UNITED STATES DEPARTMENT OF COMMERCE

WASHINGTON

SURVEY OF CURRENT BUSINESS

DECEMBER, 1928

No. 88



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 August, 1928, 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. The figures reported 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.

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 August, 1928, issue). In the intervening months the more important comparisons only are given in the table entitled "Trend of busi-

ness 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.

RELATIVE AND INDEX 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. The monthly average for 1923-1925 has usually been used as a base equal to 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 movement 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.

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 most 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 bot-tom 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 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.

METHODS OF USE

Methods of using and interpreting current business statistics have been collected by the department from many business concerns and are described in a booklet entitled "How to Use Current Business Statistics," together with methods of collecting statistics. This booklet may be obtained from the Superintendent of Documents, Government Printing Office, Washington D. C., at 15 cents per copy. (Do not send stamps.)

This issue presents practically complete data for the month of October and contains text covering the early weeks of November (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.



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December, 1928

CONTENTS

SUMMARIES	Page	INDEX BY SUBJECTS	Text page	Table page
Preliminary summary for November	1	Textiles	9	22
Business conditions in October	4	Metals and metal products	10	24
Monthly business indicators (table and chart)	2, 3	Fuels	11	28
Wholesale prices (table and charts)	6, 7	Automobiles and rubber	11	27, 29
Indexes of business	17	Hides and leather	11	30
Automobiles, building, mining, manufacturing (charts)	8	Paper and printing	-	31
Electric power, transportation (charts)	8	Building construction and housing	12	32
		Lumber products	12	32
		Stone, clay, and glass products	12	34
NEW DETAILED TABLES	į	Chemicals and oils		35
		Foodstuffs and tobacco	13	37, 40
Census of manufactures, 1927	18	Transportation and public utilities	14	41
Industrial activity as shown by consumption of elec-		Employment and wages	5	42
trical energy	19, 20	Distribution movement (trade, etc.)	14	43
Magazine advertising	20	Banking, finance, and insurance	14	44
Floor and wall tile	21	Foreign exchange and trade	14	47

PRELIMINARY SUMMARY FOR NOVEMBER

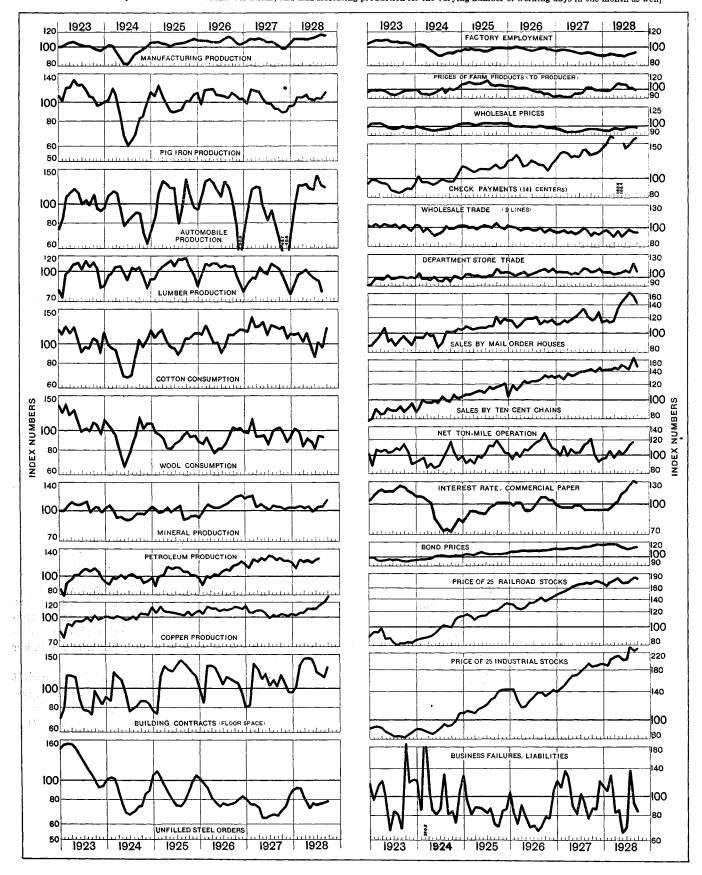
The volume of trade during the early weeks of November, as reflected by check payments, was greater than in the corresponding period of 1927. Activity in steel plants was on a higher scale than in either the previous month or the same month a year earlier. The value of new building contracts awarded during the first weeks of the month was slightly lower than in the same period a year ago. Employment in Detroit factories, measuring in large degree the activity in the automobile industry, showed some recession from the previous month but was considerably higher than a year ago.

Loans and discounts of Federal reserve member banks were somewhat higher than in the previous month, showing an advance over the same month of last year, as well. Interest rates on time money showed very little change from the previous month but were higher than last year. Call-loan rates averaged lower than in October but were higher than a year ago. Stock prices continued to average higher, while bond prices, which showed a slight advance from the previous month, were lower than a year ago, reflecting the effect of higher interest rates. Brokers' loans reached a new high point during November. The Federal reserve ratio showed only slight change from the previous month but was lower than a year ago.

The wholesale price index averaged somewhat lower than in October, but was still above the level which prevailed in November of last year. Prices for wheat averaged lower than a year ago. Cotton prices averaged higher than in October but were lower than for the corresponding month a year earlier. Iron and steel prices continued to recover and were slightly higher than during the same period of the preceding year. Copper prices averaged higher than in either the previous month or November a year ago. Business failures were approximately the same as in November of last year.

MONTHLY BUSINESS INDICATORS, 1923-1928

[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 manufacturing production for the varying number of working days in the month as well]



MONTHLY BUSINESS INDICATORS

The principal business indicators are shown below, all calculated on a comparable basis, the average for the years 1923 to 1925, inclusive. Thus the table gives a bird's-eye view of the business situation in a concise form, so that trends of the principal indicators may be seen at a glance.

Certain indicators, in which there is a marked seasonal movement, are shown with the average seasonal variations eliminated, as noted below. In this manner a more understanding month-to-month comparison may be made.

	MO	NTH	LY A	VERA	GE			1927							1	928				
ITEM	1923	1924	1925	1926	1927	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	Mar	Apr.	Мау	June	July	Aug.	Sept	Oct
							1:	923-1	.925 n	nonth	ly ave	age=	100							
Industrial production:															ĺ					
* Total manufacturing								102.0						ſ		(1			114.0
Total minerals	105.0			1	1			105.0	1			103. 0	i i					1		114.0
Pig iron					'			93. 2	t t	1		97. 1		l		1		1	1	112 9
Steel ingots				,	104.6		, ,	95. 9						124.5	l .		Į.	1		134 5
Automobiles	101. 5 92. 1			1			, ,	66. 5				98. 1	1	1			i	1		120. 7 141. 1
Lumber (5 species)					1			138. 2 101. 5			78, 6 75, 8					ł	1	1		141. 1
Cotton (consumption)								119.4	121. 9						1	1		í		120. 6
Wool (consumption)	112.8				1			103. 7	1	1	95. 2				1	1	•		1	108. 6
Raw material output:	}																			
Animal products		l .	1	1			, ,	95. 0		, ,	96. 0		í			1	ŧ	1	1	102. 0
Crops		1		1			1 I	219. 0		1		81.0	;		l		l	1		251.0
Forest products			i		,		1 1	96.0							ł					84. 0
Crude petroleum	99. 4			104. 6				126. 3	-		117.8					1	l			129, 8 115, 4
Bituminous coal	108. 0 93. 4		l .	Į.	99. 4 104. 9	95. 7 102. 0		101. 0 106. 1		94. 8 101. 9		94. 9 102. 2		73, 9 105. 7	1				1	115. 4 130. 1
Power and construction:	ļ																			
Electric power Building contracts (37 States)	92. 5 89. 7						1		137. 1 105. 2	143. 8 95. 2						139. 8 142. 2		1		157. 5 129 1
Unfilled orders:																				
General index	121.7	87. 0	91. 3	84. 6	74.0	71. 5	69. 9	67. 0	67. 1	71. 5	81. 2	81.6	81.4	76.8	73.9	75. 2	77. 1	74.7	74.7	73 1
U. S. Steel Corporation		l .	1		1										71.6)	73 6
Stocks:																				
General index		í	1			108. 7					129.0				1	2	l	1	,	131. 6
Manfd. commodities (28)		1					1 1		110.7						ĺ	119.0	ľ	1		107. 6
Cotton Copper (refined)		l .	(179 3 74. I							96. 7 58. 6	1		1	1	155. 1 40. 3
Employment:																				
Factories	106, 6	96. 3	97. 2	98. 0	94 3	93. 2	93. 8	93. 4	91 6	90. 7	89. 8	91. 2	91.8	91.4	91. 2	91.3	90. 3	91. 7	93. 1	93 9
Prices:			1																	
Farm products, to producers		1	1		1						99.3				Į	1		J	3	
Wholesale, all commodities	99. 7	1	1		1 .	94. 4	: 1	96. 1		95. 9		95. 5				1		7	1	1
Retail food		1	1		103. 6 99. 9			104.3 99.9							1	1			1	104 8 99 3
Distribution (values):	BG. 1	00.0	102.5	102. 5	35.5	80.	80.0	90.0	96. 7	33. 3	35. 2	JO. 2	80.1	31.0	80. 1	00.0	<i>83.</i> 0	30.0	30.0	5 5 0
* Bank debits, 141 cities	91. 2	96.7	111.9	119. 6	132. 5	137. 6	141.0	130. 7	132. 1	136. 9	142. 1	149. 6	164.8	161.8	168. 8	165. 4	140. 4	149. 9	156. 9	161 0
Wholesale trade			,		1			91.0	r .			97. 0		1	96. 2		93. 7	ì	1	1
Department stores, sales		99.0	103. 0	106.0	106.0	111.0	109. 0	105.0	107 0	111.6	105.0	105.0	105.0	103.0	104.0	104.0			120.0	105. 0
 Mail-order houses, sales 				115.0					119. 0						l			160. 0	ł	140.0
• 10-cent chains, sales	88. 0		113. 0				141. 0	144. 0	140 0	147. 0	140. 0	142. 0	142.0	147.0	144.0	153.0	148.0	144. 0	1	148 0
ImportsExports	97. 8 91. 5		109. 0 107. 8		ì						104. 6 108. 2							107. 3		110. 0 146. 2
Transportation:				100												*.				-
• Car loadings	99.8	97. 6	102. 8	106. 8	104.0	103. 3	130.0	80.9	95. 2	96.8	98.0	101.8	129, 0	83.0	106.4	127.0	82. 0	102.9	132. 4	85 2
Freight, net ton-miles			101.9				115. 1		1	l						100.0		113.6		
Finance:			ļ						İ				(Ì			
Member bank loans and discounts.			107. 4		117. 3		119. 3			l	2		4	1	1	128. 4				128 3
Interest rate (commercial paper)			1		•	92.8		92. 8	i	•				101.6	1	1		•		127. 6
Federal reserve ratio			1	1					1 .											87 0
Price, corporation bonds		1		108.0	l .						115.9					112.3				111 3
Price, railroad stocks		į.	117. 9	l .)		171. 5		171.6				ı	176.0			1	1		176.4
Price, industrial stocks		(l .	1				190.0					210, 4	ļ.		1			234. 5
Failures (liabilities)	106. 0	106. 8	87. 2	80 4	102. 8	92. 4	77. 3	85. 5	85.3	120. 9	112.3	106.3	129.3	82. 5	85, 2	66.0	69.8	137. 3	80.1	82. 5

[•] Seasonal adjustments.

BUSINESS CONDITIONS IN OCTOBER

PRODUCTION

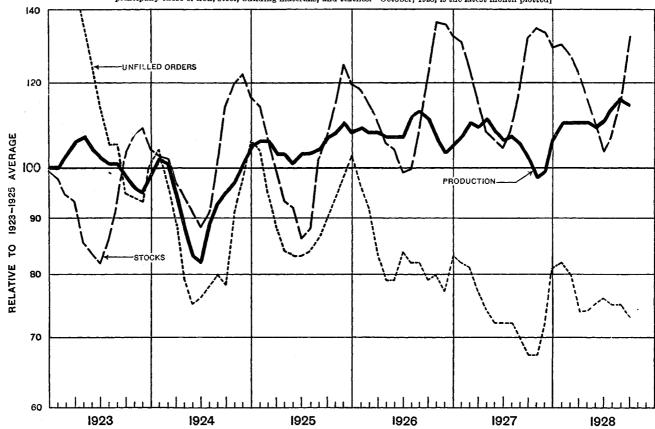
Industrial production during October, according to the weighted index of the Federal Reserve Board, after adjustments for seasonal variations, remained unchanged from the previous month, each being higher than at any other time on record. The principal gains over a year ago occurred in the output of automobiles, rubber tires, iron and steel, and cement, brick, and glass, while a decline from last year was registered in the output of textiles, lumber, and leather. Mineral production, after adjustment for seasonal conditions,

compared with a year ago, iron and steel and lumber showed larger unfilled orders, while textiles declined.

Wholesale trade in September, after adjustments for seasonal changes showed larger dollar sales than in either the preceding month or the corresponding period a year earlier, declines from September in meat, dry goods, men's clothing, and boots and shoes being more than offset by increases in other lines. Compared with a year ago only the boot and shoe industry declined, while the dry goods industry remained stationary. The greatest gain from October, 1927, in wholesale

PRODUCTION, STOCKS, AND UNFILLED ORDERS FOR MANUFACTURED COMMODITIES

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



showed gains over both the previous month and October of last year, the principal increase over last year occurring in copper.

COMMODITY STOCKS

Stocks of commodities held at the end of October were higher than at the end of the previous month, but showed a decline from a year ago, due to a decrease in stocks of manufactured goods. Contrasted with the preceding month, stocks of manufactured goods were smaller, while raw materials were larger.

SALES

The general index of unfilled orders was slightly lower than for the previous month and October of last year. Compared with September, unfilled orders for textiles and transportation equipment were larger but forward business on the books of lumber mills declined. As trade was recorded by the men's clothing, women's clothing, and furniture lines.

Sales by department stores showed substantial gains over both the previous month and October of last year. Merchandise stocks held by department stores at the end of the month were smaller than a year ago. Sales by mail-order houses were substantially larger than in either the preceding month or October, 1927. The volume of business transacted by 10-cent chains was also greater than in either the previous month or the same period a year earlier. Grocery, clothing, drug, cigar, and candy chains showed larger dollar volumes than in September, while shoe sales in chain stores declined. Cigar chains were the only type of chain stores to show a decline from a year ago in sales, substantial gains from October, 1927, being recorded by grocery, wearing apparel, drug, candy, and shoe stores.

PRICES

Wholesale prices, although lower than in September, averaged slightly above those of September, 1927. Few changes from the previous month occurred in the major groups, prices of farm products, foods, hides and leather showing declines, while chemicals advanced and the remaining groups were unchanged. Compared with a year ago, no substantial changes took place. Foods, hides and leather, fuel and lighting, metals and building materials registered small increases, while farm products, textiles, chemicals, house-furnishing goods, and miscellaneous products declined. Classified by State of manufacture, production declined from the previous month with the exception of semimanu-

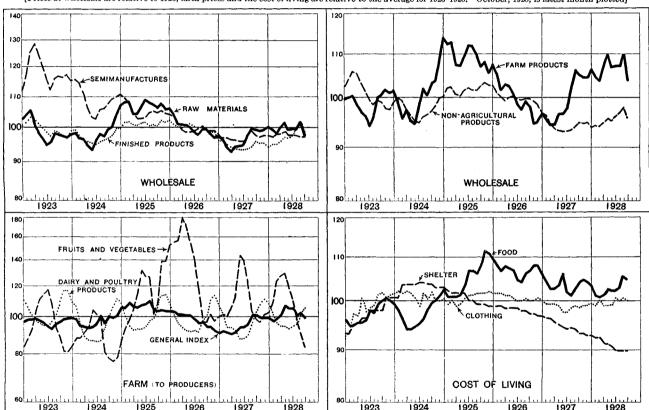
unchanged. Increases from a year ago in prices for food and clothing were insufficient to offset declines in the other items comprising the cost of living.

EMPLOYMENT

The general index of factory employment showed a small gain over both the previous month and the corresponding month of last year. This index moreover does not include any of the new industries, such as aircraft, radio, rayon, etc., where employment conditions are known to be good. Compared with the previous month, most industries for which data are available showed either an increase or no change, declines occurring only in the leather, stone, clay, and glass, and vehicle industries. Many industries re-

PRICE COMPARISONS

[Prices at wholesale are relative to 1926; farm prices and the cost of living are relative to the average for 1923-1925. October, 1928, is latest month plotted]



factured articles, which showed no change. Finished products and nonagricultural commodities showed increases over October, 1927, while raw materials and semimanufactured articles declined.

The index of prices received by farmers for their produce was lower in October than for either the previous month or for the corresponding month of last year, the only classes to show an increase from September being dairy and poultry goods and cotton and cottonseed, while meat animals and dairy and poultry were the only classes to increase as compared with October, 1927.

