Cold-storage holdings, end of month.....thous. of lbs.	167,018	118,174	72,121	46,154	54,855	83,780	69,576	+52.7	+20.4			
Prices:												
Hogs, heavy, Chicago.....dolls. per 100 lbs.	9.19	10.85	11.06	9.47	8.58	8.32	11.97	-3.0	-30.5			
Hams, smoked, Chicago.....dolls. per lb.	.235	.224	.233	.229	.214	.212	.269	-9.9	-21.2			
Lard, prime contract, N. Y.....dolls. per lb.	.128	.133	.130	.125	.120	.124	.129	+3.3	-3.9			
<b>Sheep and Lamb</b>												
Sheep movement, primary market:												
Receipts.....thousands	2,209	2,848	3,587	1,896	1,609	1,705	1,740	+6.0	-2.0	23,869	23,934	+6.8
Shipments, total.....thousands	1,054	1,734	2,413	988	723	705	819	-2.5	-13.9	12,450	12,482	+3.3
Shipments, stocker and feeder.....thousands	388	947	1,560	497	174	116	207	-33.3	-44.0	4,623	4,899	+6.0
Local slaughter.....thousands	1,137	1,101	1,148	950	896	994	921	+10.9	+7.9	11,386	11,459	+6.6
Lamb and mutton:												
Production, inspected.....thous. of lbs.	44,865	45,378	46,188	42,354	44,660	47,081	44,161	+5.4	+6.6	500,890	501,706	+2.2
Apparent consumption.....thous. of lbs.	44,908	45,098	45,855	41,877	44,246	47,073	44,292	+6.4	+6.3	500,288	503,529	+6.6
Cold-storage holdings, end of month.....thous. of lbs.	1,302	1,991	2,958	3,790	4,408	4,386	4,447	-5.5	-1.4			
Prices:												
Sheep ewes, Chicago.....dolls. per 100 lbs.	5.58	5.19	5.25	5.47	5.63	6.05	6.41	+7.5	-5.6			
Sheep, lambs, Chicago.....dolls. per 100 lbs.	13.58	13.56	13.87	13.58	13.91	12.65	12.47	-2.8	+1.4			
<b>Miscellaneous Meats</b>												
Cold-storage holdings, end mo.....thous. of lbs.	65,873	58,163	49,235	52,227	61,420	64,113	61,791	+4.4	+3.8			
<b>Total Meats</b>												
Production, inspected.....thous. of lbs.	1,091,069	958,290	1,018,772	1,098,559	1,242,109	1,370,298	1,271,837	+13.1	+7.7	13,529,935	13,509,693	-1.1
Cold-storage holdings, end mo.....thous. of lbs.	1,034,057	822,973	635,349	587,338	721,055	878,097	820,139	+21.8	+7.1			
Apparent consumption.....thous. of lbs.	1,110,507	1,076,686	1,134,997	1,089,256	1,033,046	1,118,382	1,057,234	+8.3	+5.8	12,390,626	12,533,061	+1.2
<b>Poultry</b>												
Receipts at 5 markets.....thous. of lbs.	22,691	24,391	29,103	61,370	70,350	29,347	27,704	-58.3	+5.9	362,138	344,209	-5.0
Cold-storage holdings, end of month.....thous. of lbs.	39,711	43,201	52,315	85,030	117,490	117,972	144,076	+4.4	-18.1			
<b>Fish</b>												
Total catch, prin. fishing ports.....thous. of lbs.	33,284	26,633	27,385	21,096	14,052	14,300	18,140	+1.8	-21.2	263,985	288,970	+9.4
Cold-storage holdings, 15th of month.....thous. of lbs.	54,061	60,330	65,960	66,790	64,787	53,962	58,655	-16.7	-8.0			
Canned salmon:												
Shipments, United States.....cases	802,320	1,138,147	791,856	377,951	349,112		482,140			6,297,670	6,159,681	-2.2
Exports, Canada.....cases	110,004	97,163	120,446	209,358	95,921	168,946	106,145	+76.1	+59.2	1,244,984	1,144,241	-8.1
<b>Butter</b>												
Production (factory).....thous. of lbs.	143,464	113,555	149,785	86,238	88,164	103,861	93,912	+17.8	+10.6	1,451,766	1,579,872	+8.8
Receipts, 5 markets.....thous. of lbs.	58,310	42,234	38,301	33,607	33,687	42,271	37,705	+25.8	+12.1	572,934	582,456	+1.7
Cold-storage holdings, creamery, end of month.....thous. of lbs.	163,701	147,396	118,679	83,224	46,269	28,296	17,952	-38.9	+57.6			
Apparent consumption.....thous. of lbs.	136,123	179,871	178,353	159,106	163,244	159,687	145,906	-2.2	+9.4	2,087,449	1,993,523	-4.5
Wholesale price, New York.....dolls. per lb.	.42	.46	.48	.50	.52	.49	.50	-5.8	-2.0			
<b>Cheese</b>												
Total, all varieties:												
Production (factory).....thous. of lbs.	36,157	36,614	32,862	20,511	21,186	24,033	26,250	+13.4	-8.4	495,483	431,619	-12.9
Receipts, 5 markets.....thous. of lbs.	22,556	21,522	18,995	14,279	13,826	14,409	12,706	+4.2	+13.4	207,887	218,164	+4.9
Apparent consumption.....thous. of lbs.	36,827	46,587	48,793	36,022	35,355	37,408	36,616	+5.9	+2.2	510,479	486,511	-3.0
Cold-storage holdings, end of month.....thous. of lbs.	90,204	85,131	77,603	70,735	64,035	55,750	62,136	-12.9	-10.3			
Imports.....thous. of lbs.	3,430	5,102	8,441	8,976	7,474	5,347	5,608	-28.5	-4.7	78,418	79,797	+1.8
Exports, United States.....thous. of lbs.	251	225	211	321	211	257	356	+21.8	-27.8	3,902	3,387	-13.2
Exports, Canada.....thous. of lbs.	16,023	19,040	20,944	16,072	8,878	1,324	3,209	-85.1	-38.7	134,688	110,534	-17.9
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs.	69,749	65,453	59,035	53,447	47,765	41,693	46,026	-12.7	-9.4			
Wholesale price, New York.....dolls. per lb.	.25	.27	.28	.27	.29	.29	.26	0	+11.5			
<b>Eggs</b>												
Receipts, 5 markets.....thous. of cases	1,005	897	704	603	608	862	970	+41.8	-29.5	15,601	16,204	+3.9
Cold-storage holdings, end of month:												
Case.....thous. of cases	9,650	7,960	5,485	2,956	882	25	253	-97.2	-90.1			
Frozen.....thous. of lbs.	77,508	71,208	62,066	54,703	47,020	38,451	31,207	-18.2	+23.2			
<b>Milk</b>												
Condensed milk:												
Manufacturers' total stocks (end of month):												
Case goods.....thous. of lbs.	43,559	38,357	35,932	29,155	24,820	20,521	16,594	-17.3	+23.7			
Bulk goods.....thous. of lbs.	20,796	19,566	14,956	12,362	8,310	8,452	8,303	+1.7	+1.8			
Manufacturers' unsold stocks (end of month):												
Case goods.....thous. of lbs.	38,325	33,004	30,535	24,919	19,048	15,054	11,296	-21.0	+33.3			
Bulk goods.....thous. of lbs.	7,600	7,500	5,970	5,521	4,656	5,212	3,388	+11.9	+53.8			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
	<b>FOODSTUFFS—Continued</b>											
<b>Milk—Continued</b>												
<b>Condensed milk—Continued.</b>												
Exports.....thous. of lbs.	3,532	2,439	2,760	2,981	2,345	3,819	2,694	+62.8	+41.8	38,713	34,887	-9.9
Wholesale price, New York.dolls. per case..	5.83	6.00	6.00	6.02	6.00	6.00	5.63	0	+6.6			
<b>Evaporated milk:</b>												
Manufacturers' total stocks, end of month (case goods).....thous. of lbs.	236,173	222,482	205,587	166,187	140,133	118,444	54,888	-15.5	+115.8			
Manufacturers' unsold stocks, case goods.....thous. of lbs.	203,643	198,281	183,239	149,397	117,115	95,119	19,084	-18.8	+398.4			
Exports.....thous. of lbs.	4,240	3,756	5,130	4,662	4,532	7,360	5,554	+62.4	+32.5	75,840	68,048	-10.3
Wholesale price, New York.dolls. per case..	4.58	4.58	4.58	4.59	4.57	4.58	4.50	+2	+1.8			
Production, condensed and evaporated milk.....thous. of lbs.	175,316	120,928	112,651	99,393	99,465	102,847	117,012	+3.4	-12.1	1,733,503	1,894,550	+9.3
<b>Powdered milk:</b>												
Manufacturers' total stocks.....thous. of lbs.	13,232	10,646	9,261	7,950	4,723	7,500	9,638	+31.1	-22.2			
Exports.....thous. of lbs.	238	239	307	298	336	236	268	-29.8	-11.9	2,659	3,326	+25.1
Net new orders.....thous. of lbs.	5,683	6,531	5,735	5,706	5,555	4,880	3,568	-12.2	+36.8	62,038	65,376	+5.4
<b>Fluid milk:</b>												
<b>Receipts—</b>												
Boston (includ. cream).....thous. of qts.	18,095	17,586	17,987	16,624	17,376		17,002			208,663	213,033	+2.1
Greater New York.....thous. of qts.	110,694	111,582	114,981	108,536	108,272	109,709	106,156	+1.3	+3.3	1,274,357	1,330,850	+4.4
<b>Production—</b>												
Minneapolis, St. Paul.....thous. of lbs.	21,157	19,046	20,217	19,868	22,627	26,140	25,468	+15.5	+2.6	297,226	295,629	-5
Consumption in manufacture of oleomargarine.....thous. of lbs.	5,566	6,410	7,332	7,034	7,363	7,190	6,287	-2.3	+14.4	71,173	76,233	+7.1
<b>Sugar</b>												
<b>Raw:</b>												
<b>Imports—</b>												
<b>From Hawaii and Porto</b>												
Rico.....long tons.	93,071	74,520	76,540	24,340	20,058	45,026	70,187	+124.5	-35.8	1,157,832	1,201,213	+3.7
From foreign countries.....long tons.	346,818	278,078	319,464	223,855	201,139	219,926	163,973	+9.3	+34.1	4,129,500	3,675,702	-11.0
Meltings, 8 ports.....long tons.	457,961	384,903	375,748	295,922	243,364	317,346	290,613	+30.4	+9.2	5,175,129	4,882,351	-5.7
Stocks at refineries, end month.....long tons.	296,012	258,427	254,963	215,665	205,573	192,968	177,791	-6.1	+8.5			
Receipts, domestic, at New Orleans.....long tons.	34	23	None.	5,727	10,204	None.	1,404			62,173	17,708	-71.5
<b>Refined:</b>												
Shipments, 2 ports.....long tons.	78,069	68,432	54,010	44,663	45,340	40,958	46,095	-9.7	-11.1	863,567	809,900	-6.2
Stocks, 2 ports.....long tons.	43,230	37,536	35,128	30,665	30,387	29,542	24,638	-2.8	+19.9			
Exports, including maple.....long tons.	17,297	4,451	3,642	4,480	3,651	3,184	5,760	-12.8	-44.7	95,485	111,764	+17.0
<b>Prices:</b>												
<b>Wholesale, 96° centrifugal,</b>												
N. Y.....dolls. per lb.	.045	.048	.047	.047	.046	.045	.051	-2.2	-11.8			
Wholesale, granulated, N. Y.....dolls. per lb.	.056	.058	.057	.056	.056	.057	.062	+1.8	-8.1			
Retail, granulated, N. Y.....dolls. per lb.	.066	.064	.064	.063	.062	.063	.068	+1.6	-7.4			
Retail average, 51 cities.....relative to 1913.	133	131	131	131	129	129	136	0	-5.1			
<b>Cuban movement (raw):</b>												
Receipts at Cuban ports.....long tons.	208,474	167,805	151,747	106,974	86,425	238,129	482,152	+175.5	-50.4	4,611,846	4,258,418	-7.7
Exports.....long tons.	403,719	292,816	304,118	261,815	244,852	212,161	166,044	-13.4	+27.8	4,666,393	4,064,126	-12.9
Stocks, end of month.....long tons.	783,717	671,952	531,142	344,693	212,314	177,801	298,682	-16.3	-40.5			
<b>Coffee</b>												
Imports.....thous. of bags.	1,007	667	976	1,099	1,144	1,148	907	+3	+26.6	11,313	10,858	-4.0
<b>Visible supply:</b>												
World.....thous. of bags.	4,716	4,622	4,917	5,050	5,041	4,862	4,605	-3.6	+5.6			
United States.....thous. of bags.	825	547	634	686	768	782	1,014	+1.8	-22.9			
Receipts, total, Brazil.....thous. of bags.	1,504	1,405	1,838	1,714	1,372	1,216	1,218	-11.4	-2	13,715	15,621	+13.9
<b>Clearances:</b>												
Total, Brazil, for world.....thous. of bags.	1,312	1,334	1,583	1,510	1,441	1,237	1,241	-14.2	-3	13,558	14,872	+9.7
Total, Brazil, for U. S.....thous. of bags.	595	712	862	813	876	687	666	-21.6	+3.2	7,499	7,984	+6.5
Price, Rio No. 7, Brazil grades, N. Y.....dolls. per lb.	.139	.135	.147	.145	.142	.148	.153	+4.2	-3.3			
<b>Tea</b>												
Imports.....thous. of lbs.	9,467	9,586	9,687	10,547	9,057	8,160	8,876	-9.9	-8.1	95,931	89,601	-6.6
Stocks, United Kingdom, end of month.....thous. of lbs.	146,684	164,368	185,921	215,380	245,505	254,957	222,636	+3.9	+14.5			
Price, Formosa, fine New York.....dolls. per lb.	.345	.345	.345	.329	.325	.325	.345	0	-5.8			
<b>TOBACCO</b>												
<b>Consumption (tax-paid withdrawals):</b>												
Large cigars.....thousands.	604,870	639,359	688,921	654,165	393,007	413,532	466,078	+5.2	-11.3	6,588,928	6,571,375	-3
Small cigarettes.....thousands.	9,328,055	8,994,416	8,552,397	8,093,752	6,870,462	8,369,087	7,269,356	+21.8	+15.1	89,447,114	97,176,607	+8.6
Manufac. tobacco and snuff.....thous. of lbs.	35,337	34,673	33,992	31,553	26,685	33,002	33,005	+23.7	-1	410,076	394,076	-3.9
<b>Exports:</b>												
Unmanufactured leaf.....thous. of lbs.	27,817	38,394	47,044	54,307	47,644	42,600	66,337	-10.6	-35.8	478,768	506,741	+5.8
Cigarettes.....thousands.	365,448	371,168	672,015	547,904	364,467	962,574	761,026	+164.1	+26.5	9,495,334	7,091,909	-25.3
Sales of loose-leaf, warehouses.....thous. of lbs.	66,810	136,824	162,386	161,702	116,822	135,470	130,006	+16.0	+4.2	780,616	964,926	+23.6
Price, leaf, average warehouse sales, Kentucky.....dolls. per 100 lbs.	15.730	15.594	11.331	9.812	20.220	23.227	12.356	+14.9	+88.0			
<b>Stocks (reported quarterly):</b>												
<b>Chewing, smoking, snuff, and export types</b>												
.....thous. of lbs.	<sup>1</sup> 1,376,271				<sup>1</sup> 1,519,935		<sup>1</sup> 1,416,412	+10.4	+7.3			
Cigar types.....thous. of lbs.	<sup>2</sup> 335,198				<sup>2</sup> 300,543		<sup>3</sup> 353,973	-10.3	-15.1			
Total, incl. imported types.....thous. of lbs.	<sup>1</sup> 1,806,747				<sup>1</sup> 1,920,652		<sup>1</sup> 1,841,645	+6.3	+4.3			