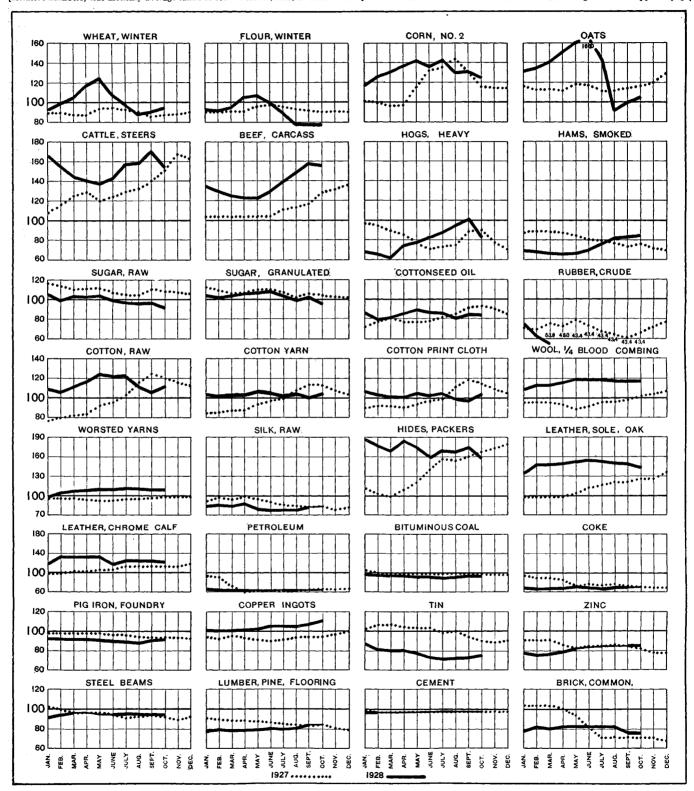
The cost of living index showed no change from September but was slightly less than a year ago. Compared with last month, the cost of living was unchanged, while that of food and clothing showed slight declines, the cost of shelter, light, and sundries remaining

corded decreases in the number employed as compared with a year ago. Marked advances in employment conditions in the vehicle, nonferrous metals, iron and steel, and chemical industries, however, more than offset decreases in other lines.

Factory pay-roll payments in October showed a substantial gain over the previous month and over the corresponding month of last year. All industrial groups except leather showed larger payments than in September. The principal increases in wage payments over the previous month were recorded by iron, steel, and nonferrous metal establishments. Contrasted with October, 1927, increased pay rolls in vehicle, nonferrous metal, chemical, paper, and food products industries were more than sufficient to offset declines in wage payments by textile, lumber, leather, tobacco, stone, clay, and glass, and miscellaneous plants.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. October, 1928, is latest month plotted. Data from which these charts are drawn are given on the opposite page]



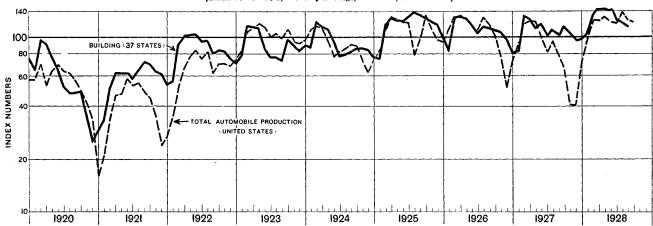
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

* Nors.—Prices to producer on farm products and market price of wool are from U. S. Department of Agriculture, Bureau of Agricultural Economics, nonferrous metals from the Engineering and Mining Journal-Press, except tin, which is from the American Metal Market. All other prices are from U. S. Department of Labor, Bureau of Labor Statistics. So far as possible all quotations represent prices to producer or at mill.

		A	CTUAL PRIC (dollars)	2		RE	LATIVE PE	HCB	
COMMODITIES	Unit		(4011413)			1926	average -	- 100	
		Septem- ber, 1928	October, 1928	October, 1927	August, 1928	Septem- ber, 1928	October, 1928	Septem- ber, 1927	
ARM PRODUCTS-AVERAGE PRICE TO PRODUCER									
heat	Bushel	0. 944 . 951	0. 987 . 847	1. 137 . 876	71 141	70 136	73 121	88 136	1:
otatoes,	Bushel	. 648	. 580	. 979	39	35	31	58	
ottonottonseed	Ton	. 176 30. 98	. 181 34, 08	. 200 36, 60	125 136	117 114	120 125	149 127	1
attle, beef	Pound	. 0996	. 0963	.0755	147	154	149	115	î
ogsambs	Pound	.1117	. 0955 . 1157	. 1016 . 1122	85 103	95 103	81 100	83 96	
FARM PRODUCTS-MARKET PRICE									
heat, No. 1, northern spring (Minneapolis)	Bushel	1. 201 1. 395	1. 185	1. 275 1. 344	78 86	78 91	77 93	85 85	
heat, No. 2, red, winter (Chicago)orn, contract grade No. 2, cash (Chicago)	Bushel	. 993	1. 436 . 937	. 878	128	131	124	131	:
ata contract grades cash (Chicago)	Bushel	. 425	. 448	. 498 . 823	91 105	99 97	104 89	114 120) :
arley, feeding (Chicago)	Th 1 1	. 998	1.053	. 999	103	105	110	102	
obacco, leaf, average sales, warehouse (Kentucky)	Cwt Pound	7. 871 . 185	12.077 .196	11. 331 . 211	137 110	93 105	143 112	184 125	
ool, 1/2 blood combing, Ohio and Pennsylvania fleeces (Boston)	Pound	. 54	. 54	. 47	117	117	117	98	
attle, steers, good to choice, corn fed (Chicago)	Cwt	16, 188 12, 431	14, 625	14. 325 11. 055	159	170	154 81	140	
ye, No. 2, cash (Chicago). bobaco, leaf, average sales, warshouse (Kentucky). otton, middling upland (New York). otl, ½ blood combing, Ohio and Pennsylvania fleeces (Boston) attle, steers, good to c.olce, corn fed (Chicago) ogs, heavy (Chicago) neep, awas (Chicago) neep, lambs (Chicago)	Cwt	5, 500	10. 030 5. 350	5, 250	95 87	101 83	81	88 79	
	Cwt	14. 156	13.075	13, 865	105	103	95	99	
FOOD	D1	0.700	0.410	F 091	-	7 0	ma.	0.4	
our, standard patents (Minneapolis)	Barrel Barrel	6, 588 5, 650	6, 410 5, 588	7, 231 6, 535	79 78	78 78	76 77	84 92	
gar, 96° centrifugal (New York) gar, granulated, in barrels (New York)	Pound	. 042	. 039	. 047	95	97	91	110	
igar, granulated, in barrels (New York)	Pound	. 056	.052	. 057	100 80	102 84	94 83	106 91	
sef, fresh, carcass, good native steers (Chicago)	Pound	. 259	. 255	. 210	149	158	155	116	
sef, fresh, carcass, steers (New York)	Pound Pound	. 284	. 282 . 260	. 225 . 233	152 81	166 83	165 84	125 73	
ork, smoked hams (Chicago) utter, creamery, 92 score (New York) leomargarine, standard, uncolored (Chicago)	Pound	.49	. 48	. 48	104	109	107	102	:
	Pound	. 220	. 235	. 245	94	96	103	105	
TEXTILES	_								
otton yarns, carded, white, northern, mulespun, 22-1.cones (Boston). otton-print cloth, 64 x 60-381/4"-5.35—yards to pound otton sheeting, brown 4/4 Trion (New York)	Pound Yard	. 358	.372 .078	. 402 . 087	103 99	100 98	104 103	113 119	
otton sheeting, brown 4/4 Trion (New York)	Yard	. 089	. 090	. 111	98	96	96	118	1
orsted yarns, 2/32's cross-bred stock, white, in skein (Boston) oman's dress goods, French, 39 inches at mills, serge	Pound Yard	1, 575 , 988	1, 575 , 975	1, 400 1, 000	112 99	110 96	110 94	96 94	
nitings, unfinished worsted—13-ounce, mill	Yard	2,008	2,008	1.913	100	100	100	95	
uitings, serge, 11-ounce, 56-58 inch	Yard Pound	1. 998 5. 096	1, 998 5, 145	2, 048 5, 145	92 78	92 82	92 83	95 82	
lk, Japan, 13-15osiery, women's, pure silk, mill	Dozen pair.	10. 290	10, 290	10, 780	85	82 85	85	89	
LEATHER									
ides, green salted, packers' heavy native steers (Chicago)	Pound Pound	. 246 . 275	. 219 . 246	. 233 . 218	168 159	175 159	$\frac{156}{142}$	160 121	
eather, chrome calf, dull or bright "B" grades (Boston)	Square foot	. 565	. 550	. 510	125	125	121	113	
ides, calfskins, No. 1, country, 8 to 15 pounds (Chicago) sather, chrome calf, dull or bright "B" grades (Boston) sather, sole, oak, scoured backs, heavy (Boston) oots and shoes, men's black calf, blucher (Massachusetts)	Pound Pair	. 650 6. 750	. 630 6. 750	. 550 6. 500	153 106	148 106	144 106	121 102	
oots and shoes, men's dress welt tan calf (St. Louis)	Pair	5, 000	5, 000	5, 000	102	102	102	102	
FUEL									
oal, bituminous, mine-run (composite price)	Net ton	4. 019 4. 495	4, 020 4, 639	4, 199 4, 932	93 92	93 94	93 97	99 105	
oal, anthracite, chestnut (composite price)	Long ton Short ton	13.040 2.875	13. 040 2. 910	13, 389 2, 906	93 70	94 95 70	95 71	97	
oke, Connellsville (range of prompt and future) furnace—at ovens troleum, crude, Kansas-Oklahoma—at wells	Barrel	1. 210	1, 210	1, 240	64	64	64	73 64	
METALS									
g iron, foundry No. 2, northern (Pittsburgh) g iron, basic, valley furnace	Long ton	18, 635 16, 188	18.860 17.100	19, 260 17, 000	89 86	90 87	92 92	93 92	
eel billets, Bessemer (Pittsburgh)	Long ton	32.000	32, 800	33, 000	91	91	91	94	
opper ingots, electrolytic, early delivery (New York)	Pound	.1472	. 1520 . 199	. 1296	105 101	107 102	110 105	94 96	
ead, pig, desilverized, for early delivery (New York)	Pound	.0645	. 0650	. 0625	74	77	77	75	
n, Straits (New York) nc, slab, western (St. Louis)	Pound Pound	. 4807 . 0625	. 4897 . 0625	. 5850	74 85	74 85	75 85	94 85	
BUILDING MATERIAL AND MISCELLANEOUS									
amber, pine, southern, yellow flooring, mill	M feet Thousand	37. 73 12. 50	37. 73 12. 50	37. 98 11. 75	81 82	84 76	84 76	83 71	
ement, Portland, net without bags to trade, f. o. b. plant (Chicago	Barrel	1, 600	1,600	1, 600	97	97	97	97	
district)				1.000	. 71	91	91	. 41	!
district)eel beams, mill (Pittsburgh)	Cwt.	1.850	1.850	1.800	95	95	95	93	
district)_ eel beams, mill (Pittsburgh)_ ubber, smoked sheets (New York)_ liphuric acid, 66° (New York)	Cwt Pound Ton			1.800 .343 15.200	95 40 107	95 38 107	95 39 107	93 70 103	

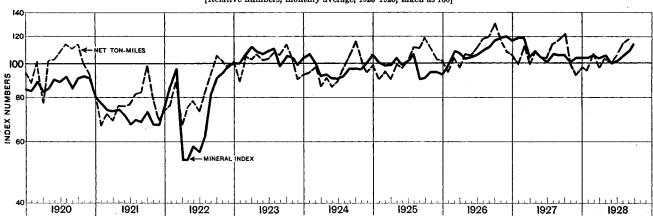
NEW BUILDING CONTRACTS AND AUTOMOBILE PRODUCTION

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



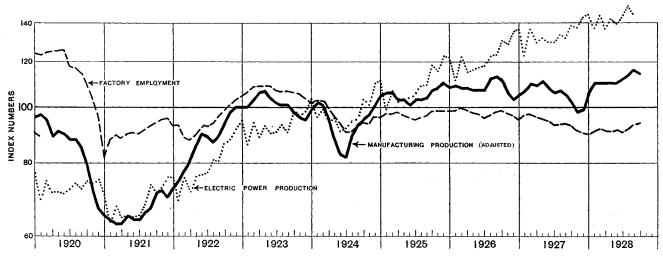
MINERAL PRODUCTION AND RAILROAD TON-MILEAGE

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



FACTORY EMPLOYMENT, MANUFACTURING, AND ELECTRIC-POWER PRODUCTION

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



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

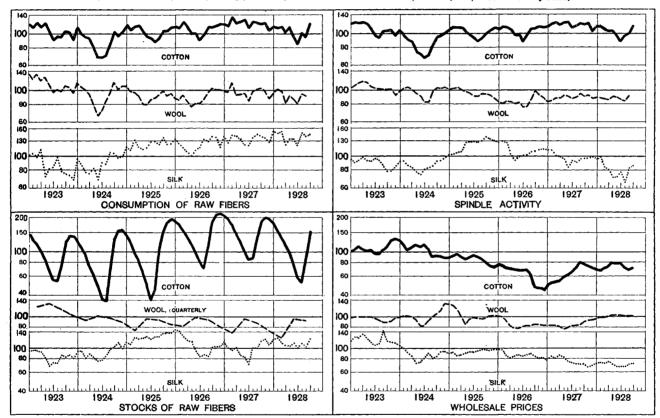
Wool imports were larger than in September but were slightly less than a year ago. Wool consumption was greater than in either September or in the corresponding month of last year. The prices for wool and woolens were generally higher than a year ago.

Cotton consumption by textile mills was larger than for either the preceding month or for October of last year. For the first 10 months of the year, however, the consumption of cotton was 13 per cent smaller of last year, while new orders exceeded those of either prior period. Prices of cotton goods showed a gain over September but were less than a year ago.

Silk imports were larger than for either the previous month or for October of last year. Silk deliveries also exceeded those of either prior period. Silk stocks held at warehouses were less and those at manufacturing plants greater than at the end of either prior period. More broad looms and less narrow looms were active than in September. The activity of silk spinning spindles exceeded that of the previous month but was

THE TEXTILE INDUSTRIES

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



than for the corresponding period of 1927. Stocks of cotton held at the end of October, both at mills and in public storage, were smaller than a year ago. Exports of raw cotton showed gains over both the previous month and the same month of last year. Cotton prices were slightly above those for the previous month but less than a year ago.

The activity of cotton spindles was greater than during the preceding month but less than a year ago, despite a gain over October of last year in the activity per spindle. Production of cotton textiles exceeded that of the previous month but fell short of the output

less than a year ago. Prices of raw silk were slightly higher than in September but showed no change from a year ago. Imports of rayon were considerably larger than for the previous month but less than a year ago. Rayon prices were unchanged from either prior period.

Textiles spread with pyroxylin showed an increase both from the previous month and from a year ago. Shipments of pyroxylin-coated textiles exceeded those of either prior period and unfilled orders, while less than at the end of September, considerably exceeded last year's total. Sales of fur by dealers advanced both from the preceding month and from October, 1927.

METALS

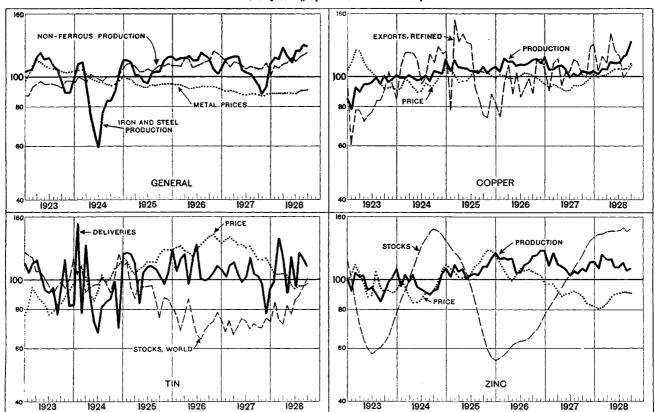
Shipments of iron ore in October were slightly less than during the previous month, but larger than a year ago. Pig-iron production was substantially larger than during either the previous month or October of last year. The same number of furnaces were in blast as at the end of September but considerably more than a year ago, their capacity being greater than in either prior period. Wholesale prices for pig iron were slightly higher than for September but were still generally lower than a year ago.

The output of steel ingots was greater than for either the previous month or the corresponding month of last New structural-steel orders, on the other hand, were less than for either the previous month or the corresponding month of last year. New orders for fabricated steel plate were the largest recorded since March, 1923, exceeding those of the previous month by 50 per cent. New orders for steel boilers exceeded both in number and square footage those for September and for a year ago.

New orders for machine tools were the largest recorded since March, 1920, being more than double those of a year ago. New orders and shipments of foundry equipment were considerably greater than either the previous month or the corresponding month

THE METAL INDUSTRIES

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



year. Unfilled steel orders at the end of October also exceeded those of either prior period. The output and shipments of steel sheets by independent manufacturers showed substantial increases both from the previous month and from October, 1927.

The output both of steel and of malleable castings was considerably greater than during September or the corresponding month of last year. New orders for steel castings, however, were less and those for malleable practically the same as in September, orders for both types being much larger than a year ago.

Shipments of fabricated structural steel during October were the largest recorded since the beginning of 1924 when the compilation of such data was begun.

of last year. Shipments of wood-working equipment exceeded those for either the previous month or for October, 1927; new orders, while greater than a year ago, were less than during September. Shipments of electric industrial trucks and tractors were greater than in either the previous month or the corresponding month of last year.

The mine production of copper showed gains over both the previous month and October, 1927. Exports of refined copper also exceeded those for both prior periods. Deliveries of tin, while slightly less than for September, were greater than a year ago. The October production both of lead and zinc exceeded those of both prior periods.

FUELS

The output of bituminous and anthracite coal increased seasonally and in each case exceeded that of a year ago. The output for the 10 months to date, however, was less in each case than for the corresponding period of last year. Coal prices showed slight advances from the previous month but were uniformly lower than a year ago. The production of coke was greater than for either the previous month or October, 1927, the decline from last year in the production of

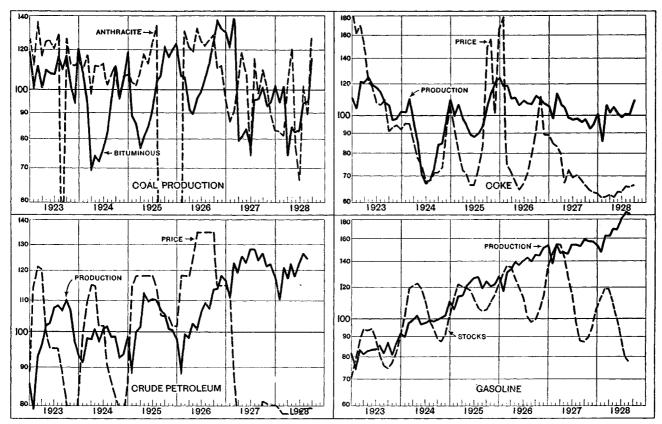
Imports of rubber were substantially larger than during either the previous month or October, 1927. The aggregate amount of rubber imported during the first 10 months of the current year, however, showed little change from that brought into the country during the corresponding period of last year.