<sup>2</sup> Quarter ending in month indicated.<sup>3</sup> Quarter ending December 31, 1926.<sup>4</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>TRANSPORTATION</b>												
<b>River and Canal Cargo Traffic</b>												
Panama Canal:												
Total cargo traffic..... thous. of long tons	2,430	2,398	2,718	2,489	2,574	2,372	2,242	-7.8	+5.8	27,588	29,104	+5.5
In American vessels..... thous. of long tons	1,390	1,257	1,396	1,113	1,090	1,019	1,216	-7.3	-16.2	14,854	15,347	+3.3
In British vessels..... thous. of long tons	514	594	714	743	763	698	478	-8.5	+46.0	6,631	6,983	+5.3
Sault Ste. Marie canals..... thous. of short tons	11,721	10,791	11,231	6,898	1,169	None.	None.	-100.0	0	87,676	83,355	-4.9
New York State canals..... thous. of short tons	390	357	381	327	None.	None.	None.	---	---	2,370	2,582	+8.9
Cape Cod Canal..... short tons	58,685	67,873	89,030	101,206	98,426	73,097	50,378	-25.7	+45.1	781,322	824,172	+5.5
Suez Canal..... thous. of metric tons	2,477	2,389	2,402	2,546	2,504	---	2,305	---	---	25,409	29,598	+16.5
Welland Canal..... short tons	1,011,771	1,090,647	1,130,277	853,845	53,883	None.	None.	-100.0	0	5,214,514	6,570,459	+26.0
St. Lawrence Canal..... short tons	1,128,517	1,178,199	1,198,952	908,199	53,793	None.	None.	-100.0	0	6,123,701	7,909,952	+29.2
Mississippi River, Govt. barges..... short tons	122,300	89,396	104,923	114,541	114,063	103,000	89,610	---	---	1,044,649	1,336,632	+28.0
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va..... short tons	1,007,373	988,412	894,938	823,910	685,546	517,488	621,496	-24.5	-16.7	9,321,761	9,622,134	+3.2
Allegheny River..... short tons	353,279	421,985	444,358	338,975	176,540	81,585	89,242	-53.8	-8.6	2,509,202	2,955,695	+17.8
Monongahela River..... short tons	2,132,449	2,181,251	2,132,076	2,020,004	1,965,934	2,327,246	1,935,879	+18.4	+20.2	24,469,315	24,492,961	-1
<b>Ocean Traffic</b>												
Clearances, vessels in foreign trade:												
Total..... thous. of net tons	4,755	4,722	6,974	4,697	5,296	5,163	5,153	-2.5	+2	79,043	75,440	-4.6
American..... thous. of net tons	2,916	2,712	2,939	3,261	2,057	1,865	1,818	-9.3	+2.6	28,532	29,794	+4.4
Foreign..... thous. of net tons	4,634	4,520	4,035	3,697	3,239	3,298	3,335	+1.8	-1.1	50,510	45,647	-9.6
<b>Shipbuilding</b>												
Completed during month:												
Total..... gross tons	24,352	31,510	9,290	26,657	35,867	9,294	6,396	-74.1	+45.3	228,069	359,356	+57.6
Steel seagoing..... gross tons	21,145	23,303	3,364	22,554	30,742	2,888	1,208	-90.6	+139.1	162,882	277,302	+70.2
Building or under contract, end of month:												
Merchant vessels..... thous. of gross tons	216	216	241	194	204	---	313	---	---	---	---	---
World construction (quarterly):												
Ships launched..... number	---	190	---	---	224	---	196	+17.9	+14.0	558	728	+30.5
Tonnage..... thous. of tons	---	535	---	---	4,836	---	578	+56.3	+44.6	1,634	2,238	+37.0
Ships under construction..... number	---	663	---	---	693	---	671	+4.5	+3.4	1,989	2,672	+34.3
Tonnage..... thous. of tons	---	3,074	---	---	3,119	---	2,841	+1.5	+9.8	7,765	11,664	+49.4
<b>Freight Cars</b>												
Surplus (daily av. last week of month):												
Total..... cars	214,985	135,059	168,829	352,168	464,005	403,792	259,548	-12.0	+55.6	---	---	---
Box..... cars	123,901	74,126	82,411	158,304	224,247	182,001	148,742	-18.9	+22.4	---	---	---
Coal..... cars	53,204	34,805	61,455	148,860	183,638	169,463	62,588	-7.7	+170.8	---	---	---
Shortage (daily av. last week of month):												
Total..... cars	151	371	302	None.	25	4	164	-84.0	-07.6	---	---	---
Box..... cars	None.	None.	None.	None.	None.	3	2	---	+50.0	---	---	---
Coal..... cars	147	371	103	None.	None.	None.	85	0	-100.0	---	---	---
Car loadings:												
Total..... cars	4,249,359	4,360,022	5,587,921	3,822,620	4,172,605	3,447,723	3,756,060	-17.4	-8.2	53,098,819	51,686,561	-2.7
Grain and grain products..... cars	219,898	238,699	273,675	182,059	219,482	187,197	178,988	-14.7	+5.6	2,363,361	2,384,080	+0.9
Livestock..... cars	112,323	123,364	193,753	134,598	144,519	127,658	129,321	-11.7	-1.3	1,596,184	1,547,158	-3.1
Coal and coke..... cars	735,389	760,522	1,004,056	713,254	869,877	752,752	939,677	-13.5	-19.9	10,615,178	9,787,968	-7.7
Forest products..... cars	275,251	270,322	336,527	244,210	259,598	233,368	257,374	-10.1	-9.3	3,654,399	3,420,182	-6.4
Ore..... cars	248,462	225,581	243,550	76,267	40,682	31,737	37,845	-22.0	-16.1	2,179,141	1,881,617	-3.7
Merchandise and l. c. l..... cars	1,042,893	1,039,460	1,348,614	1,015,551	1,177,774	927,299	965,485	-21.3	-4.0	13,310,782	13,308,737	-1
Miscellaneous..... cars	1,615,143	1,702,084	2,187,746	1,456,681	1,460,673	1,187,712	1,247,970	+18.7	-4.8	19,379,774	19,356,819	-1
<b>Railroad Operations</b>												
Operating revenue:												
Freight..... thous. of dolls.	415,179	426,752	452,608	385,760	334,742	---	357,840	---	---	4,819,321	4,647,167	-3.5
Passenger..... thous. of dolls.	91,691	86,293	75,201	70,885	81,990	---	85,975	---	---	1,043,911	976,336	-6.5
Total operating..... thous. of dolls.	557,436	565,091	580,498	503,820	467,598	---	487,004	---	---	6,463,433	6,204,903	-4.0
Operating expenses..... thous. of dolls.	393,294	386,388	399,504	376,876	377,800	---	387,489	---	---	4,727,278	4,625,444	-2.2
Net operating income..... thous. of dolls.	118,226	132,770	133,776	86,424	55,334	---	61,579	---	---	1,232,373	1,084,140	-12.0
Freight carried..... thous. ton-miles	41,973	42,954	45,552	37,228	34,580	---	39,223	---	---	488,704	474,654	-2.9
<b>Railway Equipment</b>												
Locomotives (Am. Ry. Assn.):												
Owned, end of month—												
Quantity..... number	61,540	61,455	61,305	61,088	60,784	60,679	62,387	-0.2	-2.7	---	---	---
Tractive power..... mills. of lbs.	2,603	2,605	2,606	2,602	2,595	2,596	2,611	+0.1	-0.6	---	---	---
In bad order end of month—												
Quantity..... number	8,502	8,345	8,778	8,961	8,257	8,733	9,256	+5.8	-5.7	---	---	---
Per cent of total in use..... per cent	13.9	13.6	14.4	14.8	13.6	14.5	14.9	+6.6	-2.7	---	---	---
Installed..... number	104	177	195	149	135	154	145	+14.1	+6.2	2,399	1,955	-18.5
Retired..... number	329	262	345	366	378	269	210	+31.5	+23.3	3,574	3,572	-1
New orders..... number	20	6	8	17	149	2	26	-98.7	-92.3	1,195	656	-45.1
Shipments, manufacturer's (census)—												
Total..... number	81	127	112	52	72	47	57	-34.7	-17.5	1,755	1,074	-38.8
Steam, domestic..... number	71	86	81	31	41	22	16	-46.3	+37.5	1,352	726	-46.3
Electric, domestic..... number	6	7	12	7	13	23	8	+76.9	+187.5	177	148	-16.4
Unfilled orders (railroads), end of mo.—												
From manufacturers..... number	171	102	53	51	80	151	262	+88.7	-42.4	---	---	---
In railroad shops..... number	36	32	27	18	13	22	56	+69.2	-60.7	---	---	---
Unfilled orders, manufacturers (census)—												
Total..... number	363	271	182	145	232	222	412	-4.3	-46.1	---	---	---
Steam (domestic)..... number	244	167	97	74	178	161	334	-9.6	-51.8	---	---	---
Electric (domestic)..... number	68	49	45	42	39	38	23	-2.6	+65.2	---	---	---
Exports, steam..... number	11	8	19	5	25	13	41	-48.0	-68.3	271	228	-15.9

\* Quarter ending in month indicated.

\* Quarter ending December 31, 1926.

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 133 of the February, 1923, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>TRANSPORTATION—Continued</b>												
<b>Railway Equipment—Continued</b>												
Electric locomotive shipments (census, reported quarterly):												
Mining..... number.....		177			154		304	-13.0	-49.3	871	812	-6.8
Industrial..... number.....		16			19		75	+18.8	-74.7	70	70	
Freight cars (Am. Ry. Assn.):												
Owned, end of month—												
Quantity..... cars.....	2,328,328	2,326,616	2,325,027	2,322,179	2,313,375	2,309,478	2,336,050	-0.2	-1.1			
Capacity..... mills. of lbs.....	211,935	211,970	212,027	211,985	210,923	210,640	211,500	-0.1	-0.4			
In bad order, end of month—												
Quantity..... cars.....	141,038	137,571	139,441	137,795	130,493	136,115	136,847	+4.3	-5			
Per cent of total in use..... per cent.....	6.2	6.0	6.1	6.1	5.8	6.0	5.9	+3.4	+1.7			
New orders..... cars.....	1,066	40	326	14	14,114	2,098	17,196	-85.1	-87.7	56,289	58,959	+4.7
Shipments—												
Total..... cars.....	5,317	4,397	4,320	3,780	2,545	774	3,209	-69.6	-75.9	80,100	54,291	-32.2
Domestic..... cars.....	5,270	4,393	4,101	3,754	2,536	576	3,160	-66.3	-81.8	77,655	53,524	-31.1
Unfilled orders (railroads)—												
Total..... cars.....	18,096	14,437	10,901	9,721	12,431	18,464	27,069	+48.6	-31.8			
From manufacturers..... cars.....	13,545	10,799	6,991	6,424	9,341	15,459	17,209	+65.5	-10.2			
In railroad shops..... cars.....	4,541	3,638	3,910	3,297	3,090	3,005	9,860	-2.8	-69.5			
Passenger cars:												
New orders..... cars.....	36	19	18	12	150	615	314	+310.0	+95.9	1,321	1,195	-9.5
Shipments—												
Total..... cars.....	152	201	119	166	174	78	60	-55.2	+30.0	2,233	1,420	-36.4
Domestic..... cars.....	146	201	119	164	174	68	42	-60.9	+61.9	2,137	1,378	-35.5
<b>Passenger Travel</b>												
National parks:												
Visitors..... number.....	492,016	199,336	50,101	34,736	26,939	50,591	51,972	+87.8	-2.7	1,774,552	1,976,367	+11.4
Automobiles entered..... number.....	98,449	29,089	12,862	4,305	3,925	6,679	6,359	+70.2	+5.0	311,185	373,495	+20.0
Arrivals from abroad:												
Immigrants..... number.....	28,418	31,000	31,719	27,758	22,350		18,804			336,295	323,885	-3.7
United States citizens..... number.....	57,701	75,557	50,254	24,325	18,922		16,913			378,175	412,485	+9.1
Departures abroad:												
Emigrants..... number.....	6,322	7,625	6,402	5,871	9,085		3,928			73,179	70,122	-4.2
United States citizens..... number.....	43,039	39,748	24,396	22,612	25,209		21,483			367,739	405,989	+10.4
Passports issued..... number.....	10,269	8,474	8,063	8,596	8,387	8,896	9,053	+6.1	-1.7	176,033	182,430	+3.6
Pullman company operations:												
Revenue..... thous. of dolls.....	7,528	7,625	6,494	5,915	6,411		7,086			81,834	80,952	-1.1
Passengers carried..... thousands.....	3,428	3,288	2,851	2,606	2,831		2,988			36,073	35,198	-2.4
<b>PUBLIC UTILITIES</b>												
Telephone companies:												
Operating revenue..... thous. of dolls.....	65,758	66,529	65,233	65,193			64,140					
Operating income..... thous. of dolls.....	14,972	16,322	16,445	16,006			16,517					
Telegraph companies:												
Commercial telegraph tolls..... thous. of dolls.....	11,241	11,172	10,979	10,238	11,016		10,074			129,947	127,501	-1.9
Operating revenue..... thous. of dolls.....	13,894	13,822	13,643	12,713	13,747		12,557			160,466	158,286	-1.4
Operating income..... thous. of dolls.....	2,000	2,085	2,009	1,622	1,654		1,338			21,185	21,505	+1.5
Gas and electric companies:												
Gross earnings..... thous. of dolls.....	162,647	169,414	177,734	182,040	193,000		191,701			1,995,259	2,117,160	+6.1
Net earnings..... thous. of dolls.....	53,551	61,897	65,260	70,134	78,000		74,377			715,081	774,788	+8.3
Electric railways (212 companies):												
Passengers carried..... thous. of persons.....	745,769	728,371	790,712	771,443	830,930	814,172	831,635	-2.0	-2.1	9,513,483	9,394,314	-1.3
Average fare..... cents.....	7.952	7.952	7.952	7.999	8.018		7.805					
Electric power production:												
Total..... mills. of kw. hours.....	6,684	6,607	6,929	6,874	7,218	7,197	6,730	-0.3	+6.9	73,791	79,768	+8.1
By water power..... mills. of kw. hours.....	2,404	2,201	2,386	2,508	2,736	2,720	2,354	-0.6	+16.5	26,188	29,575	+12.6
By fuels..... mills. of kw. hours.....	4,280	4,406	4,543	4,365	4,482	4,477	4,376	-0.1	+2.3	47,603	50,193	+5.4
In street railways, manfg. plants, etc..... mills. of kw. hours.....	349	338	352	357	402		427			4,577	4,423	-3.4
In central stations..... mills. of kw. hours.....	6,335	6,269	6,577	6,507	6,782		6,303			69,214	75,301	+8.8
Electric power production (Canada):												
Total..... thous. of kw. hours.....	1,229,089	1,197,023	1,399,170	1,311,211	1,361,864	1,317,736	1,131,212	-3.2	+16.5	11,923,733	14,192,937	+19.0
By water power..... thous. of kw. hours.....	1,213,531	1,181,173	1,289,967	1,289,242	1,339,206	1,297,783	1,113,899	-3.1	+16.5	11,756,971	13,991,754	+19.0
By fuels..... thous. of kw. hours.....	15,558	15,850	19,203	21,969	22,658	19,953	17,313	-11.9	+15.2	166,762	201,183	+20.6
Exported..... thous. of kw. hours.....	157,197	154,047	142,991	129,415	130,552		130,894			1,506,000	1,632,609	+8.4
Electric power, gross revenue sales..... thous. of dolls.....	135,600	144,900	150,800	158,000			162,000					
<b>EMPLOYMENT AND WAGES</b>												
Employment in factories:												
New York State..... thousands.....	474	484	485	476	467	457	486	-2.1	-6.0			
Detroit..... thousands.....	206	197	192	196	205	224	216	+9.3	+3.7			
New Jersey..... rel. to 1923.....	93	95	95	94	93	91	100	-2.2	-9.0			
Pennsylvania..... rel. to 1923.....	84	84	84	83	81	80	89	-1.2	-9.0			
Delaware..... rel. to 1923.....	71	74	73	74	75	75	80	0	-6.3			
Wisconsin..... rel. to 1915.....	121.7	118.5	117.2	112.3	112.0	111.6	115.4	-0.4	-3.3			
Illinois..... rel. to 1922.....	94.4	94.2	93.7	91.8	90.8	88.9	97.8	-2.1	-9.1			
Massachusetts..... rel. to 1914.....	84.0	85.2	85.5	84.3	81.2	80.6	88.9	-7	-9.3			
Total pay roll:												
New York State (weekly)..... thous. of dolls.....	13,898	14,317	14,195	13,671	13,830	13,361	14,331	-3.4	-6.8			
Wisconsin..... rel. to 1915.....	278.7	265.1	262.4	251.1	248.8	231.6	251.2	-6.9	-7.8			
New Jersey..... rel. to 1923.....	101	102	102	100	103	98	107	-4.9	-8.4			
Pennsylvania..... rel. to 1923.....	85	83	85	84	83	79	90	-4.8	-12.2			
Delaware..... rel. to 1923.....	75	76	76	77	81	76	83	-6.2	-8.4			
Ohio construction employment..... rel. to 1923.....	96	95	84	73	61	54	62	-11.5	-12.9			
Anthracite mines:												
Employment..... rel. to 1923-25.....	116.5	115.6	117.9	113.3	117.5	115.8	116.8	-1.4	+6			
Pay roll..... rel. to 1923-25.....	90.6	107.4	107.4	113.2	99.3	94.5	109.6	-4.8	-9.4			