HIDES AND LEATHER

Imports of hides and skins in October were slightly greater than during the previous month, but less than

THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. October, 1928, is latest month plotted where data were available!



beehive coke being more than offset by the increase in by-product coke.

AUTOMOBILES AND RUBBER

Although the output of passenger cars, both in the United States and Canada, was less than during the previous month, it was larger than is usually recorded at this season of the year, the total for the United States being exceeded in October of earlier years only in one instance, that of October, 1925. The output of trucks, both in the United States and in Canada, was larger than for either prior period. For the first 10 months of the current year, the production, both of passenger cars and of trucks, exceeded that of a corresponding period in any previous year. Shipments of accessories and parts during October, while slightly less than during the previous month, were considerably greater than a year ago.

a year ago, increases in calfskins and goatskins over September more than offsetting declines in cattle hides and sheepskins. Prices of hides were less than in September. The October output of sole leather was greater than during either the previous month for the corresponding month of last year. Exports of sole and of upper leather also exceeded those of the previous month, although upper leather was exported in smaller quantities than a year ago. Leather prices declined from September but exceeded last year's level

The production of boots and shoes was larger than for either the previous month or for the corresponding month of last year. For the calendar year to date, however, shoe production showed only a slight increase over last year's output. Shoe prices were generally higher than a year ago but showed no change from the previous month.

BUILDING AND CONSTRUCTION

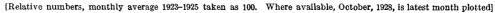
Building costs were generally higher than during the previous month and lower than a year ago. The value of new building contracts awarded in October exceeded that reported for either prior period. For the first 10 months of 1928 the value of new building contracts was 7 per cent greater than for the corresponding months of last year. October contracts awarded in Canada were less than for either the previous month or for October, 1927, although the total for the year to date was considerably larger than for the first 10 months of last year. Fire losses in the United States and Canada were greater during October than for either comparative period. Fire

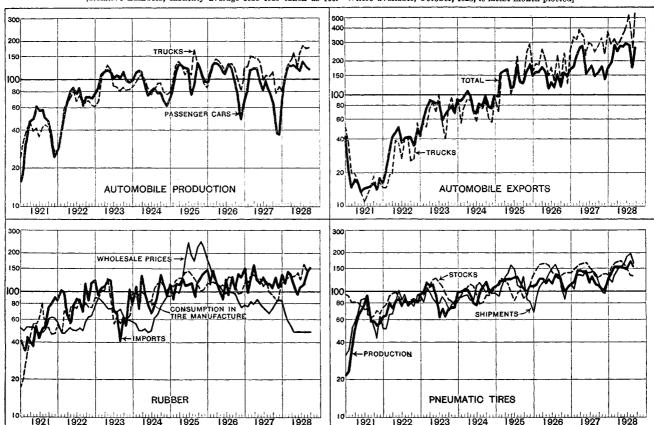
than at the end of September; those for maple flooring also being less than a year ago. Lumber prices averaged higher than during September; those of hardwoods being higher and those of softwoods being lower than a year ago.

STONE, CLAY AND GLASS PRODUCTS

The production of face brick averaged higher than in either the previous month or in October, 1927. Shipments and unfilled orders, while less than in September, were greater than a year ago, while smaller stocks were carried than at the end of either prior period. New orders for porcelain and for vitreous-china plumbing fixtures were much larger than during the previous month, those for porcelain being larger

THE AUTOMOBILE AND RUBBER INDUSTRIES





losses for the year to date, however, were substantially smaller than in 1927.

LUMBER AND LUMBER PRODUCTS

The October output of lumber was generally greater than for the previous month but less than a year ago; among the few exceptions to this trend were California redwood, which declined from September, and Northern pine, which increased over a year ago. Lumber shipments were generally greater than for either prior period, although those of Douglas fir and California redwood declined both from the previous month and from October, 1927.

The output of flooring, both oak and maple, was greater than during the previous month, that of oak flooring being also greater than a year ago. Flooring shipments exceeded those for either prior period. Unfilled flooring orders, on the other hand, were less

and those for vitreous china but little less than a year ago. Shipments of both types of fixtures also exceeded those of the previous month, but were less than in October, 1927. New orders for architectural terra cotta were considerably larger than for either priorperiod.

The production and shipments of Portland cement were less than in September, but slightly greater than a year ago. For the year to date, however, the cement output and shipments exceeded those for the corresponding period of last year. Cement stocks declined from the previous month, but were greater than a year ago.

New awards for concrete pavements were lower than for the previous month or for the corresponding month of last year. The total for the year to date, however, was 18 per cent greater than for the same period of 1927.

FOODSTUFFS AND TOBACCO

The visible supply of wheat, both in the United States and in Canada, increased seasonally and was much greater than a year ago. Receipts of wheat at the principal markets during October also exceeded those of either prior period. Exports of wheat and flour were larger than during the previous month but considerably less than in October, 1927. Prices for winter wheat averaged higher and those for spring wheat lower than for either prior period.

The visible supply of corn was greater than in September, but very much less than a year ago. The Department of Agriculture's estimate indicates the receipts being less and the shipments greater than in October, 1927. The output of inspected beef also exceeded September's total but was less than a year ago.

Receipts and shipments of hogs at primary markets were larger than during the previous month or the corresponding month of last year. The inspected slaughter of pork products also exceeded those of each prior period, while the cold-storage holdings declined. Prices for hogs and pork products, with the exception of ham, declined from both prior periods.

Receipts and shipments of sheep were larger than during the previous month or October, 1927. The production of lamb and mutton under Federal inspection also exceeded those of each prior period.

THE TOBACCO INDUSTRIES

1928 crop to be slightly larger than that for last year. Receipts and shipments of corn at the principal markets were less than during either the previous month or October of last year. Prices also declined from the previous month but were at a higher level than in October, 1927.

The visible supply of oats was less than in September or a year ago. Receipts at the principal markets also were smaller than for either prior period, although the estimate of the 1928 crop indicated a 25 per cent increase over last year's total. Prices for oats averaged slightly above those for September but were lower than a year ago.

The receipts and shipments of cattle at the primary markets were larger than during the previous month, Imports of coffee were considerably less than for either the previous month or for the corresponding month of last year. Coffee prices on the other hand ranged higher than for either prior period. An increase in the imports of tea, as compared both with September and with the corresponding month of last year, was accompanied by a decline in price from both periods.

Although the estimate of the 1928 tobacco crop indicated a considerable increase over last year's total, prices were higher than for either the previous month or for October, 1927. The consumption of each kind of tobacco was larger than for either prior period and exports of unmanufactured leaf showed a similar tendency.

TRANSPORTATION

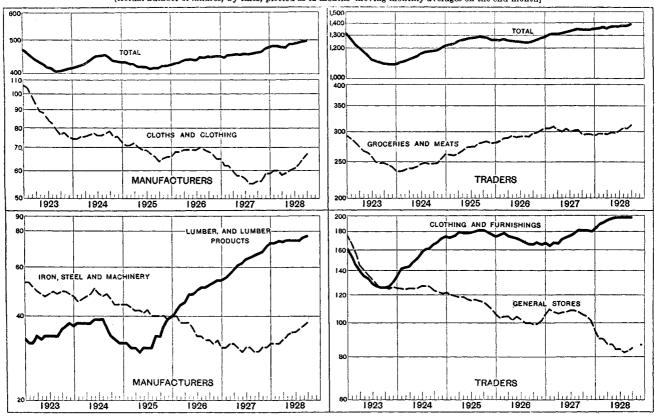
Car loadings in October were 5 per cent larger than a year ago, the only classes of goods to show a decrease from October, 1927, being grain, livestock, and forest products. For the first 10 months of 1927 car loadings showed a slight decine from the corresponding period of last year, grain and miscellaneous products being the only classes of goods to show an increase from October, 1927, in car loadings. Traffic through the inland waterways was uniformly larger than in September and, except on the Alleghany River, larger than a year ago. New orders for freight cars exceeded those of each prior period.

DISTRIBUTION MOVEMENT

Sales of mail-order houses and 10-cent chain stores showed substantial increases over both prior periods. Magazine advertising also exceeded that for either the previous month or the corresponding month of last year, and newspaper advertising, while much larger than in September, was 1 per cent less than a year ago. Postal receipts for the 100 important cities were larger than for either prior period, a similar trend being shown in the issuance of money orders. Dividend and interest payments scheduled for distribution in October exceeded those of either the previous month or the corresponding month of last year.

BUSINESS FAILURES

[Actual number of failures, by lines, plotted as 12 months' moving monthly averages on the end month]



BANKING AND FINANCE

Check payments outside of New York City were larger than during either the previous month or the corresponding month of last year. Loans and discounts of the Federal reserve member banks showed expansion as compared with both prior periods. Interest rates on time loans were slightly higher and those on call loans lower than during the previous month, both being much higher than a year ago.

New sales of life insurance were slightly less than in September, but were greater than a year ago, increases from September in ordinary and industrial insurance being more than offset by decreases in group insurance. For the first 10 months of the year, however, the amount of new insurance sold was 8 per cent greater than for the corresponding period of 1927. Deposits in New York savings banks were slightly less than in September, but were greater than a year ago.

GOLD, SILVER, AND FOREIGN EXCHANGE

Receipts of domestic gold at the mint were much larger than for either the previous month or the corresponding month of last year. The Rand output showed a similar tendency, but to a lesser degree. October imports of gold were much larger and exports much smaller than for either prior period. Silver production exceeded that of September but was less than a year ago, prices being slightly stronger than for either prior period.

Exchange on the principal foreign currencies showed only slight changes from September, increases occurring in the rates with Japan, India, and Brazil. Contrasted with last year the principal changes were downward, declines occurring in the Italian lira, the Swedish krone, Japanese yen, and the Argentinian and Chilean peso.

INDEXES OF BUSINESS

The index numbers presented in this table are designed to show the trend in production, prices, trade, etc., by commodities or groups. They consist in general of weighted combinations of series of individual relative numbers; often the individual relative numbers are also given. The function of index and relative numbers is explained on the inside front cover. All of the index numbers, except where noted, are based on the average of the years 1923 to 1925, while maxima and minima are given only since 1923, thus eliminating the abnormal period prior to 1923. Complete descriptions and figures for earlier years may be found in the following issues of the Survey (later data being available in the latest semiannual issues): Production, in the July, 1928, issue (No. 83), pages 18 to 22; stocks in the August, 1928, issue (No. 84), pages 20 to 22; new orders in the September, 1928, issue (No. 85), page 19; unfilled orders in the January, 1928, issue (No. 77), pages 22 and 23; wholesale trade in the January, 1928, issue (No. 77), page 21; mail-order and chain stores in the May, 1928, issue (No. 81), pages 20 and 21; department stores in the April, 1928, issue (No. 80), pages 20 and 21; employment, based on 1923 as 100, in the August, 1928, issue (No. 84), page 108; farm prices, in the August, 1928, issue (No. 84), page 27; wholesale prices (Department of Labor), in the November, 1927, issue (No. 75), page 24, and the June, 1928, issue (No. 82), page 23; wholesale prices, commercial, in the August, 1928, issue (No. 84), page 26; cost of living in the August, 1928, issue (No. 84), page 27, and the June, 1926, issue (No. 58), page 24.

	Maxi-	Mini-		1927			1928			INCREASE (十) REASE (一)
Relative to 1923–1925 monthly average as 100	mum since Jan. I, 1923	mum since Jan. 1, 1923	August	Septem- ber	Octo- ber	August	Septem- ber	Octo- ber	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 19
PRODUCTION					· · ··· ·			····		
TOTAL INDUSTRIAL				1						
Jnadjusted, except for working daysAdjusted for seasonal variations	117 114	81 83	105 107	106 105	105 103	110 112	115 114	117 114	+1.7 0.0	+11.4 +10.7
MANUFACTURING			1							
Fotal (adjusted for working days only) Fotal (adjusted for seasonal variations) Iron and steel Textiles	116 116 127 121	79 82 59 77	104 107 102 119	106 105 98 118	104 102 94 113	110 113 121 109	115 116 127 108	116 114 125 111	$ \begin{array}{c c} +0.9 \\ -1.7 \\ -1.6 \\ +2.8 \end{array} $	+11.5 $+11.8$ $+33.0$ -1.8
Food products Paper and printing	106 118	92 91	97 112	93 113	$\begin{array}{c} 94 \\ 111 \end{array}$	91 117	97 118	99	$+\overline{2}$. $\overline{1}$	+5.3
LumberAutomobiles	110 139	90 47	95 89	99 81	94 70	86 133	82 139	81 120	-1.2 -13.7	-13.8 + 71.4
Leather and shoes Cement, brick, and glass Nonferrous metals Petroleum refining	$117 \\ 128 \\ 121 \\ 162$	86 92 87 84	112 115 108 136	113 113 107 139	108 108 106 142	111 118 116 160	111 126 118 162	$106 \\ 119 \\ 120$	$ \begin{array}{c c} -4.5 \\ -5.6 \\ +1.7 \end{array} $	$ \begin{array}{c c} -1.9 \\ +10.2 \\ +13.2 \end{array} $
Rubber tires Tobacco manufactures	166 129	66 93	119 119	113 123	176 121	154 131	165 129	166 127	$^{+0.6}_{-1.6}$	$+43.1 \\ +5.0$
MINERALS				Ì					1	
Fotal (adjusted for working days only) Fotal (adjusted for seasonal variations) Bituminous coal Anthracite coal	124 120 125 133	84 90 77 1	111 106 92 106	111 105 92 99	112 105 90 106	110 105 91 95	115 108 94 95	122 114 99 119	$ \begin{array}{r} +6.1 \\ +5.6 \\ +5.3 \\ +25.3 \end{array} $	+8. 9 +8. 6 +10. 0 +12. 3
Crude petroleum Iron-ore shipments Copper	126 134 128	88 0 82	123 99 101	124 87 104	$124 \\ 95 \\ 102$	122 105 116	$125 \\ 109 \\ 121$	115 128	+5. 5 +5. 8	$+21.1 \\ +25.5$
Zinc Lead Silver	124 125 123	93 75 85	114 112 94	111 111 90	110 105 91	121 108 82	114 115 79	110 108 81	$ \begin{array}{c c} -3.5 \\ -6.1 \\ +2.5 \end{array} $	$ \begin{array}{c c} 0.0 \\ +2.9 \\ -11.0 \end{array} $
ANIMAL PRODUCTS (marketings)				İ						
Total Wool Livestock	124 421 131	79 26 76	105 225 89	87 89 85	95 68 108	97 195 79	92 54 92	102 35 95	+10.9 -54.3 $+3.3$	$\begin{array}{r r} +7.4 \\ -48.5 \\ -12.0 \end{array}$
Poultry and eggs Dairy products Fish	148 160 187	68 64 44	77 123 187	75 89 150	73 81 154	80 117 170	76 95 137	86 89 153	$\begin{array}{c c} +3.3 \\ +13.2 \\ -6.3 \\ +11.7 \end{array}$	$\begin{array}{c c} -12.0 \\ +17.8 \\ +9.9 \\ -0.6 \end{array}$
CROPS (marketings)	101		10.	100	101	1.0	10.	100	,	
Total	251	45	115	183	219	115	178	251	+41.0	+14.6
Grains*	205	38	169	178	160	186	165	174	+5.5	+8.8
Vegetables*Fruits*	199 266	60 55	86 124	146 183	199 223	83 165	133 206	$\frac{151}{266}$	+13.5 +29.1	$\begin{vmatrix} -24.1 \\ +19.3 \end{vmatrix}$
Cotton products* Miscellaneous crops*	353 266	$\begin{array}{c} 11 \\ 22 \end{array}$	74 106	$\begin{array}{ c c }\hline 186 \\ 220 \\ \end{array}$	$\begin{array}{c} 260 \\ 266 \end{array}$	45 117	184 206	$\begin{array}{c} 353 \\ 207 \end{array}$	$+91.8 \\ +0.5$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
FOREST PRODUCTS										
Total	112	78	99	98	96	89	77	87	+13.0	-9.4
Lumber	112	78	102	99 84	94	88	77	84	+9.1	-10.6
PulpwoodGum (rosin and turpentine)*	151 161	54 18	63 119	$\begin{array}{c c} 84 \\ 124 \end{array}$	100 117	82 161	68 129	108 128	+58.8 -0.8	+8.0 +9.4
Gum (rosm and turpentine)"	101	65	119	113	104	TOT	65	85	+30.8	-18.3

^{*}Fluctuations between maximum and minimum due largely to seasonal conditions: Minerals and Manufacturing are adjusted for seasonal variations except where noted

16
INDEXES OF BUSINESS—Continued

	Maxi-	Mini-		1927			1928		PER CENT I	ncrease (+ tease (-)
Relative to 1923-1925 monthly average as 100	mum since Jan. 1, 1923	mum since Jan. 1, 1923	August	Septem- ber	October	August	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928 from Oct., 192
PRODUCTION—Continued										
NEW ORDERS				-						
Total	139	25	95	98	92	98	95			
Textiles	153	30	108	118	103	92	99			1
Iron and steel	144	24	96	99	99	118	124			
Lumber	141	22	101	103	95	100 108	92			
Paper and printingStone and clay products	$128 \\ 129$	14 19	102	107	107 96	97	109 93			
STOCKS										
Grand total	134	82	109	120	132	107	115	131	+13.9	-0.8
										
Total manufactured goods	120	88 79	115 129	114 116	110	114	109	108	-0.9 -12.4	-1.8
Foodstuffs Textiles	129 138	79	95	108	$\begin{array}{c} 96 \\ 109 \end{array}$	$\begin{array}{c c} 117 \\ 125 \end{array}$	105 118	$\frac{92}{115}$	$ \begin{array}{c c} -12.4 \\ -2.5 \end{array} $	-4.5 + 5.
Iron and steel		78	117	125	115	131	130	134	+3.1	+3. $+16.$
Nonferrous metals	133	74	114	111	113	$12\overline{5}$	129	128	-0.8	+13.
Lumber	125	78	122	122	122	98	96	96	0. 0	-21.
Stone, clay, etc	178	64	123	116	118	140	130	120	-7.7	+1.
Leather	123	66	69	69	70	72	73	73	0. 0	+1.
Rubber	185	77	140	129	129	134	130	130	0. 0	+3.
Paper	155	46	116	118	107	156	137	139	+1.5	+29.
Chemicals and oils	125	84	94	97	103	90	97	103	+6.2	0.
Total raw materials	150	69	104	124	149	102	120	149	+24.2	0.
Foodstuffs	159	68	119	125	136	136	145	156	+7.6	+14.
Textiles	202	43	96	135	173	66	96	149	+55.2	-13 .
Metals.	136	54	96	103	117	100	116	133	+14.7	+13.
Chemicals and oils	153	73	89	110	146	93	108	139	+28.7	-4.
UNFILLED ORDERS										
$\Gamma otal_{}$	157	67	73	71	68	75	75	72	-4.0	+5.
Textiles	154	62	85	87	84	66	69	74	+7.2	-11.
Iron and steel	157	66	66	65	66	75	75	75	0. 0	+13.
Transportation equipment		53	66	62	62	60	60	62	+3.3	0.
Lumber	142	56	78	72	62	88	84	69	-17.9	+11.
WHOLESALE TRADE										
Grand total, all classes		82	111	112	106	109	110	112	+1.8	+5.
Groceries	119	86	97	102	102	101	101	108	+8.0	+5.
Meats		87	111	117	122	118	130	125	-3.8	+2.
Dry goods	128	71 43	$\begin{array}{c c} 125 \\ 165 \end{array}$	113 140	99	110 148	105	199	-5.7	0.
Men's clothing Women's clothing	167 188	26	98	95	101 87	92	137 88	122 106	-10.9 +20.5	$\begin{vmatrix} +20. \\ +21. \end{vmatrix}$
Boots and shoes.	128	68	122	127	114	119	110	108	-1.8	-5.
Hardware		82	98	106	105	96	100	108	+8.0	+2.
Drugs	125	88	110	122	128	115	119	133	+11.8	+3.
Furniture	131	72	111	117	118	108	127	131	+3.1	+11.
RETAIL TRADE										
MAIL-ORDER HOUSES (4 houses)	156	64	105	118	147	127	143	183	+28.0	+24.
Chain Stores:							1			
Ten-cent	250	62	130	128	153	133	144	163	+13.2	+6.
GroceryWooring apparel	224	77 47	170 165	171 198	$\frac{190}{250}$	205	$\frac{200}{246}$	228	+14.0	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
Wearing apparel		82	140	137	151	197 169	164	287 169	+16.7 +3.0	+14.
Drug Cigar	160	79	106	106	111	104	104	109	+ 3. 0	-3.
Candy	161	70	110	119	124	123	122	134	+1.9 +9.8	+8.
Shoe		55	101	108	121	109	130	127	-3.1	+5.
DEPARTMENT STORES:	100	55	101	100	1 221	100	100	12.	0,1	''
Sales		71	89	100	119	85	106	123	+16.0	+3.
Stocks		83	97	107	113	96	101	110	+8.9	-2.

17
INDEXES OF BUSINESS—Continued

	Maxi- mum	Mini- mum		1927			1928		PER CENT II OR DECR	NCREASE (+) EASE (-)
Relative to 1923-1925 monthly average as 100	since Jan. 1, 1923	since Jan. 1, 1923	August	Septem- ber	October	August	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927
EMPLOYMENT										
Number employed, by industries:										
Total, all classes	109 112	90 90	93 93	94 97	93 97	92 91	93 94	94 96	$\begin{array}{c} +1.1 \\ +2.1 \end{array}$	$+1.1 \\ -1.0$
Food products Textiles	114	85	92	94	95	86	87	90	+3.4	-5.3
Iron and steel	114	87	93	92	91	93	94	95	+1.1	+4.4
Lumber	107	80	88	89	88	85	85	85	0.0	-3.4
Leather	112	86	97	97	95	91	91	90	-11	5. 3
Paper and printing	106	97	102	103	104	101	102	103	+1.0	-1.0
Chemicals	111	88 85	94 97	98	97	91 95	98 95	98	0.0	$\begin{array}{c} +1.0 \\ -2.1 \end{array}$
Stone, clay, and glass Metal products other than iron and	107	00	91	91	90	95	95	93	-2.1	-2.1
steel	110	87	93	92	91	94	95	97	+2.1	+6.6
Tobacco products	108	· 82	89	92	94	87	89	91	+2.2	-3.2
Vehicles	110	82	82	88	87	98	99	98	-1.0	+12.6
Miscellaneous	115	86	100	98	98	94	95	97	+2.1	-1.0
Amount of pay roll, by industries:	111	85	96	95	96	95	97	100	191	149
Total, all classes Food products	108	90	97	99	99	95	98	100	$\begin{array}{c c} +3.1 \\ +2.0 \end{array}$	$\begin{array}{c c} +4.2 \\ +1.0 \end{array}$
Textiles	115	78	94	96	98	84	87	93	+6.9	-5.1
Iron and steel	117	79	94	92	91	98	98	103	+5.1	+13.2
Lumber	107	84	94	95	96	89	91	93	+2.2	-3. 1
Leather	117	77	101	98	92	92	91	88	-3.3	-4.3
Paper and printing	114 114	94 89	108	109	111	108 98	110	112	+1.8	+0.9
ChemicalsStone, clay, and glass	111	84	99	98	99	98	96	104	$+2.0 \\ +2.1$	$+2.0 \\ -1.0$
Metal products other than iron and steel.	114	81	92	89	90	99	100	107	+7.0	+18.9
Tobacco products	111	81	84	95	96	86	90	92	$+2.\overset{\circ}{2}$	-4.2
Vehicles.	114	79	92	87	90	101	101	105	+4.0	+16.7
Miscellaneous.	119	86	102	98	102	96	98	100	+2.0	-2.0
PRICE INDEX NUMBERS										
FARM PRICES			İ	1						
(Relative to 1909-1914 average as 100)										
All groups	152	125	132	140	139	139	141	137	-2.8	-1.4
Grains		108	138	134	128	120	117	116	-2.8 -0.9	-9.4
Fruits and vegetables	253	108	172	145	138	137	127	114	-10.2	-17.4
Meat animals	162	98	136	142	145	162	174	160	-8.0	+10.3
Dairy and poultry	166	122	127	137	146	136	145	150	+3.4	+2.7
Cotton and cottonseedUnclassified	252 108	81 79	136 81	179 87	169 83	153 87	142 85	147 83	+3.5 -2.4	-13.0 0.0
	100	''	01	"	00	0.		00	-2.4	0.0
WHOLESALE PRICES			{{		1	\				
Department of Labor Indexes		-	#		-					
(Relative to 1926 monthly average as 100)										
All commodities		94	95	97	97	99	100	98	-2.0	+1.0
Farm products Food, etc	114	94 85			105	107 104	109	104	-4.6	-1.0
Hides and leather products	127	98	112	113	100	121	121	102 118	-4.7 -2.5	$\begin{array}{c c} +2.0 \\ +4.4 \end{array}$
Textile products	114	94		99	98	96	96	96	-2.3	-2.0
Fuel and lighting	112	81	84	84		85	85	85	0. 0	$+1.\overset{2}{0}$
Metals and metal products	113	97	98	98	97	100	101	101	0.0	+4.1
Building materials	116	90	93	92	02	95	95	95	0.0	+3.3
Chemicals House-furnishing goods	104 111	95 97	95 99	96	1	95 97	95 97	96 97	+1. 1 0. 0	-1.0 -2.0
Miscellaneous.		79	90			79	80	80	0. 0	-2.0 -9.1
Classified by state of manufacture:					00			00	0.0	3. 1
Semimanufactured articles	128	96	97	99		97	97	97	0.0	-1.0
Finished products	103	93	93		00	99	101	99	-2.0	+3.1
Raw materialsNonagricultural commodities	. 109 . 106	93	98 93			99	101	97 96	$\begin{array}{c c} -4.0 \\ -2.0 \end{array}$	$\begin{vmatrix} -3.0 \\ +1.1 \end{vmatrix}$
Commercial Indexes	. 100				99			90	-2.0	T 1. 1
(Relative to 1926 monthly average as 100)	1									
	106	85	100	101	102	103	103	102	-1.0	0. 0
Dun's Bradstreet's									-1.0	-2.8
######################################		1	-00	200		100			1	

INDEXES OF BUSINESS—Continued

	Maxi- mum	Mini- mum		1927			1928			CREASE (+) Base (-)
Relative to 1923–1925 monthly average as 100	since Jan. 1, 1923	since Jan. 1, 1923	Au gust	Septem- ber	October	August	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927
PRICE INDEX NUMBERS—Contd.										
COST OF LIVING										
National Industrial Conference Board Indexes										
(Relative to July, 1914)					}					
All items weighted Food (Department of Labor) Shelter Clothing Fuel and light (combined) Fuel	186 177 179	158 141 161 160 156 174	162 152 169 170 161 181	163 154 168 171 162 183	164 156 167 170 163 184	161 154 161 173 159 178	163 158 161 174 160 180	163 157 161 173 161 182	$egin{array}{c} \textbf{0.0} \\ -0.6 \\ 0.0 \\ -0.6 \\ +0.6 \\ +1.1 \end{array}$	$ \begin{array}{r} -0.6 \\ +0.6 \\ -3.6 \\ +1.8 \\ -1.2 \\ -1.1 \end{array} $
ruel Light Sundries	123 176	118 171	122 172	122 172	122 173	121 171	121 171	121 171	0. 0 0. 0	-1.1 -0.8 -1.2

ADDITIONAL PRELIMINARY RETURNS, CENSUS OF MANUFACTURES, 1927 1

	VALUE	OF PRO	DUCTS	PERSO	NS EMPI	OYED		VALUE	OF PRO	DUCTS	PERSO	NS EMPL	OYED
Industry	1927	1925	Per	1927	1925	Per cent	Industry	1927	1925	Per	1927	1925	Per
	Thousa doll		in- crease (2)	Nun	nber	in- crease (2)			ands of lars	in- crease (²)	Nun	aber	in- crease (²)
Adhesives, other than glue and	- 0.45						Lace goods	27, 298	30, 844	-11.5	6, 482	7,006	-7. 8
rubber cementAsbestos products	7, 945 44, 156		-19.4 21.7	502 6, 337	561 6, 129	-10.5	Leather, tanned, curried, and finished.	404 721	462, 014	7. 1	53, 047	52 042	
Baskets frattan and willow ware.		30, 214	21. 1	0,001	0, 120	J. T	Lighting equipment manufacture.	251, 449	217, 793	15.5	00,011	00,010	
not including furniture	20,960	16,658	25, 8	8, 594	6,808	26. 2	Nonclay refractories	22, 252	19, 430	14.5	4, 729	4, 102	15. 3
Batteries, total Beverages Brushes Cement	150, 452	155, 248	-3.1 2.0		27, 384	-1.5	Perfumes, cosmetics, and toilet preparations	177 001		i	l		
Brushas	47 844	45 894	4.4	26, 974 7, 673	7, 836	-1.5 -2.1	Printing inks	37 734	34, 753	8, 6	2, 294	2, 150	6. 7
Cement	293, 565	300, 895	-2.4	36, 292		-5.6	Printing inks. Pulp goods Radio apparatus and tubes Rag carpets and rugs Red earthenware	23, 818	20, 270	17. 5	2, 989	3, 017	-ŏ. s
Caskets, comins, burial cases, and				, i		i	Radio apparatus and tubes	191, 849	176, 990		1		
morticians' goods	74, 891	70, 413		11,665	11, 479		Rag carpets and rugs	5, 890	5, 710	$\begin{array}{c} 3.2 \\ -1.2 \end{array}$	1,633	1, 901 705	-14.
Common brick	122, 723	87, 276 106, 642		26, 297 6, 427	29, 524 7, 128	-10.9	Roofing tile	5, 435	2, 400 5, 841	-1. 2 -7. 0	673 1, 410		
Coffee roasting and spice grinding.	380, 157	297, 528		8, 168	9, 665		Sewer pipes	34, 379	33, 536	2.5	11, 029		
Draintile Dressed furs 3	4, 238	4, 110	3.1	1, 533	1, 539	-0.4	Sewing machines, cases, and	,	']]] [,	1
Dressed furs 3	27, 357	25, 423	7.6	5, 468	5, 056	8.1	attachments	45, 222	46, 298	-2.3	11,838	12, 121	-2.3
Engraving, steel and copperplate,	38, 658	32, 106	20, 4	8, 427	7, 259	16.1	SoapSteel and brass pens	287, 060 1, 658	278, 273 1, 446	3. 2 14. 7	13, 432 534	15, 406 487	-12. 8 9.
and plate printing Face brick	46, 179	47, 914	-3.6	15, 312			Stoneware and vellow and rock-	1,000	1, 770	17. 1	001	301	
Fire brick	40, 621	44, 838	-9.4	12, 269	13, 452	-8.8	Stoneware and yellow and rock- ingham ware	4, 929	4, 311	14.3		1,463	13.
Floor and wall tile and similar tile_	27, 959	22, 455	24.5	9, 264	7, 704	20. 2	Trunks, suit cases, and bags Vitrified brick or block	59, 959	61, 224	-2.1			8.0
Furniture and store and office fixtures	849 716						White ware	11, 049 32, 476	11,767 32,949	-6.1 -1.4	3, 510 13, 395	3, 638 13, 480	-3. -0.
Gas meters and water meters	36, 715	34, 292	7. 1	5, 915	5, 514	7.3	Wood preserving	184, 558	32, 848	1	12, 259		.1
Gas meters and water meters Glass	279, 708	295, 959	-5.5	65, 813	69, 371	-5.1	Wood preserving Wool shoddy Writing ink	12, 597	21, 022	-40.1	1,679	2, 218	-24.
Haircloth	3,616	2,746		385	355		Writing ink	5, 342	6,084	-12.2	491	524	⊢6.
Hollow building tile	25, 953	28, 452	-8.8	7, 929	8, 250	-3.9							

¹ Compiled by the *U. S. Department of Commerce, Bureau of the Census*, from reports collected in connection with the census of manufactures. Data for other industries will appear as they are completed. Statistics in greater detail may be obtained from the bureau's preliminary statements on the respective industries.

² A minus sign (—) denotes decrease.

³ Value of products and receipts for contract work.

CONSUMPTION OF ELECTRICAL ENERGY BY INDUSTRIES 1

ACTIVITY IN LEADING INDUSTRIES THROUGHOUT THE COUNTRY

(1923-1925 monthly average=100)