2 Quarter ending in month indicated.

3 Quarter ending December 31, 1926.

4 Revised

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per cent increase (+) or decrease (-) cumulative 1927 from 1926	
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927		
<b>EMPLOYMENT AND WAGES—Contd.</b>													
Federal civilian employees, Washington, D. C., end of month.....	number	60,413	60,267	60,236	60,399	60,660	59,615						
Average weekly earnings, factories:													
Illinois.....	dolls.	28.61	27.65	28.59	28.23	28.15	27.49	28.23	-2.3	-2.6			
New York State.....	dolls.	29.29	29.57	29.28	28.75	29.57	29.22	29.52	-1.2	-1.0			
Wisconsin.....	dolls.	25.94	25.40	25.40	25.39	25.24	23.60	24.58	-20.2	-4.0			
Massachusetts.....	rel. to 1914	236.4	237.1	231.2	231.4	232.1	232.1	228.3	0	+1.7			
New Jersey.....	rel. to 1923	109	109	109	108	111	109	108	-1.8	+9			
Pennsylvania.....	rel. to 1923	101	98	101	100	101	98	101	-3.0	-3.0			
Delaware.....	rel. to 1923	102	101	103	103	106	100	102	-5.7	-2.0			
Average weekly earnings National Industrial Conference Board:													
Grand total (both sexes).....	dollars	27.16	27.32	27.01	26.72	26.90	27.26						
Total male.....	dollars	29.76	29.70	29.35	28.69	29.35	29.57						
Skilled male.....	dollars	31.33	31.18	30.78	30.15	30.80	30.93						
Unskilled male.....	dollars	24.08	24.29	24.21	23.42	24.12	24.69						
Total women.....	dollars	17.26	17.32	17.35	17.32	17.34	17.25						
Average weekly hours:													
Nominal (both sexes).....	hours	49.5	49.5	49.5	49.4	49.5	49.5						
Actual (both sexes).....	hours	47.8	47.8	47.4	47.1	47.3	48.2						
Wages, road labor, by geographic divisions:													
New England.....	cents per hour	49	49	48	48	55	53	44	-3.6	+20.5			
Middle Atlantic.....	cents per hour	47	46	46	46	46	48	46	+4.3	+4.3			
South Atlantic.....	cents per hour	27	26	28	26	24	24	24	0	0			
East South Central.....	cents per hour	26	25	25	25	24	25	24	+4.2	+4.2			
West South Central.....	cents per hour	28	33	32	30	32	26	27	-18.7	-3.7			
East North Central.....	cents per hour	38	40	40	40	42	39	39	-7.1	0			
West North Central.....	cents per hour	37	38	38	37	37	37	38	0	-2.6			
Mountain.....	cents per hour	46	46	48	47	46	43	43	-10.9	-4.7			
Pacific.....	cents per hour	54	54	56	53	54	50	51	-7.4	-2.0			
United States, average.....	cents per hour	39	40	40	40	39	37	37	-5.1	0			
Wage rates, U. S. Steel Corp.....	cents per hour	50	50	50	50	50	50	50	0	0			
Wages, steel workers, Youngstown district.....	per cent of base	125.5	125.5	125.5	128.5	128.5	125.5	133.0	-2.3	-5.6			
Applicants per 100 jobs, employment agencies:													
United States.....	number	129	121	120	137	145	170	160	+17.2	+6.3			
Eastern States.....	number	137	131	129	146	155	192	156	+23.9	+23.1			
Central States.....	number	156	136	145	160	165	203	203	+23.0	0			
Southern States.....	number	122	114	122	132	145	188	146	+29.7	+28.8			
Western States.....	number	70	79	61	71	80	87	78	+8.8	+11.5			
<b>Factory Labor Turnover</b>													
(Percentage of number on pay roll)													
Departures:													
Total.....	per cent (annual basis)	40.7	51.3	38.0	30.5	26.5	28.4	41.4	+7.2	-31.4			
Voluntary quits.....	per cent (annual basis)	27.2	38.0	25.3	18.2	14.9	16.5	23.4	+10.7	-36.3			
Lay offs.....	per cent (annual basis)	8.6	6.0	7.7	8.2	7.7	7.9	12.3	+2.6	-35.8			
Discharges.....	per cent (annual basis)	4.9	7.3	5.0	4.1	3.9	4.0	5.7	+2.6	-29.8			
Accessions.....	per cent (annual basis)	41.7	52.6	38.3	34.1	24.8	37.4	35.0	+50.8	+6.9			
<b>DISTRIBUTION MOVEMENT</b>													
<b>Retail Sales</b>													
Mail-order houses:													
Total sales, 4 houses.....	thous. of dolls.	41,406	46,218	57,776	58,368	65,733	41,267	39,404	-37.2	+4.7	541,326	559,993	+3.4
Total sales, 2 houses.....	thous. of dolls.	37,795	40,987	50,869	51,229	59,494	37,465	35,237	-37.0	+6.3	471,964	495,304	+4.9
Sears, Roebuck & Co.....	thous. of dolls.	23,970	24,609	29,302	29,847	34,486	24,240	22,080	-29.7	+9.8	272,700	292,901	+7.4
Montgomery Ward & Co.....	thous. of dolls.	13,825	16,378	21,567	21,382	25,008	13,225	13,157	-47.1	+5	199,264	202,403	+1.6
Ten-cent chain stores:													
Total sales (4 chains).....	thous. of dolls.	39,539	38,738	46,498	44,254	84,977	31,901	29,647	-62.5	+7.6	457,336	503,827	+10.2
Total stores operated (4 chains).....	number	2,349	2,371	2,396	2,415	2,427	2,431	2,223	+2	+9.4			
F. W. Woolworth & Co.....	thous. of dolls.	21,400	20,740	26,032	23,731	43,897	17,114	16,117	-61.0	+6.2	253,642	272,746	+7.5
Stores operated.....	number	1,552	1,568	1,584	1,588	1,588	1,591	1,484	+2	+7.2			
S. S. Kresge Co.....	thous. of dolls.	10,522	10,422	12,084	12,011	23,044	8,658	7,956	-62.4	+8.8	119,218	133,767	+13.0
Stores operated.....	number	409	413	419	427	435	436	370	+2	+17.8			
McCrorry Stores Corp.....	thous. of dolls.	3,037	3,022	3,332	3,236	6,857	2,369	2,286	-65.5	+3.6	33,606	38,336	+14.1
Stores operated.....	number	214	215	217	219	221	221	199	0	+11.1			
S. H. Kress & Co.....	thous. of dolls.	4,564	4,556	5,069	5,272	11,182	3,760	3,292	-66.4	+14.2	51,870	58,061	+11.9
Stores operated.....	number	174	175	176	181	183	183	170	0	+7.6			
Metropolitan.....	thous. of dolls.	965	978	1,120	1,090	2,349	692	655	-70.5	+5.6	11,006	12,273	+11.5
Stores operated.....	number	90	90	90	91	91	81	81	0	+12.3			
F. & W. Grand.....	thous. of dolls.	1,947	1,905	1,233	1,140	2,267	800	657	-64.7	+21.8	10,496	12,882	+22.7
Stores operated.....	number	54	55	55	55	55	55	44	0	+25.0			
W. T. Grant Co.....	thous. of dolls.	3,114	3,279	4,275	4,366	8,205	2,624	2,205	-68.0	+19.0	35,935	43,323	+20.6
Stores operated.....	number	126	130	135	145	151	154	106	+2.0	+45.3			
Chain stores:													
Groceries—													
Sales.....	thous. of dolls.	107,234	107,653	119,443	118,335	126,282	117,355	97,405	-7.1	+20.5	1,067,790	1,311,371	+22.8
Stores operated.....	number	27,985	28,051	28,206	28,323	28,494	28,268	26,608	-8	+6.2			
Drug—													
Sales.....	thous. of dolls.	8,439	8,243	9,149	8,725	10,922	8,947	8,195	-18.1	+9.2	92,148	103,861	+12.7
Stores operated.....	number	747	762	792	797	828	837	741	+1.1	+13.0			
Cigar—													
Sales.....	thous. of dolls.	8,707	8,678	9,099	8,653	12,766	7,422	7,963	-41.9	-6.8	109,517	109,699	+2
Stores operated.....	number	3,451	3,449	3,453	3,469	3,463	3,463	3,411	0	+1.5			
Shoe—													
Sales.....	thous. of dolls.	3,076	3,278	3,673	3,615	5,467	2,603	2,486	-52.4	+4.7	41,419	42,018	+1.4
Stores operated.....	number	606	606	614	618	621	618	576	-5	+7.3			

† Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>DISTRIBUTION MOVEMENT—Contd.</b>												
<b>Retail Sales—Continued</b>												
Chain stores—Continued.												
Music—												
Sales.....thous. of dolls.	890	1,136	1,159	1,161	1,595	873	852	-45.3	+2.5	13,927	11,893	-14.6
Stores operated.....number	62	62	61	61	61	61	61	0	0			
Candy—												
Sales.....thous. of dolls.	2,523	2,713	2,830	2,857	3,749	2,279	2,163	-39.2	+5.4	31,332	32,717	+4.4
Stores operated.....number	277	280	267	257	269	261	243	-3.0	+7.4			
Restaurant chains:												
Total sales (3 chains).....thous. of dolls.	4,863	4,844	4,893	4,699	5,082		5,029			59,566	58,112	-2.4
Stores operated.....number	364	366	366	367	370		361					
Average per store.....dollars	13,360	13,235	13,369	12,804	12,735		13,931					
Childs Co., sales.....thous. of dolls.	2,463	2,437	2,378	2,275	2,490	2,346	2,537	-5.8	-7.5	29,920	28,803	-3.7
J. R. Thompson Co., sales.....thous. of dolls.	1,183	1,161	1,224	1,185	1,262	1,235	1,225	-2.1	+8.8	14,383	14,349	-2.4
Waldorf System (Inc.), sales.....thous. of dolls.	1,217	1,246	1,291	1,239	1,330		1,267			15,263	14,960	-2.0
Other chain stores:												
Isaac Silver & Bros.....thous. of dolls.	304	430	509	513	1,065	312	281	-70.7	+11.0	4,762	5,610	+17.8
Stores operated.....number	21	20	20	19	19	19	19	0	-13.6			
Hartman Corporation.....thous. of dolls.	1,706	1,919	1,478	1,312	1,505		842			18,777	17,661	-5.9
Stores operated.....number	17	18	18	19	19		16					
J. C. Penny Co.....thous. of dolls.	11,007	13,735	17,165	17,054	21,796	7,722	4,631	-64.6	+22.0	115,681	151,060	+30.6
Stores operated.....number	854	883	889	890	891	913	800	+2.5	+14.1			
United Cigar Stores Co.....thous. of dolls.	6,447	6,473	6,822	6,534	9,475	5,562	5,723	-41.3	-2.8	80,245	80,179	-0.1
Stores operated.....number	3,143	3,139	3,143	3,143	3,151	3,151	3,109	0	+1.4			
A. Schulte (Inc.).....thous. of dolls.	2,225	2,164	2,231	2,076	3,233	1,826	2,204	-43.5	-17.2	28,748	28,046	+1.0
Stores operated.....number	297	297	297	298	299	300	294	+3	+2.0			
G. C. Murphy Co.....thous. of dolls.	736	771	875	865	2,064	598	551	-71.0	+8.5	8,553	10,294	+19.7
Stores operated.....number	107	108	111	115	113	113	92	0	+22.8			
Installment sales in New England department stores:												
Ratio to total sales.....per cent.	11.2	7.5	7.0	6.7	3.9		10.5					
<b>Advertising</b>												
Magazine advertising for the following month.....thous. of lines												
2,128	2,542	2,599	2,289	1,811	2,176	2,210	2,210	+20.2	-1.5	4,031	3,987	-1.3
Newspaper advertising.....thous. of lines												
82,865	100,737	115,472	108,671	109,430	95,545	97,610	97,610	-10.2	-2.1	1,271,864	1,217,704	-4.1
National advertising in newspapers:												
Total.....thous. of lines	22,704	26,250	30,257	28,861	19,637		22,953			320,555	323,665	+0.9
Automobiles.....thous. of lines	5,161	5,323	5,144	4,544	3,679		5,352			63,020	62,393	-1.0
Automobile accessories.....thous. of lines	1,572	1,597	1,103	1,570	940		1,028			17,448	18,418	+5.6
Cigars, cigarettes, and tobacco.....thous. of lines	2,776	3,198	3,507	3,891	2,107		1,257			25,421	33,044	+30.0
Financial.....thous. of lines	601	649	917	842	841		905			10,218	10,218	0
Food, groceries, beverages.....thous. of lines	3,325	3,203	3,796	3,679	1,891		2,239			41,218	42,374	+2.8
Hotels and resorts.....thous. of lines	344	230	246	228	562		315			5,144	5,346	+3.9
Household furniture.....thous. of lines	262	819	840	341	237		148			6,911	6,567	-5.0
Men's clothing.....thous. of lines	99	438	439	340	206		26			3,594	3,531	-1.8
Musical instruments.....thous. of lines	59	131	178	205	270		184			2,364	1,750	-26.0
Radio and electrical.....thous. of lines	548	1,840	3,019	2,658	2,052		1,370			15,541	17,551	+12.9
Railroads and steamships.....thous. of lines	1,701	1,293	1,252	1,674	1,510		1,275			21,349	20,658	-3.2
Shoes.....thous. of lines	30	190	174	181	120		116			1,936	1,680	-13.2
Toilet articles and medical preparations.....thous. of lines	3,087	3,895	5,860	5,566	3,216		5,312			60,743	57,562	-5.2
Women's wear.....thous. of lines	42	129	351	168	37		31			1,768	1,667	-5.7
Miscellaneous.....thous. of lines	2,497	3,315	3,461	2,974	2,169		3,395			41,880	39,646	-5.3
<b>Postal Business</b>												
Postal receipts, 50 selected cities.....thous. of dolls.												
28,478	30,152	32,450	32,799	40,823	30,579	30,394	30,394	-25.1	+6	367,258	376,039	+2.4
Postal receipts, 50 industrial cities.....thous. of dolls.												
3,197	3,291	3,395	3,331	4,448	3,438	3,317	3,317	-22.7	+3.6	39,290	40,312	+2.6
Money orders:												
Domestic paid (50 cities)—												
Quantity.....number	10,120	10,167	11,659	11,954	13,516	10,468	10,576	-22.6	-1.0	132,099	133,433	+1.0
Value.....thous. of dolls.	82,638	84,383	76,574	97,853	102,259	78,220	80,473	-23.5	-2.8	1,047,647	1,037,883	-0.9
Domestic issued (50 cities)—												
Quantity.....number	3,162	2,994	3,363	3,381	3,759	3,416	3,363	-0.1	+3.4	38,101	39,508	+3.7
Value.....thous. of dolls.	33,234	31,667	35,147	34,860	37,452	34,117	34,001	-8.9	+3	296,116	468,719	+3.2
<b>BANKING AND FINANCE</b>												
<b>Life Insurance</b>												
(Association of Life Insurance Presidents)												
Policies, new (45 companies):												
Ordinary.....number of policies	211,482	186,090	212,924	203,629	256,546	183,511	187,460	-28.5	-2.1	2,637,142	2,642,742	+0.2
Industrial.....number of policies	781,361	745,664	992,140	940,847	783,539	901,736	679,290	+15.1	+32.8	9,386,964	9,884,401	+5.3
Group.....number of contracts	138	115	148	208	491	125	192	-74.5	-34.9	2,351	2,369	+0.8
Total.....number of policies and contracts	992,981	931,869	1,205,212	1,144,684	1,040,576	1,085,422	866,942	+4.3	+25.2	12,026,457	12,529,512	+4.2
Policies and certificates issued:												
Total policies and certificates.....number	1,023,331	945,250	1,228,861	1,172,404	1,164,208	1,111,705	918,717	-4.5	+21.0	12,776,386	13,628,135	+6.7
Group insurance certificates.....certificates	30,488	13,496	23,797	27,928	124,123	26,408	51,967	-78.7	-49.2	752,280	500,992	-33.4
Amount of new insurance (45 companies):												
Ordinary.....thous. of dolls.	625,510	526,564	615,753	582,000	725,847	575,127	576,642	-20.8	-3	7,804,415	7,804,406	0
Industrial.....thous. of dolls.	211,157	200,622	265,974	252,738	211,076	236,303	185,292	+12.0	+27.5	2,566,059	2,667,533	+3.9
Group.....thous. of dolls.	43,977	31,475	48,625	76,960	165,025	46,841	94,445	-71.6	-60.4	1,050,605	824,372	-21.5
Total insurance.....thous. of dolls.	880,644	758,661	930,352	911,698	1,101,948	858,271	856,379	-22.1	+2	11,421,079	11,296,111	-1.1