		Al	LL INI	USTR	Y		Ch	emical	s and a	allied p	roduct	s	Fo	ood an	i kindr	ed pro	ducts	
Монтн	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January	103. 9 113. 0			118. 4 123. 7	111. 5 120. 7	118. 4 127. 7	97. 7 87. 2	97. 7 92. 0	113, 2 108, 8	122. 2 115. 6	95, 1 105, 3	124. 2 129. 1	96. 1 92. 7	102. 3 101. 8	103. 4 93. 4	101. 7 98. 9	95. 3 98. 5	102. 4 115. 6
March	107.4	102.7	108.0	118.5	116.8	118, 2	83, 8	95. 1	106, 2	113.3	103. 1	126.8	96.3	99.6	87.9	87. 3	83.8 104.2	108, 4
April May	114.0 113.6			114. 1 111. 3	116. 9 120. 7	119. 3 119. 0	86. 8 88. 5	93. 3 96. 0	101. 2 108. 2	111. 2 120. 8	108. 0 111. 8	131.7 126.3	101. 2 106. 4	95. 6 103. 8	89. 4 99. 4	98. 2 102. 8	115.8	105. 9 103. 9
June	108.1	76.8	99.7	106.6	112, 5	116. 4 120. 2	85, 8 87, 3	96. 1	104.0	111.1	101.7	122.6	110.8	114.9	109.3	98.9	113.4	116.8
July August	104. 0 102. 2		99. 2 94. 3	106. 7 110. 9	110. 6 110. 6	120.8	78. 3	89. 3 92. 9	104.8 111.0	115. 7 122. 7	104. 9 97. 8	128. 5 119. 2	104. 8 103. 3		105. 8 101. 2		121. 2 111. 6	129. 2 128. 3
August September October	109.8		98.1	118.6	118.4	134. 5 132. 0	94.7	98.4	115.4	113.8	122.6	132.0	104.9		104.4		127.4	142.0
November	107. 2 105. 9		112.8	119. 0 111. 9	119. 9 115. 2		107. 0 99. 2	126.0	121. 2 127. 0	120. 2 99. 9	115.8 115.5	129. 4	105. 8 104. 4		103. 7 95. 1		120. 8 117. 9	
December	98.7	97. 2		101.7	109.8		101. 2	117.4		106. 2	109.0		102. 2	94.9	99. 4			
Monthly average	107.3	92. 5	105. 2	113. 5	115. 3		91. 5	100. 7	112. 4	114. 4	107. 6		102. 4	103. 8	99. 4	103. 4	109. 5	
	R	colling	mills a	nd stee	l plant	s		Meta	al work	ing pla	nts				Me	tals		
January February					120. 5	131, 3	116.3	104.3	116.0	131.5	114.0	117.4	116.3	104. 3	116.0	131. 5	117. 7	124.4
March			l l		126. 8 125. 6	133, 8 124, 5	123. 5 113. 0	117.0 110.4	119.3 108.4	129. 9 121. 8	114.3 108.3	127. 6 117. 4	123. 5 113. 0	117. 0 110. 4	119. 3 108. 4	129. 9 121. 8	120. 5 117. 0	130.7 121.0
April					123. 5	125. 4	115.8	102.8	105. 2	116.0	106.3	121.7	115.8	102.8	105. 2	116.0	114.9	123, 2
				109. 9	122. 5 116. 3	125. 0 121. 2	116. 8 109. 8	78. 5 68. 1	98. 2 90. 7	109.3 110.0	109. 0 105. 6	122. 7 123. 7	116.8 109.8	78. 5 68. 1	98. 2 90. 7		116. 7 110. 9	123.6 122.7
July				109. 0	113.0	121. 2	113.0	62. 1	90. 7	107.4	104. 4	126.3	113.0	62. 1	90. 7	108. 2	108.6	124, 2
August				108. 2 120. 8	106. 4 109. 6	125. 4 141. 2	107. 5 110. 0	69. 5 78. 7	92. 5 97. 2	110. 4 118. 5	103. 0 105. 2	125. 8 144. 2	107. 5 110. 0		92. 5 97. 2	109.3 119.7	104. 6 107. 4	125. 5 143. 0
October				123. 2	111.8	144. 7	106. 7	78.6	96.0	122. 9	109.7	144. 5	106.7	78.6	96.0	123.0	110.8	144. 6
June July August September October November December				113. 5 106. 2			103. 2 96. 8	88. 2 100. 0	105. 8 113. 0	114. 8 113. 1	106. 3 101. 2		103, 2 96, 8			114. 2 109. 6	107. 7 105. 9	
Monthly average					[111.0	88. 2	102. 8	117. 1	107. 3		111.0					
Monthly average			er and				111.0			its pro			111.0		aper a			
										1								
JanuaryFebruary	116.0 119.4		96.0 104.4	90. 8 111. 2	102. 5 105. 6	112. 2 118. 4	82. 5 81. 7	105.3 114.0	110. 5 115. 0	126, 2 132, 8	118. 8 116. 0	107. 7 113. 3	106. 4 91. 4	113. 0 96. 2	104. 8 98. 6	122. 7 117. 9	128. 7 [30. 2	121, 3 124, 2
March	124.7	100.8	105.8	93. 9	99. 7	107.0	81.8	100.5	109.6	123.0	105.7	106.0	101.8	93. 5	102.0	108.4	116.0	120. 2
April	124. 2 116. 7		105. 8 96. 2	87. 3 87. 3	101. 3 96. 3	98. 8 98. 1	96. 7 97. 5	102. 0 101. 2	107. 2 106. 4	122. 2 117. 5	111. 4 136. 8	115, 4 110, 8	104.0 115.0		106. 0 111. 5	108. 4 100. 0	124. 2 124. 8	120. 5 136. 4
June	108.5	84.3	89.5	86.6	97.8	100. 2	100. 2	99.8	103.4	108.4	113, 4	109, 2	114.6	109.0	102.4	101.9	119.8	133, 7
July August	106. 2 111. 3		92. 2 101. 5	86. 2 100. 0	96. 3 97. 0	99. 0 94. 7	101. 8 96. 8	89. 7 95. 6	101. 2 104. 3	106. 0 116. 4	112. 9 128. 0	108.8 111.6	105. 5 100. 7	88. 6 86. 2	93. 8 96. 7	109. 6 118. 6	115.8 117.3	127. 3 129. 1
September	110.8	101.9	104.8	102.9	105.9	106. 9	105.7	105.8	109.3	117.8	141.3	111.3	98. 1	91. 9	87.8	128. 2	122.7	132.0
October	111. 2 93. 7	108. 8 99. 1	108. 5 93. 8	103. 3 105. 8	111. 0 104. 5		103. 4 106. 7	98. 5 104. 2	102. 0 113. 2	118.8 112.9	139. 2 135. 8	109. 3	94. 2 101. 8	100. 0 104. 0	107. 7 11 0 . 5	133. 4 118. 5	127. 7 126. 5	133, 3
November	90.6			101. 2			104.6	113. 0	102. 0	103. 7	123. 3		101.5	98. 3	113. 2	118. 2	122. 0	
Monthly average	111.1	94.7	99.0	96. 4	101.3		96.6	102. 5	107. 0	117. 1	123. 6		102. 9	99. 8	103. 8	115. 5	123.0	
		Rubb	er and	its pro	ducts				Shipbu	ilding				Stor	ne, clay	and g	lass	
January	94.0			113. 2	111. 2	120. 4	89. 7	101. 2	116. 2	112.8	129. 2	94. 2	103. 7	98. 7	93. 2	114.2	98. 4	105. 2
February	104.0 101.4		114.0 105.2	125. 9 111. 4	118. 4 115. 0	137. 0 126. 2	100. 3 95. 2	111. 5 105. 7	120. 2 108. 8	119. 4 109. 9	120. 4 117. 7	98. 8 75. 4	114. 5 96. 7	102. 6 99. 0	101. 0 96. 7	118.8 105.2	105. 8 110. 2	127.3 121.1
March April May	132. 2	100.8	105. 2	115.4	115. 7	121. 7	113. 2	90.2	99.6	127.7	129.8	93. 3	97.4	97. 3	105.8	109. 7	117.4	133.6
May June	125. 0 125. 0	78.0 71.2	103. 2 98. 3	109.3 107.0	120. 4 114. 9	128. 5 131. 7	121.6 117.0	76. 1 73. 7	105. 2 100. 4	125. 0 128. 4	134. 5 130. 5	84. 0 85. 3	92. 4 94. 5	94. 2 98. 2	114. 9 110. 8	117. 9 127. 2	130. 2 107. 4	129.3 128.0
July	107. 7	68. 2	100.8	97. 3	109.0	135, 3	122.7	73. 7 79. 1	99. 2	130.8	116. 7	67. 2	99. 2	94. 2	113.0	122.0	111.3	129.8
August September	97.6			98. 5 114. 0	117. 8 114. 4	138. 4 151. 2	127. 8 115. 4	86. 7 88. 8	102. 6 112. 8	110.8 111.3	112. 2 106. 6	67. 3 72. 3	93. 3 104. 2	99. 0 105. 3	104.8 111.3	124. 5 129. 0	114. 1 118. 2	135, 3 152, 0
	00.0	84. 5	111. 2	113.8	115.6	146. 4	94.3	85. 2	105.6	117.0	117. 2	73.8	96. 5	100.4	106.7	130. 7	111.0	144.7
October November December	103. 2 98. 6			112. 8 101. 5	96.7		90. 8 97. 8	91. 3 101. 8	107. 1 108. 4	115. 4 141. 0	100. 8 94. 6		102. 8 100. 6	108. 8 103. 0				
Monthly average	108. 9	89. 2	108.6	110.0	113.8		107. 2	90. 9	107. 2	120, 8	117. 5		99. 7	100. 1	107. 4	120. 0	111.0	
			Text	iles			Auto	mobile	es, incl	udingı	epair p	arts		Metal	workin	ıg indu	stry ?	
January	116.6		106. 4	119.7	127. 7	116.7	73. 2	97. 4	72. 7	99. 1	78. 1	135. 2	108. 5	101. 7	104. 5	112.5	108.0	120. 2
January February March	126. 4 114. 2		117. 6 105. 7		136. 0 125. 0	127. 5 114. 9	90. 2 102. 7		93. 8 113. 7	122. 4 129. 7	103. 4 118. 2	148. 7 136. 2	118. 2 111. 5	120. 4 111. 2	108. 0 109. 0	126. 8 122. 2	112. 7. 110. 6	134. 8 118. 6
April	117 1	87.5	109.8	101.8	128.3	109.8	119.5	115.4	132.4	136.8	126.7	148.7	118.0	105.0	110. 7	120.7	112.0	125. 4
May June	117. 5 108. 0		101.4	100. 5 96. 3	128. 5 118. 8	105. 7 104. 7	118.3 113.6	96. 6 79. 5	134. 2 121. 4	139. 0 121. 5	131. 5 107. 6	141. 6 136. 0	116. 6 109. 9	84. 5	106. 4 98. 2	115. 2 111. 8	114.5	124. 2 124. 1
1113v	07 1	68.6	94. 2	88. 7	113.0	91.8	102. 5	81. 3	120. 5	111.0	102. 3	143.7	110.0	70, 3	97. 7	106. 1	106. 1 104. 1	124. 1
AugustSeptember OctoberNovember	99. 2 113. 8	74.7	97.8	94. 1	113.0	97. 3	99.8		78.6	132. 2 129. 2	108.0	143. 2	104.1	76. 1	89.4	113. 2	104.0	
October	108.0	101.8	104. 5	113. 7 123. 4	121. 2 125. 4	121.0	106. 6 109. 7	92. 2 88. 0	104. 5 136. 3	108. 2	109. 5 114. 2	161. 0 141. 2	107. 7 105. 7		98. 4 104. 4	119. 3 119. 0		
November December	116.9 103.0	109.7	118.3	127. 5	119. 2		97. 4	75. 6	122. 7 100. 0	82. 8 52. 1	114. 2 100. 7		101.0	87. 7	109. 2	107.0	105. 6	
							94.6	62. 8			106. 4		96.1		109. 2	98. 7		
Monthly average		90.5	106.5	110. 0	122. 4		102. 3	92. 5	110. 9	113, 7	108. 9		108. 9	90.8	103. 8	115. 2	108. 2	

Data compiled by the Electrical World and represent the utilization of electrical energy by 3,600 identical concerns depending at all times upon electrical energy for power and do not show the expansion of the market for central power with new customers. All figures are adjusted to the basis of 26 working days to the month.

2 Tomoths' average.

3 Compiled by the American Machinist.

CONSUMPTION OF ELECTRICAL ENERGY BY INDUSTRIES—Continued ACTIVITY BY GEOGRAPHICAL DIVISIONS

		UN	IITED	STAT	ES				New E	ngland	1			1	North	Centra	1	
Монтн	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January February March April May June July August September October November December Monthly average	103. 9 113. 0 107. 4 114. 0 113. 6 108. 1 104. 0 102. 2 109. 8 107. 2 105. 9 98. 7	103. 0 111. 1 102. 7 100. 9 84. 4 76. 8 73. 4 79. 8 92. 6 92. 3 95. 9 97. 2	102. 9 112. 3 108. 0 111. 2 106. 8 99. 7 99. 2 94. 3 98. 1 107. 3 112. 8 110. 3	118. 4 123. 7 118. 5 114. 1 111. 3 106. 6 106. 7 110. 9 118. 6 119. 0 111. 9 101. 7	111. 5 120. 7 116. 8 116. 9 120. 7 112. 5 110. 6 110. 6 118. 4 119. 9 115. 2 109. 8	118. 4 127. 7 118. 2 119. 3 119. 0 116. 4 120. 2 120. 8 134. 5 132. 0	117. 0 120. 3 113. 2 123. 8 120. 0 116. 4 106. 2 99. 2 113. 8 107. 0 111. 3 112. 4	111. 7 102. 1 91. 3 94. 0 82. 1 80. 6 71. 1 72. 4 90. 5 96. 0 105. 2 107. 0	108. 0 112. 7 104. 7 107. 0 101. 0 95. 1 91. 1 94. 0 100. 6 104. 0 113. 3 114. 2	105. 9 114. 0 111. 8 105. 5 105. 8 98. 6 92. 9 100. 7 111. 5 117. 8 113. 3 116. 0	117. 2 120. 4 113. 4 114. 0 115. 2 112. 0 109. 3 105. 4 114. 0 114. 0 109. 7 103. 9	115. 2 125. 2 116. 9 113. 8 109. 1 108. 4 102. 4 102. 2 115. 3 119. 3	96. 4 102. 0 103. 2 120. 4 118. 6 115. 0 113. 2 109. 2 101. 4 103. 2 98. 0 96. 2	99. 3 111. 8 111. 9 107. 3 91. 4 80. 7 78. 6 86. 4 91. 6 90. 4 87. 5	98. 4 107. 3 108. 2 116. 2 113. 2 104. 5 103. 4 94. 1 105. 5 108. 8 122. 3 108. 8	111. 8 122. 6 118. 2 118. 9 122. 4 111. 0 104. 1 117. 2 121. 2 123. 4 107. 2 95. 2	105. 5 117. 4 117. 4 118. 9 124. 7 110. 9 115. 5 112. 5 116. 5 115. 0 111. 4 107. 8	117. 0 127. 7 122. 3 129. 0 127. 2 124. 6 131. 8 132. 4 149. 5
]	Middle	Atlan	tie				Sou	thern					Wes	tern		
January February March April May June July August September October November December	118.4	100. 6 108. 4 97. 6 95. 2 80. 5 77. 1 68. 6 70. 7 90. 0 101. 8 109. 2 107. 2	111. 0 115. 0 106. 3 105. 4 98. 8 96. 7 96. 6 93. 8 100. 8 108. 0 118. 2 117. 2	119. 1 118. 3 114. 9 108. 4 104. 7 98. 4 92. 9 103. 8 111. 0 112. 8 109. 3 107. 3	114. 0 112. 5 109. 6 105. 9 108. 8 101. 9 96. 0 97. 4 111. 6 111. 5 110. 4 109. 9	116. 2 126. 6 114. 2 112. 0 112. 9 113. 4 110. 8 118. 3 136. 0 133. 4	98. 3 104. 0 98. 8 103. 0 107. 1 100. 0 103. 3 91. 6 107. 4 103. 5 104. 3 100. 0	96. 5 100. 6 95. 7 94. 1 88. 9 85. 3 79. 0 79. 0 99. 6 105. 5 111. 7 109. 1	105. 9 107. 7 111. 6 106. 3 105. 3 99. 7 99. 8 96. 6 108. 1 112. 0 121. 4 124. 5	120. 0 119. 3 113. 5 114. 3 109. 7 106. 8 102. 6 105. 7 115. 2 122. 5 134. 2 126. 1	132. 8 123. 4 117. 2 119. 3 123. 0 120. 0 112. 7 121. 0 136. 8 134. 4 137. 8 128. 0	124. 8 134. 8 115. 4 115. 2 110. 6 114. 6 112. 0 112. 8 127. 5 129. 7	95. 7 95. 3 90. 0 97. 3 106. 9 101. 1 110. 3 105. 4 107. 7 98. 3 93. 9 101. 2	105. 3 107. 3 102. 1 93. 1 95. 6 91. 4 97. 3 97. 0 96. 3 96. 3 97. 9 100. 3	112. 0 105. 8 103. 3 96. 6 104. 1 100. 3 100. 1 96. 1 104. 5 101. 5 104. 5 109. 2	117. 8 116. 5 110. 6 117. 5 122. 2 121. 2 114. 2 119. 8 120. 2 116. 7 112. 8 108. 0	118. 7 116. 1 100. 1 122. 1 126. 8 117. 2 125. 4 115. 3 124. 6 125. 7 117. 0 116. 9	115. 0 116. 7 110. 4 117. 8 112. 9 118. 5 116. 5 127. 5 150. 8 148. 7
Monthly average	108. 5	92. 2	105. 7	108.4	107. 5		101.8	95. 4	108. 3	115.8	125. 5		100. 3	98. 3	103. 2	116. 5	118.8	

MAGAZINE ADVERTISING 1

[Number of agate lines]

							M			
Монтн	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
January February March Aprii	827, 236 923, 231 1, 116, 064 1, 241, 719	1, 077, 377 1, 534, 993 1, 524, 130 1, 394, 544	1, 138, 199 1, 250, 196 1, 424, 116 1, 550, 258	1, 201, 757 1, 381, 661 1, 396, 140 1, 548, 999	966, 694 1, 234, 273 1, 374, 138 1, 557, 186	874, 890 1, 109, 692 1, 317, 292 1, 428, 054	939, 868 1, 107, 716 1, 208, 866 1, 267, 239	920, 856 1, 195, 631 1, 406, 361 1, 560, 377	1, 120, 777 1, 391, 897 1, 610, 201 1, 838, 118	1, 105, 787 1, 230, 205 1, 412, 148 1, 676, 176
May June July August	1, 214, 450 1, 087, 154 864, 495 809, 735	1, 573, 132 1, 315, 363 1, 073, 324 867, 452	1, 598, 494 1, 323, 201 1, 037, 119 893, 860	1, 484, 454 1, 284, 013 974, 074 788, 508	1, 475, 223 1, 328, 130 950, 479 753, 373	1, 448, 781 1, 262, 512 951, 521 749, 541	1, 324, 691 1, 216, 698 966, 097 805, 507	1, 627, 032 1, 464, 478 1, 141, 115 1, 052, 473	1, 785, 000 1, 602, 665 1, 267, 478 1, 031, 128	1, 624, 088 1, 499, 789 1, 237, 323 1, 019, 227
September October November December	1, 336, 525	1, 078, 150 1, 408, 849 1, 516, 134 1, 499, 875	1, 100, 669 1, 478, 278 1, 474, 159 1, 448, 831	1, 080, 513 1, 379, 742 1, 398, 479 1, 417, 732	1, 031, 619 1, 314, 680 1, 351, 705 1, 347, 349	1, 024, 552 1, 182, 710 1, 188, 252 1, 107, 636	1, 018, 901 1, 270, 598 1, 309, 159 1, 298, 039	1, 255, 531 1, 644, 060 1, 573, 117 1, 632, 655	1, 265, 734 1, 703, 763 1, 645, 354 1, 617, 524	1, 248, 476 1, 406, 545 1, 410, 473 1, 343, 764
Total Monthly average	13, 149, 181 1, 095, 765	15, 863, 323 1, 321, 944	15, 717, 380 1, 309, 782	15, 336, 072 1, 278, 006	14, 684, 849 1, 223, 737	13, 645, 433 1, 137, 119	13, 733, 379 1, 144, 448	16, 473, 686 1, 372, 807	17, 879, 639 1, 489, 970	16, 214, 001 1, 351, 167
	,			1	1		{		l .	J
!	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
January February March April	1, 092, 975 1, 447, 206	1,805,368 2,425,972 2,667,691 2,914,488	1,730,824 1,758,934 1,768,381 1,820,158	1, 181, 360 1, 427, 259 1, 593, 204 1, 809, 541	1, 457, 209 1, 762, 080 2, 010, 803 2, 309, 452	1924 1, 565, 215 1, 905, 528 2, 172, 222 2, 476, 011	1925 1, 598, 324 2, 037, 513 2, 297, 263 2, 505, 242	1,901,534 2,287,158 2,515,201 2,765,036	1,954,081 2,370,318 2,584,084 2,835,395	1, 811, 053 2, 176, 059
Fehruary	1, 092, 975 1, 447, 206 1, 789, 051 2, 167, 605 2, 236, 079 2, 201, 634	1, 805, 368 2, 425, 972 2, 667, 691	1, 730, 824 1, 758, 934 1, 768, 381	1, 181, 360 1, 427, 259 1, 593, 204	1, 457, 209 1, 762, 080 2, 010, 803	1, 565, 215 1, 905, 528 2, 172, 222	1, 598, 324 2, 037, 513 2, 297, 263	1, 901, 534 2, 287, 158 2, 515, 201	1, 954, 081 2, 370, 318 2, 584, 084	1, 811, 053 2, 176, 059 2, 517, 200 2, 925, 964 2, 811, 504 2, 571, 240
February March April May June	1, 092, 975 1, 447, 206 1, 789, 051 2, 167, 605 2, 236, 079 2, 201, 634 1, 772, 717 1, 558, 744 2, 082, 723 2, 372, 144 (2)	1, 805, 368 2, 425, 972 2, 667, 691 2, 914, 488 2, 931, 244 2, 845, 948 1, 971, 866	1, 730, 824 1, 758, 934 1, 768, 381 1, 820, 158 1, 843, 999 1, 684, 016 1, 323, 685	1, 181, 360 1, 427, 259 1, 593, 204 1, 809, 541 1, 894, 637 1, 722, 703 1, 419, 444	1, 457, 209 1, 762, 080 2, 010, 803 2, 309, 452 2, 219, 563 2, 046, 054 1, 693, 895	1, 565, 215 1, 905, 528 2, 172, 222 2, 476, 011 2, 401, 448 2, 202, 402 1, 649, 686	1, 598, 324 2, 037, 513 2, 297, 263 2, 505, 242 2, 420, 040 2, 308, 373 1, 744, 498	1, 901, 534 2, 287, 158 2, 515, 201 2, 765, 036 2, 659, 718 2, 628, 524	1, 954, 081 2, 370, 318 2, 584, 084 2, 835, 395 2, 906, 865 2, 554, 224 2, 046, 006	1, 811, 053 2, 176, 059 2, 517, 200 2, 925, 964

¹ Compiled by *Printer's Ink* and represents magazine advertising lineage of leading magazines of the country. The data for the last 4 years cover the lineage in identical magazines. For earlier years the magazines covered are not entirely identical but represent the field with equal thoroughness.

² Data not available due to printers' strike.

³ 11 months.

FLOOR AND WALL TILE 1

	Produc- tion	Shipn	aents	Stocks, end of month	Produc- tion	Shipn	ients	Stocks, end of month	Produc- tion	Shipn	nents	Stocks, end of month
Month		19	24			199	25			192	26	
	Squai	re feet	Value	Square feet	Squai	re feet	Value	Square feet	Squar	e feet	Value	Square feet
January February March April	4, 784, 933 4, 764, 692 5, 067, 113 4, 532, 963	3, 662, 495 3, 525, 043 3, 986, 924 4, 091, 811	\$1, 202, 232 1, 092, 103 1, 187, 576 1, 308, 588	6, 725, 486 7, 241, 801 7, 844, 941 8, 107, 465	3, 707, 380 3, 804, 906 4, 106, 761 3, 953, 531	3, 061, 814 3, 297, 656 3, 917, 862 4, 288, 052	\$1, 090, 044 1, 166, 964 1, 361, 282 1, 508, 768	9, 273, 492 9, 535, 538 9, 704, 917 9, 265, 448	5, 069, 911 4, 938, 921 5, 659, 129 5, 330, 429	4, 404, 227 4, 274, 041 4, 997, 070 5, 178, 162	\$1, 664, 517 1, 603, 531 1, 861, 501 1, 872, 847	7, 744, 206 7, 838, 722 8, 617, 235 8, 513, 628
May June July August	3, 928, 441 3, 977, 342 3, 527, 485 3, 878, 151	3, 539, 444 3, 803, 613 3, 650, 567 3, 923, 304	1, 221, 538 1, 329, 864 1, 260, 824 1, 329, 346	8, 126, 151 8, 135, 130 7, 747, 682 7, 526, 825	4, 260, 763 4, 506, 862 4, 594, 522 4, 908, 662	4, 344, 017 4, 556, 067 4, 870, 211 4, 907, 158	1, 549, 582 1, 631, 274 1, 733, 089 1, 801, 931	8, 495, 827 7, 590, 686 7, 375, 322 6, 867, 613	5, 483, 792 5, 770, 984 5, 847, 698 5, 842, 431	5, 071, 192 5, 529, 547 5, 526, 373 6, 006, 805	1, 889, 848 2, 061, 051 2, 094, 805 2, 241, 974	8, 794, 369 8, 565, 048 9, 023, 321 8, 797, 949
September October November December	4, 109, 773 4, 422, 386 3, 901, 648 3, 828, 533	3, 778, 454 4, 060, 339 3, 298, 604 3, 056, 289	1, 314, 150 1, 471, 346 1, 177, 044 1, 143, 450	7, 673, 906 7, 968, 691 8, 065, 835 9, 125, 005	5, 194, 018 5, 412, 056 5, 238, 613 5, 363, 558	5, 219, 495 5, 515, 201 5, 057, 176 5, 108, 444	1, 905, 990 2, 045, 539 1, 776, 390 1, 911, 876	6, 913, 415 6, 839, 880 6, 926, 379 7, 789, 150	5, 435, 254 5, 921, 648 5, 600, 995 5, 433, 438	5, 756, 751 5, 344, 115 5, 110, 662 5, 057, 424	2, 119, 786 2, 032, 334 1, 950, 251 1, 924, 189	8, 576, 344 8, 690, 152 8, 770, 089 9, 001, 354
Year's total Monthly average	50, 723, 460 4, 226, 955	44, 376, 887 3, 698, 074	15, 038, 061 1, 253, 172	7, 857, 410	55, 051, 632 4, 587, 636	54, 143, 153 4, 511, 929	19, 482, 729 1, 623, 561	8, 048, 139	66, 334, 650 5, 527, 888	62, 256, 369 5, 188, 031	23, 316, 634 1, 943, 053	8, 577, 701
			Produc- tion	Ship	ments	Stocks, end of month	Production	Shi	pments	Stocks, end of month		
	M	ONTH		1	927				1928	<u> </u>		
			Squ	are feet	Value	Square fee	t Sq	uare feet	Value	Square fe	et	
	February March		5, 186, 85 5, 548, 929	4, 412, 009 5, 278, 465	1, 687, 766 2, 008, 207	11, 250, 739 11, 493, 179	5, 348, 9	08 4, 245, 02 91 5, 355, 01	7 2, 074, 50	1 14, 241, 9 1 13, 982, 1	90 01	
	May June July August		5, 252, 833 5, 240, 513 5, 214, 383 5, 554, 007	5, 173, 542 5, 299, 324	1, 989, 451	11, 971, 66 11, 374, 50	6, 192, 1		9 2, 461, 58	3 13, 030, 8	46	
	November.		5, 079, 608	3 4,409,461	1,672,408	12, 072, 750 12, 767, 31	5				 	

¹ Compiled by the *U. S. Department of Commerce, Bureau of the Census*, from data reported by 39 concerns, which produced about 80 per cent of the total production of floor and wall tile in 1923, including the entire membership of the Associated Tile Manufacturers. Details by grades and kinds are issued each month in mimeograph form.

22, 701, 633 1, 891, 803

64, 302, 940 5, 358, 578 59, 394, 796 4, 949, 566

TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in important industrial and commercial movements. These data represent continuations of the figures presented in the latest semiannual number (August, 1928), in which monthly figures for 1927 and 1928 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations of relative numbers, including base periods, see introduction on inside front cover.

Pha augustines shows are through			1928			19	27	PER CE CREASE DECREA		FROM JAN. 1 OCT.	I THROUGH	Per in- crea (+
The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	or d crea (cum lati 192 from
TEXTILES												
Wool	1											
Receipts at Boston: Total thous, of lbs_ Domestic thous, of lbs_ Foreign thous, of lbs_	55, 841 50, 08 2 5, 759	54, 907 51, 346 3, 561	29, 720 25, 802 3, 918	7, 156	8, 090 4, 598 3, 492	16, 956 11, 799 5, 157		-21.6 -35.7 +10.5	-51.2 -49.1 -53.7	312, 902 201, 423 111, 479	273, 722 192, 906 79, 716	-:
mports: In condition importedthous. of lbs Grease equivalentthous. of lbs Consumption by textile mills,	19, 671 21, 383	18, 289 19, 805		14, 510	20, 730 24, 193	15, 832 18, 933	21, 053 24, 535	+42.9 +42.2	-1.5 -1.4	1	208, 723 235, 356	-1 -1
grease equivalent thous. of lbs Stocks, grease equivalent, end of quarter:	41, 282	38, 099	45, 103	43, 492	51, 477	48, 153	49, 122	+18.4	+4.8	463, 516	442, 387	-
Total thous of lbs. Held by manufacturers thous of lbs. Held by dealers thous of lbs. Machinery activity, hourly:	² 385, 407 ² 173, 556 ² 211, 850			² 369, 816 ² 158, 346 ² 211, 470		\$ 357, 107 \$ 175, 436 \$ 181, 671		-4.0 -8.8 -0.2	+3.6 -9.7 +16.4			
Looms— Wideper ct. of hours active Narrowper ct. of hours active Carpet and rugper ct. of hours active	59 58 62	53 49 55	55 48 63	53	67 66 67	64 65 65	66 67 64	+13.6 +24.5	+1.5 -1.5			
Sets of cardsper ct. of hours active Combsper ct. of hours active	81 63	78 59	77 65		93 82	84 81	84 88	+8.1 +9.4 +10.8	+10.7			1
Spinning spindles— Woolen———————————————————————————————————	78 49	75 50	74 58	80	88 68	82 71	⁷ 82 74	+10.0 +9.7	+7.3			
Raw, territory, fine, scoureddolls. per lb Raw, Ohio and Pa, fleeces.	1.18	1.17	1. 1 4	1.14	1.10	1.12	1.12	-3.5	-1.8			
Worsted yarndolls. per lb_ Women's dress goods, French	. 55 1. 58	. 55 1. 60	. 54 1. 60		. 54 1. 58	. 45 1. 38		0.0 0.0	+12.9			
serge, 39-indolls. per yd Suiting, 13-ozdolls. per yd	1.03 2.008	1.03 2.008	1.03 2.008		2.008	. 98 1. 913	1.00 1.913	-1.0 0.0	-2.0 +5.0			
Cotton												
Production, crop estimatethous, of balesthous, of bales					4 14, 133 6 11, 320		\$ 12, 789 \$ 10, 895					
teceipts into sightthous. of bales mports, unmanufacturedbales tayorts, unmanufactured (incl. linters)bales tonsumption by textile millsbales	297 14, 587 457, 781 510, 565	339 18, 473 341, 849 438, 743	259, 489	18, 508 814, 569	3, 927 27, 840	2,000 28,347 631,041 627,784	2, 837 19, 235 71, 113, 018	+93.7 +50.4 +52.3 +25.7	+38.4 +44.7 +11.5 +0.9	7, 695, 088	263, 782 6, 169, 207	-2
tocks, domestic, end of month: Total, mills and w'houses_thous, of bales_ Millsthous, of bales_ Warehousesthous, of bales_	2, 805 1, 159 1, 646	2, 197 1, 007 1, 190	1, 971 782 1, 189	3, 366 720	5, 831 1, 195 4, 636	5, 081 1, 116	7 6, 743 7 1, 324	+73.2 +66.0	-13.5 -9.7 -14.4			
tocks, world visible, end of month: Totalthous. of bales Americanthous. of bales	4, 962 2, 910	4, 056 2, 165	3, 480 1, 790	4, 114	6, 198 4, 645	5, 356	6, 479	+50.7 +81.2	-4.3			
rices: To producer, all gradesdolls. per lb In New York, middlingdolls. per lb	. 197 . 214	. 210 . 215			. 181 . 196	. 225		+2.8 +5.9	-13.8 -7.1			
Cotton Yarn	İ			[]					!			
Machinery activity of spindles:												
Active spindles thousands Total activity millions of hours Activity per spindle hours.	28, 624 7, 248	28, 228 6, 259	28, 244 7, 431	6, 961	30, 315 8, 694	8, 761	⁷ 32, 535 8, 705	×7.2 +24.9	-6.8 -0.1			
Ratio to capacityper cent	203 88. 4	176 79. 7	209 87. 7	196 90. 6	246 103, 9	240 106. 6	⁷ 105. 0	+25.5 +14.7	+3.4 -1.0			
Production thous, of lbs. Stocks, end of month thous, of lbs.	19, 415	12, 522	14, 046	18, 839	17, 621			-6.5	+6.0		175, 712	
Unfilled orders, end of mothous. of lbs	12, 539 25, 435	12, 350 24, 619		10, 248 34, 836	8, 476 39, 041		10, 165 27, 220	-17.3 + 12.1	-16.6 +43.4			
22/1 cones, Boston dolls. per lb 40/1s, southern spinning dolls. per lb.	. 374 . 489	. 384 . 515	. 369 . 514		. 372 . 495			+3.9 -1.2	-7.5 -9.3			
Cotton Goods												
Cotton textiles: Productionthous. of yds	262 010	991 202	200 470	952 800	904 000	244 000	221 0#4	L10 0	_14 1		9 049 040	
Production thous of yds. New orders thous of yds. Shipments thous of yds. Stocks, end of month thous of yds. Unfilled orders, end month thous of yds.	287, 818 267, 025 270, 342 458, 984	221, 826 187, 439 217, 540 463, 270 272, 227	324, 073	387, 151 278, 110	307, 402	333, 607	225, 560 293, 411	+10.5	+78.2 +4.8		2, 942, 048 2, 989, 637 2, 883, 807	

¹ Quarter ending in month indicated. ¹ Quarter ending Sept. 30, 1927.

⁴ As of Nov. 1, 1928. 5 Final estimate for 1927.

⁶ As of Nov. 1, 1927. 7 Revised.

The cumulatives shown are through			1928			19	27	CREASE	ENT IN- (+) OR ASE (-)	CUMULATIV FROM JAN. 1 OCT.	THROUGH	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928 ′	crease (-) cumu lative 1928 from 1927
TEXTILES—Continued								-			-	1027
Cetton Goods-Continued												
Cotton cloth: Importsthous. of sq. yds Exportsthous. of sq. yds	4, 615	3, 490			3, 676		4, 425	+17.1	-16.9	52, 370	51, 019	
Fabrics for tire manufacture.	46, 534 19, 646	44, 951 20, 947	21, 854	·	56, 087	50, 333 13, 998	42, 836 13, 549	+61.7	+30.9	464, 810 8 139, 659	419, 616 8 169, 540	
consumption thous of lbs_ Elastic webbing, shipments thous of dolls_ Prices:	1, 384	1, 211	1, 399	1, 478	1,624			+9.9	1		14, 003	
Print cloth, 64 x 60dolls. per yd Sheeting, browndolls. per yd Cotton goods (Fairchild), rel. to.1911-1913	. 077 . 091 162	. 079 . 092 165		. 089	. 078 . 090 163	. 089 . 110 177	. 087 . 111 175	+5.4 +1.1 +1.9	-10.3 -18.9 -6.9			
Cotton Finishing		-50		100	100	1	110	1 1.0	0.0			
White, dyed and printed (outside mills): Billings, finished goodsthous. of yds	70, 029	58, 685	70, 748	69, 805	83, 935	84, 899	85, 490	+20.2	-1.8	858, 369	730 389	_19
New orders, gray yardagethous of yds Shipments, finished goodscases Stocks, finished goods, end mocases Operating activityper ct. of capacity Unfilled orders, end of monthdays	61, 347 42, 357	62, 310 40, 500	71, 743 46, 283	74, 483 45, 767	87, 175 50, 984	87, 386	77, 296	+17.0 +11.4	+12.8	841, 616 505, 180	739, 382 734, 512 462, 027	-13. -12. -8.
Stocks, finished goods, end mocases Operating activityper ct. of capacity	38, 907 53 3, 6	37, 958 51 3, 8	54	61	32, 046 66 6. 0	72	73	$-4.1 \\ +8.2$	-18.0 -9.6			
Printed only imilia and discides:	63, 796	49, 996	54, 495		77, 320	5, 8 58, 673	5. 4 64, 943	+20.0 +17.0				l
Production thous. of yds_Stocks, end of month thous. of yds_	79, 416	75, 977	74, 682	75, 161	73, 687			-2.0				
Silk Imports, rawthous. of lbs	6, 174	5, 832	9, 320		8, 272	7, 625	7, 942	+14.9	+4.2 +4.4	72, 939	73, 281	+0.
Deliveries (consumption)bales Stocks, end of month: At warehousesbales	46, 051 41, 127	40, 931 38, 866	50, 821 50, 975	· '	49, 940 49, 381	50, 107 58, 986	47, 827 62, 366	+4.5 -2.1	+4.4 -20,8	ł I	478, 275	1
At manufacturing plantsbales Silk machinery activity:	24, 746	22, 188	24, 429	22, 786	26, 676	22, 100	25, 967	+17. 1	+2.7	-		ļ.
Broad loomsper cent of normal	97. 4 55. 4	93, 0 52, 1 62, 7		54. 0	102, 0 50, 5	81. 9 50. 8	84. 2 54. 2	+10.0 -6.5	+21. 1 -6. 8			
Spinning spindlesper cent of normal Prices: Raw, Japanese, 13-15, N. Y. dolls. per lb	57. 1 4. 851	4, 851			69. 3 5. 145	i I	77. 6 5. 145	+3.6 +1.0	1		1	l
Silk goods, compositedolls. per yd	1. 18	1, 17	1. 16		1. 16		1, 20	0.0	-3.3			
Rayon Importsthous. of lbs Stocks, bonded, end of monththous. of lbs	710	659			1, 238	1, 129	1, 386	+34.0	-10.7	13, 161	10, 117	-23.
Stocks, bonded, end of monththous. of lbs Price, 150 denier, A grade, N. Ydolls. per lb	3, 157 1. 50	2, 949 1. 50	2, 976 1, 50	2, 814 1, 50	1. 50	1, 875 1, 50	1, 674 1, 50	0. 0	0.0			
Clothing												
Men's and boy's garments cut: Suitsthous. of garments_ Separate trousersthous. of garments_	1, 902 1, 818	1, 911 1, 638	2, 045 1, 895			1, 839 1, 963	1, 715			8 18, 789	17, 729 16, 916	-5.
Overcoatsthous, of garments	463	535	666	647		729			1 1	11 1	8 3, 669	
Cutthous. of dozen garments_ Net shipments_thous. of dozen garments_	367 322	346 330	7 394 7 360	383 358							8 3, 304 8 2, 902	
Unfilled orders end of mothous. of dozen garments	159	169	7 159	158								
Hosiery						į						
Productionthous. of dozen pairs_ Net shipmentsthous. of dozen pairs_ Stocks, end of monththous. of dozen pairs_	3, 292 3, 386 9, 011	2, 786 2, 963 8, 916	3, 469 3, 731 8, 648	3, 755		3, 841 4, 355 7, 695	4, 151 4, 294 7, 965			8 33, 585 6 33, 490	8 30, 557 8 30, 484	-9.
New orders thous of dozen pairs. Unfilled orders, end of mo_thous of dozen pairs.	3, 573 4, 900	2, 786 2, 963 8, 916 2, 836 4, 711	3, 202 4, 076	3, 810		4, 896 6, 407	4, 246 6, 481			8 35, 641	8 30, 130	-15.
Knit Underwear									}			
Productionthous, of dozen garments Net shipmentsthous, of dozen garments	1, 113 998	881 942	1, 098 1, 306	1.402	1, 297 1, 514	1, 055 1, 464	1, 181 1, 359	+27.7 +8.0	+9.8 +11.4		11, 078 11, 299	+4. +2
Stocks, end of mothous. of dozen garments New ordersthous. of dozen garments	1, 761 894	1, 658 852	1, 570 1, 236	1,370	1, 228	1, 216	1, 322 1, 147	-10.4 +22.3	—7. 1	[]	11, 182	
Unfilled orders, end of monththous, of dozen garments	2, 053	1, 947	1,896	1, 696	1, 645	2, 416	2, 185	-3.0	-24.7			
Burlaps and Fibers Imports:												
Burlapsthous. of lbs Fibers (unmanufactured)long tons	56, 913 19, 672	58, 541 18, 449	47, 766 20, 657	43, 617 21, 004	30, 874 25, 615	40, 337 18, 284	37, 396 16, 705	-29.2 + 22.0		495, 651 254, 647	536, 810 251, 568	+8. 1.
Pyroxylin Coated Textiles												
Pyroxylin spread thous. of lbs. Shipments billed thous. of linear yards.	5, 123 4, 274	5, 038 3, 814	4, 201	3, 852	4,386	2, 901	3, 042 2, 649 2, 426	+16.8 +13.9	+65.6	27, 515	50, 666 39, 397	
Unfilled orders, end mo_thous. of linear yards Fur	4, 226	4, 194	3, 855	4, 439	3, 704	2, 421	2, 426	-16.6	+52.7			
Sales by dealersthous. of dollars	13, 840	12, 215	12, 110	10, 244	12, 576	13, 64	8, 843	+22.8	+42.2	153, 895	120, 575	-21