† Revised.

‡ Cumulative through February 29

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or de-crease (-) cumu-lative 1927 from 1926
	August	Septem-ber	October	Novem-ber	Decem-ber	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>BANKING AND FINANCE—Continued</b>												
<b>Life Insurance—Continued</b>												
Premium collections (45 companies):												
Ordinary.....thous. of dolls..	137,510	131,763	140,041	145,581	168,114	-----	135,395	-----	-----	1,570,579	1,740,316	+10.8
Industrial.....thous. of dolls..	49,220	45,741	49,272	48,273	89,926	-----	45,920	-----	-----	537,302	602,264	+12.1
Group.....thous. of dolls..	5,327	4,317	5,792	4,862	6,448	-----	7,065	-----	-----	58,712	65,045	+10.8
Total.....thous. of dolls..	192,057	181,821	195,105	198,716	264,488	-----	188,380	-----	-----	2,166,593	2,407,625	+11.1
Admitted life insurance assets (41 companies):												
Grand total.....mills. of dolls..	11,172	11,268	11,381	11,484	-----	-----	10,529	-----	-----	-----	-----	-----
Mortgage loans—												
Total.....mills. of dolls..	4,898	4,941	4,982	5,019	-----	-----	4,587	-----	-----	-----	-----	-----
Farm.....mills. of dolls..	1,622	1,620	1,621	1,620	-----	-----	1,592	-----	-----	-----	-----	-----
All other.....mills. of dolls..	3,276	3,321	3,361	3,399	-----	-----	2,995	-----	-----	-----	-----	-----
Bonds and stocks (book value)—												
Total.....mills. of dolls..	4,192	4,216	4,262	4,323	-----	-----	3,987	-----	-----	-----	-----	-----
Government.....mills. of dolls..	923	919	928	940	-----	-----	919	-----	-----	-----	-----	-----
Railroad.....mills. of dolls..	2,242	2,259	2,268	2,287	-----	-----	2,173	-----	-----	-----	-----	-----
Public-utility.....mills. of dolls..	876	887	911	942	-----	-----	764	-----	-----	-----	-----	-----
Policy loans and premium notes.....mills. of dolls..	1,327	1,338	1,347	1,358	-----	-----	1,240	-----	-----	-----	-----	-----
<i>(Life Insurance Sales Research Bureau)</i>												
Sales of ordinary life insurance (81 companies):												
United States total.....thous. of dolls..	681,654	606,760	659,375	662,688	833,944	609,228	601,985	-26.9	+1.2	8,408,659	8,531,545	+1.5
Eastern manuf. dist.....thous. of dolls..	261,413	237,184	257,543	254,111	316,931	261,893	257,734	-17.4	+1.6	3,358,503	3,438,062	+2.4
Western manuf. dist.....thous. of dolls..	154,708	138,441	148,380	150,447	188,770	130,338	133,912	-31.0	-2.7	1,829,684	1,898,798	+3.8
Western agric. district.....thous. of dolls..	103,638	93,224	103,663	106,310	131,530	90,662	86,167	-31.1	+5.2	1,322,084	1,286,886	-2.7
Southern district.....thous. of dolls..	86,549	76,998	82,706	84,189	113,184	68,847	66,112	-39.2	+4.1	1,057,591	1,049,908	- .7
Far western district.....thous. of dolls..	75,346	60,913	67,083	67,631	83,529	57,483	58,060	+23.5	-1.0	840,897	857,891	+2.0
Canada total, 15 companies.....thous. of dolls..	38,360	35,302	48,104	44,935	48,899	47,569	36,986	-2.7	+28.6	471,649	502,438	+6.5
<b>Banking</b>												
Check payments:												
New York City.....mills. of dolls..	31,653	33,369	34,091	33,282	38,938	37,884	31,258	-2.7	+21.2	339,056	391,557	+15.5
Outside New York City.....mills. of dolls..	22,054	23,887	25,117	23,809	26,509	25,007	23,457	-5.7	+6.6	269,115	282,346	+4.9
Canada.....mills. of dolls..	1,474	1,583	1,849	2,159	2,311	1,871	1,454	-19.0	+28.7	16,970	19,708	+16.1
Federal reserve banks:												
Bills discounted.....mills. of dolls..	401	430	379	477	609	423	365	-30.5	+15.9	-----	-----	-----
Notes in circulation.....mills. of dolls..	1,676	1,706	1,717	1,717	1,813	1,577	1,688	-13.0	-6.6	-----	-----	-----
Total investments.....mills. of dolls..	658	737	862	903	990	812	607	-18.0	+33.8	-----	-----	-----
Total reserve.....mills. of dolls..	3,146	3,126	3,067	2,940	2,862	2,971	3,133	+3.8	-5.2	-----	-----	-----
Total deposits.....mills. of dolls..	2,341	2,390	2,404	2,413	2,473	2,452	2,245	-8	+9.2	-----	-----	-----
Reserve ratio.....per cent..	78.3	76.3	74.4	71.2	66.8	73.7	79.6	+10.3	-16.1	-----	-----	-----
Federal reserve members banks:												
Total loans and discounts.....mills. of dolls..	14,697	14,942	15,029	15,214	15,433	15,265	14,200	-1.1	+7.5	-----	-----	-----
Total investments.....mills. of dolls..	5,927	6,042	6,065	6,329	6,386	6,575	5,540	+3.0	+15.3	-----	-----	-----
Net demand deposits.....mills. of dolls..	13,349	13,230	13,464	13,954	13,786	13,888	12,879	+7	+7.8	-----	-----	-----
Brokers' loans, end of month:												
To New York Stock Exchange members.....mills. of dolls..	3,674	3,915	3,946	4,092	4,433	4,420	3,139	-3	+40.8	-----	-----	-----
By New York F. R. member banks.....mills. of dolls..	3,184	3,306	3,372	3,511	3,718	3,816	2,732	+2.6	+39.7	-----	-----	-----
Interest rates:												
New York call loans.....per cent..	3.65	3.81	4.03	3.75	4.44	4.35	4.28	-2.0	+1.6	-----	-----	-----
Commercial paper 4-6 mos.....per cent..	4.90	4.87	4.97	4.92	3.97	3.88	4.13	-2.3	-6.1	-----	-----	-----
N. Y. Fed. Res. Bank.....per cent..	3.50	3.50	3.50	3.50	3.50	3.50	4.00	0	-12.5	-----	-----	-----
Federal land banks.....per cent..	4.17	4.17	4.17	4.17	5.15	5.15	5.21	0	-1.2	-----	-----	-----
Intermediate credit banks.....per cent..	4.50	4.50	4.50	4.50	4.50	4.50	4.50	0	0	-----	-----	-----
<b>Savings Deposits</b>												
New York State savings banks, end of month.....mills. of dolls..	4,033	4,089	4,083	4,096	4,164	4,189	3,889	+6	+7.7	-----	-----	-----
<b>Public Finances</b>												
Government debt, gross.....mills. of dolls..	18,380	18,478	18,369	18,174	18,036	18,050	19,170	+1	-5.8	-----	-----	-----
Customs receipts.....thous. of dolls..	52,982	54,410	56,617	47,660	43,113	41,975	44,695	-2.6	-6.1	605,627	591,946	-2.3
Total ordinary receipts.....thous. of dolls..	202,182	590,192	221,205	149,683	652,708	168,840	169,583	-74.1	-4	4,084,591	4,087,815	+ .1
Expenditures chargeable to ordinary receipts.....thous. of dolls..												
Money in circulation:	259,181	287,442	413,220	406,830	354,178	349,142	304,254	-1.4	+14.8	3,614,142	3,604,775	- .3
Total.....mills. of dolls..	4,750	4,850	4,844	4,952	5,000	-----	4,713	-----	-----	-----	-----	-----
Per capita.....dollars	40.54	41.35	41.25	42.13	42.50	-----	40.51	-----	-----	-----	-----	-----
<b>Business Failures</b>												
Liabilities (United States):												
Total commercial.....thous. of dolls..	39,196	32,786	36,236	36,147	51,262	47,634	51,290	-7.1	-7.1	409,233	520,305	+27.1
Manufacturing establishments.....thous. of dolls..												
Trade establishments.....thous. of dolls..	14,921	15,349	17,134	12,786	29,024	14,871	19,996	-48.8	-25.6	158,031	211,506	+33.8
Agents and brokers.....thous. of dolls..	14,702	12,052	14,657	16,949	16,733	26,446	24,530	+58.0	+7.8	201,344	228,194	+13.3
Banks (quarterly).....thous. of dolls..	9,573	5,385	4,445	6,412	5,305	6,318	6,764	+19.1	-6.6	49,858	90,405	+81.3
Liabilities (Canada).....thous. of dolls..	20,857	1,490	2,157	2,581	31,362	82,221	2,954	+50.4	-61.9	212,075	143,449	-32.4
Firms (United States):	1,687	1,490	2,157	2,581	2,914	5,382	2,954	+84.7	+82.2	28,423	26,091	-8.2
Total commercial.....number	1,708	1,573	1,787	1,864	2,162	2,643	2,465	+22.2	+7.2	21,773	23,146	+6.3
Manufacturing establishments.....number												
Trade establishments.....number	438	389	488	478	597	553	501	-7.4	+10.4	5,395	5,682	+5.3
Agents and brokers.....number	1,174	1,083	1,170	1,276	1,430	1,946	1,842	+36.1	+5.6	15,266	16,082	+5.3
Banks (quarterly).....number	96	101	129	110	135	144	122	+6.7	+18.0	1,112	1,382	+24.3
Firms (Canada).....number	147	143	173	162	184	360	221	+60.0	-61.7	608	398	-34.5
								+95.7	+62.9	2,106	2,016	-4.3

<sup>1</sup> Quarter ending in month indicated.