⁷ Revised.

⁶ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) or	CUMULATIVE FROM JAN. 1	THROUGH	Per ci in- crease (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
TEXTILES—Continued Buttons												
Fresh-water pearl buttons:												
Productionratio to capacity_ Stocks, end of monththous. of gross	46. 8 11, 202	29. 7 10, 847	43. 6 10, 746	47. 7 10, 593	51. 0 10, 621	51, 2 9, 490	7 54. 2 9, 604	+6.9 +0.3	-5.9 +10.6			
Ocean pearl buttons: Production thous. of gross thous. of gross thous. of gross.	158 187	110 197	187 227	163 241	195 262	173	207	+19.6 +8.7	-5.8	1, 820	1, 887 2, 245	+3 +5
New orders thous. of gross Stocks, end of month thous. of gross.	165 636	163 646	224 600	222 482	288		282	+29.7	+2.1	2, 160	2, 351	-4
IRON AND STEEL												
Iron			!									
Manganese ore, importsthous. of long tons Iron ore:	13	22	26	15	26	36	15	+73.3	+73. 3	250	172	-31
Imports	189 8, 926	183 8, 981	9, 243	211 8,748	170 8, 454			-19. 4 -3. 4			2, 059 49, 721	
Lake Erie ports and furnacethous. of long tons. Other portsthous. of long tons. Consumptionthous. of long tons.	6, 199 2, 613	6, 078 2, 655	6, 390 2, 819	5, 827 2, 710	6,002 2,580	5,493 1,832		+3.0 -4.8		34,721 13,133	33, 344 14, 900	
Stocks, end of month—	4, 667	4, 633	4, 761	4, 608	5, 025	4,089	4, 024	+9.0	+24.9	45, 127	46, 929	
Total thous of long tons At furnaces thous of long tons tons of long tons	22, 981 17, 913	27, 209 21, 824	31, 754 26, 036	35, 808 29, 708	33, 082	32, 527	34, 952	+11.4	-5.4			
On Lake Erie docks_thous. of long tons_ Pig-iron production: Total, United Statesthous. of long tons_	5, 068 3, 082	5, 385 3, 072	5, 718 3, 137	6, 100 3, 062	6, 473 3, 374	1		+6.1 +10.2	l	H I	31, 167	T0
Merchant furnacesthous. of long tons Canadathous. of long tons	633	607 95	575 92	585 91	644	685	707	+10.1	-8.8	7.467	6, 257	-16 +38
Furnaces in blast, end of month: Furnacesnumber	189	185	183	197	197	179	172	0.0	+14. 8	5		
Capacity long tons per day Per cent of total per cent	100, 855 55. 3	98, 445 54. 6	98, 730 54. 3	106, 755 58. 1	108, 800 58. 5							
Ohio gray-iron foundries: Meltings— Actual long tons	19, 382	19, 967	12, 932	14, 586	20, 112	13, 298	14, 207	+37.9	+41.€	158, 125	162, 507	+2
Actual long tons Normal long tons Ratio to normal per cent of normal	18, 454 105. 0	19, 365 103. 0	12, 497 103. 4	16, 155 90. 2	19, 349 103. 9	16, 284	18, 389	+19.8	+5.2	188, 546	160, 298	-15
Receiptsper cent of normal	146 99	127 107	129 99	131 90	134 103	117	88	+2.3	+52.3	3		
Malleable castings: Productionshort tons_	56, 259	49, 991	56, 507	52, 227	58,065			+11.2	+34.8	506, 677	543, 241	+7
Production short tons Operating activity per ct. of capacity Shipments short tons New orders short tons	63, 3 54, 937 48, 132	58. 6 50, 035 49, 564	66. 9 54, 020 52, 214	62. 3 51, 208 51, 506	68. 4 50, 770 51, 569	42, 500	38, 433	-0.9	+32.1	488, 332	518, 540 511, 069	+6 +13
Foundry, No. 2.	40, 102	49, 504	02, 214	01,000	01,009	35, 491	31,411	70.1	7-31.0	449, 173	311,009	T19
northerndolls. per long ton Basic (valley furnace)_dolls. per long ton	18. 51 15. 45	18. 41 16. 00	18. 26 16. 00	18. 64 16. 19	18. 86 17, 10				-2.1 +0.6	3		
Composite pig irondolls. per long ton	17. 97	17. 79	17. 78	18.04	18.40	18. 89	18. 79	+2.0	-2.1			
Cast-iron Boilers and Radiators Round boilers:	ĺ											
Production thous. of lbs. Shipments thous. of lbs.	12, 094 13, 071	10, 581 12, 302	12, 881 14, 422	13, 655 17, 021		22, 733 22, 311	19, 865 25, 734			201, 015 167, 904	113, 904 110, 298	-34
New orders thous. of lbs. Stocks, end of month thous. of lbs. Square boilers:	14, 765 89, 728	12, 950 87, 993	12, 551 86, 141	14, 504 82, 931		20, 340 113, 561			1	1!	112, 527	-34
Production thous, of lbs	31, 238 25, 165	19, 541 28, 247	38, 693 36, 212	ା ⊿1 ଉହର		29, 682 30, 687	24, 758 31, 156			212,669 175,512	270, 371 221, 533	+27 +26
Stocks, end of month thous. of lbs.	25, 165 29, 779 188, 078	32, 164 179, 539	31, 809 182, 367	36, 527		25, 112	30, 400 110, 647			179, 686	229, 584	+27
Radiators: Production_thous. sq. ft. heating surface. Shipments_thous. sq. ft. heating surface. New orders_thous. sq. ft. heating surface.	13, 363 11, 665	11, 388 13, 285	15, 914 16, 951	13,770		17, 453 17, 304	1			1!	129, 993 105, 276	_7 _7
Stocks, end of	12, 394	14, 844	15, 753		1	11	19, 683			116, 999	112, 945	-3
monththous. sq. ft. heating surface Gas-fired boilers:	79, 549	78, 279	77, 267			li .	1		ł			
Shipments dollars Shipments thous. B. t. u	230, 250 182, 195 135, 711	266, 627 224, 098 125, 000	288, 954 239, 048									
Productionthous. B. t. u. Stocks, end of monththous. B. t. u.	960, 656	125, 000 852, 822	778, 337									
Crude Steel												
Steel ingots, production: United States, totalthous. of long tons Reflect capacity	3, 743	3, 812	4, 178 82	4, 148 88	4, 648		3, 316 69	+12.1	+40. 2 +31. 9	37, 095	41,579	+12.
Ratio to capacityper cent Canadathous. of long tons U. S. Steel Corporation,	76 117	81 83	89 89	100	91 109	· 68 54		+3.4 +9.0	+94.6	730	1,030	+41.
unfilled orders, end mo_thous. of long tons Steel castings:	3, 637	3, 571	3, 624	3, 698	3, 751	3, 148	3, 341	+1.4	+12.3			
Production— Totalshort tons	91, 387	78, 324	7 87, 330	⁷ 75, 356			62, 409	+15.0	+38.9	847, 386	852, 609	+0.
Ratio to capacityper cent_ Railroad specialtiesshort tons_ Miscellaneousshort tons_	30, 742	27, 501	⁷ 61 27, 157	25, 311 7 50 045	29, 113	25, 618	21, 947	+15.4 +15.0	+32.7	332, 150	313, 923	-5.
New orders— Total short tons	60, 645 71, 745	50, 823 66, 667	⁷ 60, 173 ⁷ 80, 862	7 50, 045 7 82, 329	57, 556 77, 783			+15.0	+50.3	779 062	538, 686 814, 571	1
Ratio to capacity per cent	50	20, 483	56 25, 171	57	54	36	36	-5.3 -24.7	+50.0	317, 352	311, 183	
Railroad specialtiesshort tons_ Miscellaneousshort tons_	49, 148	46, 184	7 55, 691						+45. 9	461, 710	503, 388	

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(十) OR		VE TOTAL 1 THROUGH . 31	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
IRON AND STEEL—Continued		,										
Crude Steel-Continued												
Sheets, black, blue, galvanized, and full finished: Production— Totalnet tons Ratio to capacityper cent	311, 629 94. 3	267, 685 82. 2			369, 243 103. 5	220, 919 62, 6		+15.8 +2.5	+50. 2 +44. 4	2, 7 95, 105	3, 287, 369	+17.6
Stocks, end of month— Total net tons	151,606	161, 933			150, 600		145, 980	+2.6	+3.2			
Unsold net tons. Shipments net tons. New orrders net tons. Unfilled orders, end of month net tons. Steel barrels:	50, 702 308, 741 318, 902 526, 798	55, 280 278, 310 333, 357 550, 468	51, 636	44, 519 322, 876 370, 936	49, 800 354, 925 344, 614	53, 311 230, 443	50, 518 232, 626 234, 358	+11.9 +9.9 -7.1 -2.7	-1.4	2, 705, 695 2, 479, 978	3, 175, 619 3, 125, 164	+17. 4 +26. 0
Production barrels Ratio to capacity per cent	712, 779 61. 4	647, 844 55. 5	677, 3 13 57. 8	593, 255 50. 2	656, 021 56. 4	521, 899 47. 4	578, 408 51. 6	+10.6 +12.4	+13.4 +9.3	5, 685, 433	6, 283, 025	+10.5
Shipments barrels Stocks, end of month barrels Unfilled orders, end of month barrels. Track work, production short tons.	717, 496 53, 868 1, 159, 756 13, 716	645, 881 55, 831	675, 600 57, 544	595, 640 55, 059 996, 820	661, 009 50, 071 823, 872 9, 493	525, 374 53, 938 1, 124, 437	572, 893 59, 453 1, 000, 559	+11.0 -9.1 -17.3 -11.8		5, 672, 770 141, 786	6, 285, 460 	+10.8 -15.2
ron, steel, and heavy hardware sales rel. to Jan., 1921. Lock washers, shipments thous. of dolls.	204 287	11,770 187 257	215 282	207	9, 453 269	203 203	216 199	+4.7	+35. 2		2, 652	+9.4
Wholesale prices: Steel billets, Bessemerdolls. per long ton Iron and steel, compdolls. per long ton	32. 2 5	32.00	32.00	32. 00	32. 80	33.00	33. 00	+2.5	-0.6			
Structural steel beamsdolls. per long ton Structural steel beamsdolls. per 100 lbs Composite finished steel.dolls. per 100 lbs	35. 34 1. 85 2. 48	34, 91 1, 85 2, 48		1.85	1.85	1.83	1.80	+0.9 0.0 +0.8	-0.8 + 2.8			
Fabricated Steel Products												
Structural steel, fabricated: New orders (prorated)short tons. Ratio to capacityper cent. Shipments (prorated)short tons.	303, 750 81 7 262, 500	296, 250 79 7 273, 750	95 296, 250	277, 500	330, 000	270, 000	251, 250	-24.7 -24.7 +18.9	-16.9 +31.3	2, 407, 500		+8. 9 +9. 0
Ratio to capacityper cent Steel plate, fabricated, new orders: Totalshort tons	7 70 35, 202	7 73 35, 959			60, 482		67 47, 090	+18.9 +50.2	·	434, 708	444, 339	+2.2
Ratio to capacityper cent	12, 204	47	60 24,807	50	76	48	58 18,648	+52.0 +29.0	+31.0		195, 227	+3.5
Oil-storage tanks short tons Steel bars, cold finished, shipments tons Steel boilers, new orders: Quantity number Area thous of sq. ft	39, 542 1, 611	39, 943 1, 615	42, 993 7 I, 647	43, 893 7 1, 425	50, 867 1, 514	27, 860 1, 312	27, 656 1, 270	+15.9 +6.2	+83.9 +19.2	352, 846 13, 659	417, 961 13, 983	+18.5 +2.4
	1, 470	1, 528	7 1, 457	7 1, 257	1, 325	1, 152	930	+5.4	+42.5	13, 701	13, 162	-3.9
Fabricated Steel Products Steel furniture:												
Business group— Shipments————thous. of dolls— New orders———thous. of dolls— Unfilled orders, end mo.thous, of dolls—	3, 009 2, 764 1, 993	2, 515 2, 594 2, 072	2, 565 2, 619 2, 118	2,689	3, 184	2,368	2, 411		+32.1	25, 434	29, 068 29, 678	+14.0 +16.7
Shelving— Shipmentsthous. of dolls. New ordersthous. of dolls. Unfilled orders, end mothous. of dolls.	720 737 729	723 713 706		800		608 ،	619 551 666	+40.7 +19.9 +0.8			7, 590 7, 897	+24.5 +28.3
Iron and steel: Exports long tons long tons.	262, 052 56, 573	253, 336 33, 465	287, 297 54, 062			166, 352 46, 573			+50.9 +27.0			+30.0 +11.5
Enameled Ware	00,000	JU, 100	02,002	11,000	00, 110	10,010	00,010	0.2	, 21.0	113,002	200,000	
Baths: Shipments pieces Stocks, end of month pieces New orders. Pieces Unfilled orders, end of month pieces.	119, 297 120, 723 113, 017 121, 061	111, 067 113, 430 101, 603 101, 560	122, 167 96, 876	134, 749 76, 074	147, 656 90, 665	129, 559 100, 413	143, 824 85, 368	+9.6 +19.2	+2.7 +6.2	998, 350 1, 007, 344		-1.0 +7.5
Lavatories: Shipmentspieces Stocks, end of monthpieces	131, 623 173, 898	120, 600 164, 830	114, 070 161, 276	94, 383 168, 211	99, 343 180, 658	118, 257 196, 259	101, 961 197, 121	+5.3 +7.4	-2.6 -8.4	1, 103, 161		+0.9
New orderspieces	138, 113	104, 262 122, 593	,			1		+2.8	-5.8	' '		+9.2 +0.1
Shipments pieces Stocks, end of month pieces New orders pieces	128, 298 227, 929 128, 368	213, 539 116, 236	216, 338	216, 255	230, 850	222, 824	220, 875	+10.0 +6.7 10.7	+4.5		1, 260, 793	+8.6
Miscellaneous sanitary ware: Shipmentspieces. Stocks, end of monthpieces.	48, 221 111, 141	48, 550	54, 003	44, 910	45, 365	50, 616	46, 100	+1.0	-1.6	487, 460		-1.9
New orderspieces Small ware (all except baths):	111, 141 47, 197	110, 330 41, 605		103, 509 44, 707		136, 902 50, 129	134, 307 46, 758				496, 208	+3.1
Unfilled orders, end of monthpieces_ Enameled sheet-metal ware:	315, 920	274, 135	174, 072	155, 483	129, 273	119, 608	99, 514	16. 9	+29.9			
Shipmentsdozen pieces Porcelain flat ware: New orders—	299, 078	277, 684				310, 823	,	1		, ,	⁸ 3, 123, 160	+4.1
Total thous. of sq. ft. Ratio to capacity per cent Shipments—	5, 477 49	4, 457 40	6, 233 55			6, 129 48	9, 578 63					
Total thous. of sq. ft_Ratio to capacity per cent_	5, 322 47	4, 665 41	5, 4 95			6, 849 53	6, 889					
	vised.	41	-19				through S			;;	,	

⁷ Revised.