<sup>2</sup> Quarter ending December 31, 1926.

<sup>3</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. in-crease (+) or de-crease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>BANKING AND FINANCE—Continued</b>												
<b>Dividend and Interest Payments</b>												
<i>(For the following month)</i>												
Grand total.....thous. of dolls.	326,325	489,725	321,800	490,675	750,200	333,000	307,450	-55.6	+8.3	\$ 985,200	\$ 1,083,200	+9.9
Interest payments.....thous. of dolls.	250,100	369,850	227,100	331,175	460,600	176,000	155,000	-61.8	+13.4	\$ 555,950	\$ 636,600	+14.5
Dividend payments:												
Total.....thous. of dolls.	76,225	119,875	94,700	159,500	289,600	157,000	152,450	-45.8	+3.0	\$ 419,250	\$ 446,600	+6.5
Industrial and misc.....thous. of dolls.	49,375	70,250	48,800	119,700	179,800	114,300	112,700	-36.4	+1.4	\$ 277,900	\$ 294,100	+5.8
Steam railroads.....thous. of dolls.	19,750	28,375	33,500	24,050	33,800	33,100	31,650	-2.1	+4.6	\$ 62,550	\$ 66,900	+7.0
Street railways.....thous. of dolls.	7,100	12,250	12,400	15,750	21,000	9,600	8,100	-54.3	+18.5	\$ 27,300	\$ 30,600	+12.1
Aver. payments on industrial stocks (qtrly.).....dolls. per share.		\$ 8.87			\$ 8.57		\$ 7.90	-3.4	+8.5			
<b>New Security Issues</b>												
Foreign governments.....thous. of dolls.	81,000	31,281	125,623	35,800	67,547	79,808	52,383	+18.2	+52.4	514,124	777,126	+51.2
Total corporation.....thous. of dolls.	444,278	451,364	734,081	617,554	852,064	573,573	610,035	-32.7	-6.0	5,299,556	7,301,398	+37.8
Purpose of issue—												
New capital.....thous. of dolls.	277,832	372,585	574,380	403,365	588,591	408,545	507,503	-30.6	-19.5	4,357,003	5,373,210	+23.3
Refunding.....thous. of dolls.	166,446	78,779	159,701	214,190	263,472	165,028	102,532	-37.4	+61.0	942,552	1,928,188	+104.6
Kinds of issue—												
Stocks.....thous. of dolls.	153,887	109,576	134,568	121,198	273,591	138,545	108,511	-49.4	+27.7	1,317,773	1,757,602	+33.4
Bonds and notes.....thous. of dolls.	290,391	341,788	599,513	496,356	578,473	435,028	501,524	-24.8	-13.3	3,982,785	5,543,618	+39.2
Class of industry—												
Railroads.....thous. of dolls.	183,764	19,493	32,550	16,796	73,686	78,222	9,346	+6.2	+937.0	422,583	962,807	+127.8
Public utilities.....thous. of dolls.	109,821	200,174	311,832	252,482	517,412	210,155	309,084	-59.4	-32.0	1,974,450	2,986,503	+51.3
Industrials.....thous. of dolls.	65,392	82,659	113,368	180,038	54,938	118,902	106,350	+116.4	+11.8	1,067,250	1,174,984	+10.1
Oil.....thous. of dolls.	25,000		42,000	8,200	42,000	2,200	68,588	-94.8	-96.8	499,717	425,338	-14.9
Land and buildings.....thous. of dolls.	38,292	45,602	73,729	42,730	58,225	78,741	74,381	+35.2	+5.9	736,168	668,692	-9.2
Shipping and misc.....thous. of dolls.	22,009	93,437	160,603	117,309	105,803	74,331	40,286	-29.7	+84.5	556,175	1,010,376	+81.7
Bond issues (Canada):												
Govt. and provincial.....thous. of dolls.		18,370	24,045	58,540	2,500	4,000	35,611	+60.0	-88.8	178,760	158,421	-11.4
Municipal.....thous. of dolls.	904	9,788	3,828	10,532	11,340	415	13,998	-96.3	-97.0	62,909	77,481	+23.2
Corporation.....thous. of dolls.	6,625	52,973	74,936	24,260	5,858	9,396	7,494	+60.4	+25.4	265,757	303,062	+14.0
Tax-exempt securities:												
Total outstanding, end of month.....mills. of dolls.	15,850	15,952	16,060	16,142	16,170		15,311					
States and municipalities:												
Permanent loans.....thous. of dolls.	88,878	118,311	124,759	105,185	107,904	98,184	174,675	-9.0	-43.8	1,362,039	1,470,566	+8.0
Temporary loans.....thous. of dolls.	60,382	73,088	69,561	26,635	12,533		30,476			661,212	593,218	-10.3
New incorporations.....thous. of dolls.	325,193	431,293	243,998	225,803	235,021		739,730			10,947,210	4,663,704	-57.9
<b>Agricultural Finances</b>												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls.	1,139,502	1,143,130	1,147,135	1,150,943	1,155,644	1,158,717	1,085,170	+0.3	+6.8			
Joint-stock land banks.....thous. of dolls.	609,891	609,535	610,050	607,891	607,477	608,798	639,651	+0.2	-4.8			
Federal intermediate credit banks.....thous. of dolls.	64,408	62,879	66,885	71,815	75,915	74,888	93,013	-1.4	-19.5			
War Finance Corporation.....thous. of dolls.	4,569	4,285	4,080	1,800	1,362	1,244	7,310	-8.7	-83.0			
<b>Stocks and Bonds</b>												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share.	229.99	242.66	233.36	237.84	242.50	242.25	175.39	-1	+38.1			
25 railroads, average.....dolls. per share.	117.42	119.95	117.84	120.04	119.68	118.29	101.55	-1.2	+16.5			
103 stocks, average.....dolls. per share.	141.17	140.67	130.15	142.63	144.26	142.13	115.29	-1.5	+23.3			
Southern cotton mill stocks.....dolls. per share.	111.05	109.85	111.31	111.94	112.36	112.25	109.72	-1	+2.3			
Stock prices, average weekly closing:												
Total stocks (229).....rel. to 1917-21.	179.3	187.7	186.1	189.4	194.6	195.2	153.5	+3	+27.2			
Railroads (31).....rel. to 1917-21.	156.0	157.1	157.6	158.6	160.6	158.2	136.9	-1.5	+15.6			
Industrials (198).....rel. to 1917-21.	189.0	200.4	197.6	202.1	208.7	210.4	160.2	+8	+31.3			
Automobile (10).....rel. to 1917-21.	318.5	354.5	355.8	353.5	366.5	369.8	266.6	+9	+63.2			
Chain stores (11).....rel. to 1917-21.	534.2	585.1	573.6	598.4	601.0	582.3	417.0	-3.1	+39.6			
Copper (11).....rel. to 1917-21.	121.8	127.4	128.0	136.3	150.5	150.5	116.0		+29.7			
Food (9).....rel. to 1917-21.	371.3	392.2	389.1	406.6	432.1	430.6	310.2	-3	+38.8			
Machinery manufactur- ing (5).....rel. to 1917-21.	106.2	110.0	109.6	111.5	117.8	122.3	94.1	+3.8	+30.0			
Petroleum (17).....rel. to 1917-21.	105.3	105.3	104.0	107.5	106.4	107.4	110.5	+9	-2.8			
Railroad equipment (10).....rel. to 1917-21.	212.5	216.1	203.8	207.9	218.4	231.6	176.3	+6.0	+31.4			
Steel (9).....rel. to 1917-21.	150.5	165.8	153.1	152.0	159.3	159.1	123.6	-1	+28.7			
Textile (5).....rel. to 1917-21.	43.6	44.8	43.9	45.1	44.4	46.6	41.5	+5.0	+12.3			
Theater (3).....rel. to 1917-21.	166.6	169.9	173.4	174.1	178.7	178.6	167.5	-1	+6.6			
Tire and rubber (7).....rel. to 1917-21.	50.6	57.6	55.4	55.8	62.1	64.6	47.0	+4.0	+37.4			
Tobacco (7).....rel. to 1917-21.	199.6	205.9	208.7	226.7	225.5	220.5	167.8	-2.2	+31.4			
Traction, gas and power (16).....rel. to 1917-21.	254.1	267.2	267.2	274.6	283.9	294.8	218.6	+3.8	+34.9			
Stock sales:												
N. Y. Stock Exchange.....thous. of shares.	51,057	51,918	40,459	51,356	62,367	56,963	34,757	-8.7	+63.9	449,104	584,491	+30.1
Bond sales:												
Miscellaneous.....thous. of dolls.	290,948	254,987	258,112	261,540	267,918	260,374	326,065	+5	-17.4	2,864,807	3,390,462	+18.3
Liberty-Treasury.....thous. of dolls.	13,070	24,326	13,187	20,205	23,916	20,864	25,349	-12.8	-17.7	255,729	289,901	+13.4
Total.....thous. of dolls.	304,018	279,313	271,299	281,745	291,834	290,238	351,414	-5	-17.4	3,120,536	3,680,363	+17.9

1 Quarter ending in month indicated.

2 Quarter ending December 31, 1926.

3 Revised.

4 Cumulative through February 29.



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 133 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
<b>BANKING AND FINANCE—Continued</b>												
<b>Stocks and Bonds—Continued</b>												
Bond prices:												
Highest-grade rails. p. ct. of par, 4% bond	94.58	95.19	96.11	97.23	97.20	97.04	91.97	-1	+5.5			
Second-grade rails. p. ct. of par, 4% bond	85.43	86.11	87.24	87.87	88.57	88.75	83.52	+2	+6.3			
Public utility. p. ct. of par, 4% bond	78.23	78.29	79.00	79.14	79.55	79.66	76.66	+1	+3.9			
Industrial. p. ct. of par, 4% bond	79.55	79.81	79.93	79.86	80.82	81.28	79.51	+6	+2.2			
Comb. price index. p. ct. of par, 4% bond	83.98	84.35	85.05	85.43	85.98	86.15	82.52	+2	+4.4			
Bond prices, 1st of following month:												
5 Liberty bonds. p. ct. of par	104.14	103.68	103.92	106.53	106.02	105.94	103.31	-1	+2.5			
16 foreign government and city. p. ct. of par	105.67	105.64	104.65	105.46	105.60	105.90	105.23	+3	+6			
Comb. price index, 66 bonds. p. ct. of par	101.34	101.51	101.59	102.43	102.46	102.60	100.38	+1	+2.2			
Bond yields:												
Railroads (15). per cent	4.32	4.27	4.24	4.19	4.17	4.13	4.42	-1.0	-6.6			
Industrials (15). per cent	4.81	4.80	4.79	4.79	4.79	4.76	4.87	-0.6	-2.3			
Utilities (15). per cent	4.78	4.75	4.75	4.76	4.72	4.68	4.81	-0.8	-2.7			
Municipal (15). per cent	4.00	3.96	3.93	3.93	3.90	3.89	4.04	-0.3	-3.7			
Municipal bond yield (20). per cent	4.02	3.96	3.95	3.93	3.87		4.08					
Long-term real-estate bonds issued:												
Grand total. thous. of dolls.	32,247	42,763	59,092	27,131	52,322	61,167	67,960	+16.9	-10.0	644,311	570,742	-11.4
Purpose of issue:												
Finance construction. thous. of dolls.	19,435	23,463	35,819	12,460	24,270	32,759	36,767	+35.0	-10.9	353,762	270,198	-23.6
Real-estate mortgage. thous. of dolls.	4,482	5,140	10,523	5,241	11,207	12,900	17,480	+15.1	-26.2	127,714	137,215	+7.4
Acquisitions and improvements. thous. of dolls.	2,080	3,310	525	1,850	5,115	6,533	6,663	+27.7	-2.0	82,330	63,843	-22.5
Kind of structure—												
Office and other commercial. thous. of dolls.	7,700	19,575	21,980	9,155	16,055	29,000	23,295	+80.6	+24.5	261,676	186,503	-28.7
Hotels. thous. of dolls.	7,170	5,140	3,845	2,680	3,790	650	4,050	-82.8	-84.0	103,043	48,266	-53.4
Apartments. thous. of dolls.	4,700	3,473	11,519	2,226	7,025	4,309	11,827	-38.7	-63.6	87,126	61,495	-29.4
<b>Corporation Stockholders</b>												
<i>(Quarterly)</i>												
Pennsylvania Railroad Co.:												
Domestic. number		141,938			142,622		141,202	+5	+1.0			
Foreign. number		2,874			2,854		2,913	-7	-2.0			
U. S. Steel Corp. common stock:												
Domestic. number		95,351			94,756		84,447	-6	+12.2			
Foreign. number		1,653			1,539		1,582	-6.9	-2.7			
Shares held by brokers. per ct. of total		25.69			25.11		28.99	-2.3	-13.4			
American Telephone & Telegraph Co.:												
Domestic. number		416,695			418,295		393,843	+4	+6.2			
Foreign. number		5,287			5,247		5,084	-8	+3.2			
<b>GOLD AND SILVER</b>												
Gold:												
Domestic receipts at mint. fine ounces	91,245	103,240	97,103	91,840	75,575	73,624	80,777	-2.6	-8.8	1,024,680	972,927	-5.1
Rand output. thous. of ounces	863	842	856	848	851	843	840	-9	+5	9,961	10,130	+1.7
Imports. thous. of dolls.	7,877	12,979	2,056	2,082	10,431	38,320	59,355	+267.4	-35.4	213,506	207,535	-2.8
Exports. thous. of dolls.	1,524	24,444	10,698	55,266	77,849	52,086	14,890	-33.1	+249.8	115,708	201,455	+74.1
Monetary stock. mills. of dolls.	4,588	4,571	4,541	4,451	4,376	4,374	4,564	0	-4.2			
Silver:												
Production—												
United States. thous. of fine oz.	5,145	4,691	4,980	5,010	5,015	5,351	5,196	+6.7	+3.0	60,918	59,412	-2.5
Canada. thous. of fine oz.	2,388	2,023	1,696	1,739	1,723	1,514	1,459	-12.1	+3.8	21,255	20,761	-2.3
Mexico. thous. of fine oz.	9,372	7,909	8,273	8,300	8,300		8,559			98,291	99,944	+1.7
Stocks, end of month—												
United States. thous. of fine oz.	508	293	178	136	353	574	700	+62.6	-18.0			
Canada. thous. of fine oz.	624	761	494	567	608	1,141	1,300	+87.7	-12.2			
Imports. thous. of dolls.	4,856	4,992	5,069	5,102	3,770	6,305	5,151	+67.2	+22.4	69,596	55,073	-20.9
Exports. thous. of dolls.	5,590	6,627	5,945	5,634	7,186	6,692	7,388	-6.9	-9.4	92,257	75,624	-18.0
Price at New York. dolls. per fine oz.	.547	.554	.560	.575	.580	.571	.558	-1.5	+2.3			
<b>FOREIGN EXCHANGE RATES</b>												
Europe:												
England. dolls. per £ sterling	4.86	4.86	4.87	4.87	4.88	4.88	4.85	0	+6			
France. dolls. per franc	.039	.039	.039	.039	.039	.039	.040	0	-2.5			
Italy. dolls. per lira	.054	.054	.055	.055	.054	.053	.043	-1.9	+25.6			
Belgium. dolls. per franc	.139	.139	.139	.140	.140	.139	.139	-7	+7			
Netherlands. dolls. per guilder	.401	.401	.402	.404	.404	.403	.400	-2	+1.0			
Sweden. dolls. per krona	.268	.269	.269	.269	.270	.269	.267	-4	+1.1			
Switzerland. dolls. per franc	.193	.193	.193	.193	.193	.193	.193	0	0			
Asia:												
Japan. dolls. per yen	.473	.468	.466	.460	.462	.469	.488	+1.5	-5.3			
India. dolls. per rupee	.361	.363	.364	.365	.367	.367	.364	0	+8			
America:												
Canada. dolls. per Canadian doll.	.999	1.001	1.001	1.001	.999	.998	.998	-1	0			
Argentina. dolls. per gold peso	.968	.971	.972	.971	.972	.971	.939	-1	+3.4			
Brazil. dolls. per milreis	.118	.119	.119	.119	.120	.120	.117	0	+2.6			
Chile. dolls. per paper peso	.120	.121	.122	.122	.122	.122	.120	0	+1.7			

<sup>1</sup> Quarter ending in month indicated.<sup>2</sup> Quarter ending December 31, 1925.<sup>3</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through December except where otherwise noted. Earlier data for items shown here may be found on pages 24 to 138 of the February, 1928, "Survey"	1927					1928	1927	PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JANUARY 1 THROUGH DECEMBER 31		Per ct. increase (+) or decrease (-) cumulative 1927 from 1926
	August	September	October	November	December	January	January	Jan., 1928, from Dec., 1927	Jan., 1928, from Jan., 1927	1926	1927	
	<b>U. S. FOREIGN TRADE</b>											
<b>Imports</b>												
Grand total.....thous. of dolls..	368,820	342,154	4355,744	4344,267	331,236	337,612	4356,841	+1.9	-5.4	4,430,888	4,184,694	-5.6
By grand divisions:												
Europe—												
Total.....thous. of dolls..	4110,169	4113,446	4123,659	4115,910	103,383		4100,140			1,285,864	1,276,282	-0.7
France.....thous. of dolls..	14,729	15,923	418,297	415,460	13,224		12,572			162,021	167,808	+10.4
Germany.....thous. of dolls..	17,837	20,162	420,846	18,401	15,511		415,908			198,493	200,554	+1.0
Italy.....thous. of dolls..	8,578	8,585	411,369	10,697	8,727		9,011			100,526	108,925	+8.4
United Kingdom.....thous. of dolls..	433,038	29,721	433,119	433,841	29,063		421,423			383,197	357,929	-6.6
North America—												
Total.....thous. of dolls..	82,865	77,784	484,752	481,578	76,485		471,993			1,011,571	985,458	-2.6
Canada.....thous. of dolls..	39,973	41,902	444,670	445,113	40,553		437,563			475,880	475,077	-0.2
South America—												
Total.....thous. of dolls..	46,401	38,293	443,268	444,945	47,529		445,007			567,979	518,275	-8.8
Argentina.....thous. of dolls..	9,694	10,017	8,536	48,296	6,413		47,542			89,059	97,240	+9.2
Asia and Oceania—												
Total.....thous. of dolls..	4123,707	105,979	498,994	495,704	93,565		4128,911			1,469,051	1,311,424	-10.7
Japan.....thous. of dolls..	47,482	35,369	33,973	25,639	34,229		437,185			400,696	402,105	+0.4
Africa, total.....thous. of dolls..	45,677	6,651	5,071	6,129	10,275		10,790			96,421	93,255	-3.3
By classes of commodities:												
Crude materials.....thous. of dolls..	144,232	130,660	4119,220	4118,394	122,507	133,226	4153,113	+8.7	-13.0	1,792,862	1,601,649	-10.7
Foodstuffs, crude, and food animals.....thous. of dolls..	42,656	33,190	444,194	449,145	51,504	48,302	444,081	-6.2	+9.6	539,757	504,571	-6.5
Manufactured foodstuffs.....thous. of dolls..	35,471	33,016	441,347	436,123	28,227	28,723	426,947	+1.8	+6.6	417,513	450,595	+7.9
Semimanufactures.....thous. of dolls..	66,691	63,094	467,807	460,091	59,037	61,059	465,974	+3.4	-7.4	804,285	749,597	-6.8
Finished manufactures.....thous. of dolls..	79,770	82,194	483,173	480,512	69,960	66,303	466,726	-5.2	-6.6	876,471	878,280	+0.2
<b>Exports</b>												
Grand total, including reexports.....thous. of dolls..	4374,751	4425,267	4488,643	4461,018	407,617	411,000	4419,402	+0.8	-2.0	4,808,660	4,865,400	+1.2
By grand division:												
Europe—												
Total.....thous. of dolls..	168,282	4211,728	4254,462	4241,169	207,088		4211,038			2,310,144	2,313,747	+0.2
France.....thous. of dolls..	14,403	421,084	29,050	423,542	23,127		420,302			264,004	228,757	-13.4
Germany.....thous. of dolls..	30,239	451,855	62,637	458,657	43,843		440,257			364,162	481,678	+32.3
Italy.....thous. of dolls..	9,332	8,169	14,494	414,926	15,907		13,238			157,402	131,651	-16.4
United Kingdom.....thous. of dolls..	57,670	472,463	489,958	479,197	72,498		489,819			972,606	840,058	-13.6
North America—												
Total.....thous. of dolls..	4109,058	4118,505	4114,543	4106,391	90,748		488,054			1,176,482	1,253,015	+6.5
Canada.....thous. of dolls..	475,241	485,725	480,681	469,991	56,708		450,718			738,568	836,514	+13.3
South America—												
Total.....thous. of dolls..	38,391	433,884	432,719	439,725	37,396		444,584			443,507	438,182	-1.2
Argentina.....thous. of dolls..	15,678	12,976	13,640	415,381	15,025		15,355			143,575	163,486	+13.9
Asia and Oceania—												
Total.....thous. of dolls..	50,492	452,903	477,031	464,726	61,923		466,046			777,258	753,365	-3.1
Japan.....thous. of dolls..	12,199	17,923	33,711	427,814	23,212		22,700			260,754	257,582	-1.2
Africa, total.....thous. of dolls..	8,527	8,247	49,898	49,007	10,462		49,680			101,279	107,087	+5.7
Total domestic exports only.....thous. of dolls..	367,575	4416,472	4480,428	4452,868	398,344	401,545	4411,649	+0.8	-2.5	4,711,721	4,758,893	+1.0
By classes of commodities:												
Crude materials.....thous. of dolls..	55,135	4102,145	4160,282	4145,889	117,574	112,062	4122,510	-4.7	-8.5	1,261,323	1,192,784	-5.4
Foodstuffs, crude, and food animals.....thous. of dolls..	46,770	69,429	62,425	46,723	23,303	18,077	24,406	-22.4	-25.9	335,062	421,107	+25.7
Manufactured foodstuffs.....thous. of dolls..	34,160	38,562	45,643	442,398	42,057	43,296	441,016	+2.9	+5.6	503,005	463,304	-7.9
Semimanufactures.....thous. of dolls..	59,786	454,791	455,001	456,140	59,612	63,846	461,339	+7.1	+4.1	655,547	699,837	+6.8
Finished manufactures.....thous. of dolls..	171,724	4151,545	4157,077	4161,722	155,798	164,265	4162,379	+5.4	+1.2	1,956,784	1,981,866	+1.3
Agricultural exports (quantities):												
All commodities.....rel. to 1910-14..	94	142	185	161	119	113	150	-5.0	-24.7			
All commodities except cotton.....rel. to 1910-14..	155	211	218	187	133	127	140	-4.5	-9.3			
<b>CANADIAN FOREIGN TRADE</b>												
Total trade:												
Imports.....thous. of dolls..	99,348	91,803	93,936	94,312	83,263	79,605	78,806	-4.5	+0.9	1,008,342	1,087,178	+7.8
Exports.....thous. of dolls..	95,955	99,335	105,821	155,521	132,189	84,428	85,266	-36.1	-1.0	1,283,940	1,238,782	-3.5

\* Revised.

## PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

Recent publications of the Department of Commerce having the most direct interest to readers of the *SURVEY OF CURRENT BUSINESS* are listed below. A complete list may be obtained by addressing the Division of Publications, Department of Commerce, at Washington. Copies of the publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, at the prices stated. If no price is mentioned, the publication is distributed free.

### OFFICE OF THE SECRETARY

**City Planning Primer**, by Advisory Committee on Zoning appointed by Secretary Hoover. iv+18 pages. States the advantages derived by every community from intelligent city planning and gives suggestions as to the things to be considered in such planning. Price, 5¢.

**Radio Service Bulletin, January, 1928.**—34 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains lists of radio stations and references to current radio literature. Single copies, 5¢; annual subscription, 25¢.

**Services Available to Chemical Industry Through United States Department of Commerce.**—ii+33 pages, 4 illustrations. The service rendered by the various bureaus of the Commerce Department to the chemical industry are outlined.

### BUREAU OF THE CENSUS

(For information concerning plan of publication and distribution of census publications, address the Director of the Census)

**Census of Agriculture, 1925: Part II, The Southern States.**—This publication presents statistics concerning farms and farm property, livestock, crops, etc., for the United States as a whole, distributed by States, and detailed county statistics for the Southern States. 1,328 pages, cloth bound, price \$1.75.

### BUREAU OF FOREIGN AND DOMESTIC COMMERCE

(The publications of this bureau may also be purchased from the bureau or its district offices)

**Monthly Summary of Foreign Commerce of United States, December, 1927.**—Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for December, 1926 and 1927, and for 12 months ended December, 1926 and 1927. Part II contains summaries of export and import trade; monthly average import and export prices; statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10¢; Part II, 5¢. Annual subscription, \$1.25.

**Trade Association Activities**, by Irving S. Paull, J. W. Millard, and James S. Taylor. Domestic Commerce Series No. 20; viii+381 pages. Study of the methods of organization of trade associations, showing scope and value of the activities of each association, and the relations of such associations with Government departments and offices. An appendix contains excerpts from reports of Attorneys General relating to prosecutions under the Sherman antitrust law. A bibliography is included. Price, 75¢.

**Standard Specifications for Structural Steel for Locomotives.**—Industrial Standards No. 210; serial designation A 10-24; 18 pages, 4 illustrations. Portuguese-English edition prepared in cooperation with the Bureau of Standards. Price, 5¢.

**Irish Free State as Market for Electrical Machinery and Supplies**, by Julian F. Harrington, American vice consul, Dublin. Trade Information Bulletin No. 531; ii+24 pages. Shows the amount of electricity generated and consumed for power, lighting, transportation, and communications in Irish Free State; and marketing methods employed for electrical appliances. Information is given regarding patent and trademark registration and advertising mediums. Price, 10¢.

**Marketing of Crude Rubber, with Trade Statistics**, by E. G. Holt. Trade Promotion Series No. 55; xvi+257 pages, 12 illustrations. Survey of rubber resources of producing countries of the world, marketing methods and exports, restriction on production in British areas of the Far East, markets for crude product in Europe and United States, rubber trade associations, and statistics regarding rubber consumption. Price, 45¢.

**Trading Under Laws of Porto Rico**, by Joaquin Servera. Trade Promotion Series No. 58; iv+44 pages. Presents an outline and brief discussion of commercial and taxation laws of Porto Rico. Price, 10¢.

### BUREAU OF STANDARDS

#### Simplified Practice Recommendations:

- No. 17. Forged Tools. vi+24 pages, 9 illustrations. Price, 5¢.
- No. 48. Shovels, Spades, and Scoops. ii+16 pages, 1 illustration. Price, 5¢.
- No. 60. Packing of Carriage, Machine, and Lag Bolts. vi+18 pages, 1 illustration. Price, 5¢.
- No. 63. Metal Spools for Annealing, Handling, and Shipping Wire. vi+12 pages, 1 illustration. Price, 5¢.

**Light Metals and Alloys, Aluminum, Magnesium.**—Circular No. 346; iv+403 pages, 73 illustrations, 6 pages of plates. This circular supersedes No. 76 on the same subject and deals with the physical and mechanical properties of aluminum and magnesium and of their alloys. Price, \$1.10.

**Physical Properties of Principal Commercial Limestones Used for Building Construction in United States**, by D. W. Kessler and W. H. Sligh. Technologic Paper No. 349. (From Technologic Papers, vol. 21, pp. 497-590, 25 illustrations.) Tests made by the Bureau of Standards to determine the strength and elasticity of limestones used for building purposes. Price 30¢.

**Technical News Bulletin, January, 1928.**—12 pages, monthly. Contains items describing laboratory activities of Bureau and a list of pamphlets issued during preceding month. Annual subscription, 25¢.

**United States Government Master Specification for Lamps Electric, Incandescent, Large, Tungsten, Filament.** Circular No. 13; 12 pages. Price, 5¢.

**1928 Supplement to Circular No. 13.** 4 pages. Price, 5¢.

### BUREAU OF FISHERIES

**Fishery Industries of United States, 1926**, by Oscar E. Sette. Document No. 1025. (Appendix V to the report of the U. S. Commissioner of Fisheries for 1927, pp. 337-483.) Price, 25¢.

**Trade in Fresh and Frozen Fishery Products and Related Marketing Considerations in Greater St. Louis, Mo.**, by R. H. Fieldler. Document No. 1026. (Appendix VI to the report of the U. S. Commissioner of Fisheries for 1927, pp. 485-514, 2 illustrations.) Price, 10¢.

**Progress in Biological Inquiries, 1926, Including Proceedings of Divisional Conference, January 4 to 7, 1927**, by Elmer Higgins. Document No. 1029. (Appendix VII to the report of the U. S. Commissioner of Fisheries for 1927, pp. 517-681, 18 illustrations.) Statement of the results of investigations conducted by the Fisheries Bureau, with a report on the proceedings of the first conference of the investigators of the division of inquiry. Price, 25¢.

### BUREAU OF MINES

**Descriptive List of Motion Picture Films of U. S. Bureau of Mines**, by M. F. Leopold and R. A. Wood. ii+20 pages. Contains an annotated list of motion-picture films produced by the Bureau of Mines and loaned for educational purposes.

**Mineral Resources of United States, 1926.** The reports on mineral resources are issued in the form of separate bulletins, of which the following have been released since the February announcement and may be obtained at the price indicated:

- Anthracite in 1926. (Pt. II, pp. 1-39.) Price, 10¢.
- Gold, Silver, Copper, Lead, and Zinc in California and Oregon in 1926. (Pt. I, pp. 297-353.) Price, 10¢.
- Lead in 1926. (Pt. I, pp. 355-370.) Price, 5¢.
- Rare Metals: Cobalt, Molybdenum, Nickel, Tantalum, Titanium, Tungsten, Radium, Uranium, and Vanadium in 1926. (Pt. I, pp. 249-274.) Price, 5¢.
- Sand and Gravel in 1926. (Pt. II, pp. 281-293.) Price, 5¢.
- Secondary Metals in 1926. (Pt. I, pp. 275-295.) Price, 5¢.

### BUREAU OF NAVIGATION

**American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over, January, 1928.** ii+64 pages. Published monthly. Single copies, 10¢; annual subscription, 75¢.

### LIGHTHOUSE SERVICE

**Light List, Atlantic and Gulf Coasts of the United States, 1928** (corrected to December 15, 1927). 520 pages. This list describes all aids to navigation maintained by the United States on the Atlantic and Gulf coasts, in Porto Rico, Virgin Islands, and Cuba. Price, 50¢.

### PATENT OFFICE

**Index of Patents Issued from United States Patent Office, 1927.** 1019 pages. Contains alphabetical lists of patentees and inventions and of disclaimers. Price, \$1.

**Index of Trade-Marks Issued from United States Patent Office, 1927.** 735 pages. Contains alphabetical lists of registrants, applicants for registration, and titles of trade-marks, labels, and prints. Price, 50¢.

# Trade Association Activities

A NEW PUBLICATION OF THE  
DEPARTMENT OF COMMERCE

A COMPREHENSIVE SURVEY OF THE ACTIVITIES AND ACCOMPLISHMENTS OF MORE THAN 400 TRADE ASSOCIATIONS

This cross section of cooperation in American commerce and industry reveals the details of organization and financing and the major activities and achievements of the principal organizations in each industry. Major activities are illustrated with details from actual practice

## A Practical Handbook for Trade Secretaries

### TABLE OF CONTENTS

Foreword by Herbert Hoover

Chapter 1. Introduction

Chapter 2. How Trade Associations are Organized and Financed

#### FUNCTIONAL ACTIVITIES

Chap.

3. Statistics
4. Legal Aspects of Statistical Activities
5. Cost Accounting
6. Industrial and Commercial Research
7. Simplified Practice
8. Industrial Standardization
9. Public Relations—Cooperative Advertising
10. Trade Relations—Arbitration
11. Credit and Insurance Departments
12. Employer-Employee Relations
13. Traffic and Transportation Service

#### INDUSTRIAL ORGANIZATION

Chap.

14. Construction Industries
15. Railways and Public Utilities
16. Automobiles, Airplanes, and Highways
17. Mining and Oil Industries
18. Metals and Machinery
19. Miscellaneous Manufacturing Industries
20. Textiles and Clothing
21. Farm Products
22. Wholesale and Retail Trade
23. Banking and Insurance
24. Technical, Auxiliary, and Special Purpose Groups

Appendix I Government Relations

II Excerpts from Reports of Attorneys General

III Bibliography

ISSUED AS DOMESTIC COMMERCE SERIES NO. 20

Bound in buckram, 380 pages. Copies may be obtained for 75 cents from  
Superintendent of Documents, Government Printing Office, Washington, D. C.

Or any of the following branch offices of the Department of Commerce:

ATLANTA: 538 Post Office Building  
BALTIMORE: 22 Light Street  
BOSTON: 1891 Customhouse  
CHATTANOOGA: 1391 Market Street  
CHICAGO: Room 845, 33 S. Clark Street  
CINCINNATI: Chamber of Commerce  
CLEVELAND: Chamber of Commerce  
DES MOINES: 121 Federal Building  
DETROIT: 607 Free Press Building  
GALVESTON: 309 Post Office Building

HOUSTON: Chamber of Commerce Building  
JACKSONVILLE: Greenleaf Crosby Building  
KANSAS CITY: Athletic Club Building  
LOS ANGELES: 1163 S. Broadway  
LOUISVILLE: Board of Trade Building  
MEMPHIS: Chamber of Commerce Building  
MINNEAPOLIS: 213 Federal Building  
MOBILE: Meaher Building  
NEWARK: Chamber of Commerce  
NEW ORLEANS: 322 Post Office Building

NEW YORK: 734 Customhouse  
NORFOLK: 406 East Plume Street  
PHILADELPHIA: Room 812, 20 S. Fifteenth Street  
PORTLAND, OREG.: 215 New Post Office Building  
ROCHESTER: Chamber of Commerce  
ST. LOUIS: 1201 Liberty Central Trust Co. Building  
SAN FRANCISCO: 310 Customhouse  
SEATTLE: 820 Skinner Building  
WILMINGTON, DEL.: Du Pont Building