⁶ Cumulative through Sept. 30.

he cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	1 THROUGH	Per in cres (+
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	cre cui lati 19 fro 19
IRON AND STEEL—Continued Machinery												_19.
acuum cleaners, shipmentsnumber Vashing machines, shipments:	75, 631	57, 702	65, 164	89, 2 2 2	96, 528	3 212, 829		+8.2			814, 761	
Total number Electric number units units	79, 962 63, 531	78, 564 62, 337	92, 955 74, 253	80, 770	92, 971 76, 757	84, 795 70, 227	86, 922 71, 570	-5.2 -5.0	+7.0 +7.2	795, 139 654, 580	851, 893 691, 736	+
ater systems, snipmentsunits	1, 235 9, 624	1, 218 8, 815	1, 402 9, 471	1, 187	1, 505 9, 668	1, 674 8, 211	1,743	+26.8 +13.8	-13.7	15, 598 70, 761	14, 136 83, 947	_
nmps: Domestic shipments— Pitcher, hand, etcunits Power, horizontal typeunits Steam, power, and centrifugal—	43, 693 1, 842	38, 867 2, 251	48, 729 2, 528	40, 677 2, 011	39, 946 2, 728	43, 007 1, 492	40, 443 1, 758	-1.8 +35.7	-1. 2 +55. 2	425, 221 10, 227	451, 859 21, 731	
Shipmentsthous. of dolls Unfilled orders, end mo_thous. of dolls	1, 505 1, 640 3, 088	1, 460 1, 553 2, 984	1, 579 1, 520 3, 023	1,369	1, 708 1, 634 3, 128	1, 178 1, 221 2, 950	1, 300 1, 303 2, 950	+21. 6 +19. 4 +2. 4	+31. 4 +25. 4 +6. 0	14, 250	14, 490 14, 277	+ +
gricultural machinery and equipment: Shipments— Total————————————————————————————————————	219. 3	213. 7	219. 7	⁷ 179. 3	151. 2	157. 2	122, 6	-15.7	+23.3			
Total rel. to 1923–25. Domestic rel. to 1923–25. Foreign rel. to 1923–25. Production rel. to 1923–25.	222. 4 202. 8	207. 8 244. 7	187. 6 387. 5	7 145. 8 7 3 54. 0	128. 4 277. 2	134. 4 277. 0	112. 0 178. 0	-11.9 -21.7	+14.6 +55.7			
New orders rel. to 1922-24	142. 4 149. 1	142. 0 94. 8	146. 1 278. 0	⁷ 145. 5 170. 0	148. 9 185. 0	1 1	121. 1 98. 0	+2.3 +8.8				11
Unfilled orders, end morel. to 1922-24	129. 4 359. 3	124. 8 332. 1	154. 1 467. 2	129, 7	254. 3		113. 4 106. 3	+96. 1 -12. 6	+124.3			
okers, mechanical, sales: Quantitynumber_ Powerhorsepower	162 42, 628	186 58, 670	162 51, 572		100 27, 219	104 27, 843	95 27, 222	-37. 9 -58. 2	+5.3 0.0		1, 272 428, 537	 -
achine tools: New orders	215 193 348	204 181 420	241 208 428		284 221 504	106 128 266	133 152 231	+7.2 +7.8 +14.3	+113.5 +45.4 +118.2			
ectric hoists:	442	394	402	447		300	270			40.000	⁸ 3, 843	
Quantity number Quantity number dollars. Value dollars dollars dollars ectric overhead cranes:	181, 205 195, 807	204, 636 177, 404	180, 365 193, 248	228, 510		147, 323 151, 674	114, 835			\$ 1, 280, 046 \$ 1, 177, 583	81,790,816	1 +
New orders thous, of dolls	600 573	463 733	564 821	464 713	806 775	653 684	764 566	+73.7 +8.7	+5.5 +36.9	7, 909 6, 865	5, 802 6, 314	
Unfilled orders, end mothous. of dolls codworking machinery; New ordersthous. of dolls	1, 688 1, 173	1, 800 1, 247	1, 952 1, 641	i i	2, 165 1, 585	2, 273 1, 182	2, 117 1, 144	-1.1 -3.3	+2.3		14, 306	
Unfilled orders, end of mothous. of dolls	1, 873	32 1, 838	2, 058	26 2, 265	140 2, 035	990	23 975	+438.5 -10.2	+508.7 $+108.7$	151	368	+1
Shipments thous of dolls Shipments number of machines ectric industrial trucks and tractors:	1, 319 871	1, 264 932	1, 436 1, 170	1, 413 1, 050	1, 666 1, 170	1, 380 1, 093	1, 124 872	+17.9 +11.4	+48. 2 +34. 2	13, 184 10, 508	13, 361 10, 080	-
Shipments, domestic— Tractors——number of vehicles— All other types—number of vehicles—	6 96	5 87	5 85	11 102		8 66		-54.5 +6.9	+34.6	853	87 972	+
Exportsnumber of vehicles_ ire-extinguishing equipment, shipments:	14 97	15 , 105	6 125		20 139	122	17	+300.0 -2.8	+17.6	100 1, 209	122 '1, 089	+
Motor vehiclesnumber_ Hand typesnumber_ atents issued:	48, 123	48, 897	47, 490	7 42, 193	49, 128	46, 255	48, 472	+16.4	+1.4	496, 990	473, 767	-
Total, all classesnumber	4, 275 24 42	3, 107 44 59	3, 390 29 43	40	59	37	57	+42.3 +47.5 +59.5	+3.5	513	35, 572 423 523	
NONFERROUS METALS								į				
Copper roduction:	m o 004	T O 400			0. 00.		20.050		104	204.250	200 15	
Minesshort tons_ Smeltershort tons_ Refined (N. and S. America)short tons_	73, 224 88, 398 131, 024	73, 426 83, 875 135, 092	76, 952 88, 517 143, 560	85, 795	100, 720	74, 418	83, 551	+11.3 +17.4 +8.9	+20.5 +19.4	694, 676 802, 911 1, 229, 314	736, 157 853, 571 1, 324, 496	II 4
omestic shipments, refinedshort tons	156, 474 81, 436	153, 190 82, 245 47, 855	158, 838	154, 518 88, 707	173, 623 100, 371	133, 291 71, 578	145, 278 68, 619	+12.4 +13.1	+19.5 +46.3	1, 367, 410 704, 718	798, 749	‡
xportsshort tons_ tocks (North and South America), end mo.: Refinedshort tons_	50, 261 58, 809	47, 855 54, 871	41, 186 54, 793		·	1	'	+24.8 -11.9	İ		466, 274	-
Blister short tons holesale price, electrolytic dolls. per lb	251, 694 . 1453	257, 673 . 1453	254, 433 . 1453	7 255, 727	257, 604	246, 517	246, 354	+0.7	+4.6			
Wire Cloth	400	0.45	400	400	400	400	400	115.0		4 505	4.050	
roduction thous. of sq. ft. hipments thous. of sq. ft. oeks, end of month thous. of sq. ft.	400 364 1, 157	367 365 1, 124	430 387 1, 120	423	442	417	446	+15.6 +4.5 -2.8	-0.9	4, 168	4, 378 4, 123	
ew ordersthous. of sq. ft nfilled orders, end of mothous. of sq. ft	310 185	346 247		412	419	440	476		-12.0		3, 878	
lake and hold orders, end of monththous. of sq. ft	414	405	457	453	459	396	412	+1.3	+11.4			
Tin eliveries (consumption)long tons	e 050	K KAE	7 000	A 00E	Q ATE	e 110	8 00=		ه جدر	AAA 69	ga kot	
enveries (consumption)long tons Ocks, end of month: World visible supplylong tons	6, 950 16, 231	5, 545 18, 022	18, 456	19, 924	20, 907	15, 083	14, 684	-6.0 +4.9			64, 565	-
United States long tons nports long tons long tons long tons rice, pig, New York dolls. per lb	2, 148 5, 050	2, 878 4, 772	1,718	3,508	4, 598	1, 973	3, 158	+31.1	+45.6		69, 037	

³ Quarter ending Sept, 30, 1927.

⁷ Revised

Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27		NT IN- (十) OR SE (一)	CUMULATI FROM JAN. 1 OCT	THROUGH	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
NONFERROUS METALS—Continued												
Zine												
Retorts in operation, end of monthnumber Per cent of totalper cent Productionshort tons	65, 680 53. 4 50, 825	62, 384 53. 9 50, 890	66, 428 57. 4 52, 157	53. 4	51. 5 50, 259	74, 435 56. 6 47, 735	57. 9 50, 185	-3.4 -3.6 +1.8	-11.1		518, 744	+1.8
Stocks, end of month short tons. Ore, Joplin district: Shipments short tons. Stocks, mines, end of month short tons.	44, 468 64, 531	42, 210 43, 227	44, 416 43, 466	41, 429	41, 165	34, 277 55, 308	76, 430	-3.9 -0.6	+27. 2 -46. 1	584,620		
Stocks, mines, end of monthshort tons Price, slab, prime westerndolls. per lb	32, 266 0. 0616	31, 679 0. 0620	39, 303 0. 0625		53, 209 0. 0625	28, 806	29, 776	+9.8 0.0	+78.7			
Lead	F1 F01	40 071	F9. 400	7 55 105	to 004		FO 104	,,,		200 EXO	F00 000	
Productionshort tons_ Ore shipments: Joplin districtshort tons_	51, 501 13, 277	48, 671 6, 623	53, 403 6, 125	-	58, 234 10, 514	53, 204 6, 439		+5.6	1	,	536, 000 79, 207	ļ
Utah short tons. Receipts in U. S. ore short tons. Stocks, U. S. and Mexico, end mo short tons.	77, 074 54, 185 163, 709	56, 395 49, 305 158, 919	78, 811 53, 575 156, 976	65, 353 51, 978 155, 482	71, 887	80, 362 50, 995 160, 134	66, 157 53, 017 155, 868	+12.7 +10.0		668, 597 8 493, 046	694, 884 6 473, 114	+3.5
Price, pig, desilverized, N. Ydolls. per lb Other Metal Products	0. 0630	0.0622	0. 0625	0. 0645	0. 0650	0.0630	0.0625	+0.8	- -4 . 0			
Rabbitt metal consumption:												
Total apparent thous. of lbs. Direct by producers thous. of lbs. Sale to consumers thous. of lbs. Band instruments, shipments:	4, 731 1, 106 3, 625	4, 693 900 3, 793	4, 756 7 939 7 3, 817	999		4, 792 676 4, 117	1, 255	+9. 2 +19. 2 +6. 9	-5.1	10, 626	49, 061 10, 227 38, 833	-3.
Total dollars dollars dollars	345, 169 148, 148	266, 219 110, 104	325, 688 147, 470	188, 711	579, 715 244, 512	495, 307 182, 209	7 216, 526	+29.4 +29.6		1, 622, 128	3, 823, 735 1, 567, 091	-3.4
Total dollars dollars Saxophones dollars Wood wind dollars and tubs, galvanized:	168, 420 28, 601	134, 350 21, 765	17, 184	42, 963		287, 667 25, 431	34, 034	+24.9 +50.8	+90.4	237, 935	1, 955, 935 300, 709	+26.
Shipments dozens	141, 448 144, 385	114, 343 121, 415	127, 797 142, 487	139, 183	153, 813 152, 258	127, 608 127, 530	141, 101	+9.4	+1.5 +7.9	1, 487, 633	1, 550, 910 1, 557, 309	+4.
Productiondozens_ Shipmentsdozens_	48, 038 44, 833	61, 688 47, 856	37, 846 44, 377	55, 850 50, 60 6	56, 469 54, 596	37, 776 44, 852	39, 006 41, 368	+1.1 +7.9	+44.8 +32.0	367, 388 375, 570	445, 833 423, 842	
Electrical Equipment												
Electrical porcelain, shipments: Standarddollarsdollars	66, 968 128, 243				128, 255	62, 536	74, 230		+72.8	788, 851	846, 889	+7.
Standard dollars Special dollars Special dollars High tension dollars Glazed nail knobs. thous of pieces Unglazed nail knobs thous of pieces Tubes thous of pieces Laminated phanolic products	514, 307	132, 762 637, 602 4, 079	649, 599	493, 067	539, 810	119, 744 311, 889 1, 897	468, 903 2, 945	+9.5 +24.8	-30, 9 +15, 1 +78, 5	1, 430, 694	1, 276, 983 5, 188, 068 31, 954	-10.
Unglazed nail knobsthous. of pieces_ Tubesthous. of pieces_	2, 597 1, 349 1, 239	2, 065 3, 237	2, 401 2, 542	2,796	3,042	755 660	879	+8.8	+246.1		17, 705 17, 736	
Laminated phenolic products, shipmentsdollars Motors:							940, 563			8 5,638,673	8 8, 715, 110	+54.
New orders dollars Billings (shipments) dollars.	761, 630		_			776, 325	740, 366 834, 479					
Outlet boxes and covers, shipmentspieces Vulcanized fiber: Shipments, totalthous. of dolls	2, 779, 032 626		1	2, 915, 560		1		11	ı	\$ 19, 796, 369		11
Consumption thous. of lbs_ Industrial reflectors, sales units_	3, 098 117, 104	2, 606 115, 929	2, 805 122, 124	2, 362 126, 151	156, 243	1, 896 125, 802	2, 030 140, 346	+23.9	+11.3	⁸ 6, 901 ⁸ 22, 661 1, 252, 827	24, 425 1, 248, 038	+7. -0.
Power cables, shipments thous, of ft. Flexible cords: Shipments thous, of ft.	1, 947 37, 803	1, 738 37, 328	51,062	43, 854		46, 632	52, 494	ll	ì		8 17, 101 364, 008	1
Stocks, end of monththous. of ft Welding sets, new orders: Single operatorunits	46, 882 206	46, 411 294	47, 351 228	234		51, 091	153			8 1, 215	8 2, 024	+66.
Multiple operatorunits_ Nonmetallic conduits, shipments_thous. of ft_ Electric furnaces, new orderskilowatts_	7, 645 4, 958	10 6, 373 4, 861	6,960	7, 376		9, 235	37 9, 614			8 123 8 88, 480	\$ 68, 263 \$ 44, 133	+1. -22.
Manufactured mica: Shipmentsthous. of dolls Unfilled orders, end of mo_thous. of dolls	270 305	265 304										
Delinquent accounts, electrical trade: Amountdollars Delinquent firmsnumber	165, 775 1, 291	151, 476 1, 191		141, 101 1, 223	163, 281 1, 257	145, 031 1, 320		+15.3				ll .
Radio equipment, dealers' stocks, end quarter: Receiving setspieces	1		1		1 1							
Loud speakers pieces. Batteries pieces. Socket-power units pieces.	2 42, 158 2 177, 505 2 19, 696					\$ 298, 376						
Tubes, receiving pieces Tubes, rectifying pieces	² 401, 654					8 523, 839 3 36, 208	3					
AUTOMOBILES Production:												
United States— Total————number of cars— Passenger cars——number of cars—	7 396, 796 356, 622	7 392, 076 338, 792	⁷ 461, 298 400, 593		398, 818 341, 705	226, 443	183, 042	-4.8	+81.5 3 +86.7	2, 730, 760	3, 869, 009 3, 405, 942	+23. +24.
Trucks number of cars Canada Total number of cars	7 40, 174 28, 399	7 53, 284 25, 226	7 60, 705	7 56, 411	57, 113 18, 536	7 33, 86	7 36, 640	+1.5 -12.	2 +55.9 5 +139.2	402, 625 169, 331	463, 067 221, 188	+15.
Passenger carsnumber of carsnumber of cars	25, 341	20, 122	24, 274	16, 572	13, 016	8, 68 2, 58	6, 236	-21.8	5 + 108.7 5 + 265.1	139, 420	181, 849	+30. +31.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	1 THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
AUTOMOBILES—Continued												
Exports (assembled): From United States—												
Totalnumber of cars	47, 171 36, 038 11, 133	51, 679 38, 880 12, 790	49, 007 32, 815 16, 192	30, 559 22, 494 8, 065	46, 524 29, 951 16, 573	26, 273 19, 033 7, 240	27, 718 19, 366 8, 352	+52. 2 +33. 2 +105. 5	+67.8 +54.7 +98.4	338, 924 248, 750 90, 174	431, 107 318, 444 112, 654	+28.0
From Canada—	5, 589	8, 021	11, 011	8, 670	9, 705	3,872	3, 507	+11.9	+176.7			
Total number of cars Passenger cars number of cars Trucks number of cars	4, 431 1, 158	6, 545 1, 476	7, 985 3, 026	6, 279 2, 391	6, 696 3, 009	2, 856 1, 016	2, 380 1, 127	+6.6 +25.8	+181.3	35, 640 15, 705	46, 556	+30.€
Shipments (General Motors Co.): To dealersnumber of cars To usersnumber of cars	186, 160 206, 259	169, 473 177, 728	186, 653 187, 463	167, 460 148, 784	120, 876 140, 883	140, 607 132, 596	128, 459 153, 833	-27. 8 -5. 3	-5.9 -8.4	1, 445, 056 1, 420, 278	1, 727, 778 1, 717, 591	+19.6 +20.9
Accessories and parts: Shipments—			101, 100	·	110,000		100, 000	_3. 0	-0.4	1, 120, 210	1,111,001	7 20. 0
Original equipment_rel. to Jan., 1925 Replacement partsrel. to Jan., 1925	200 150	203 148	231 176	218 185 122	200 184	139 181	124 174	-8.3 -0.5	+5.7			
Accessories rel. to Jan., 1925 Service parts rel. to Jan., 1925 thous of dolls	110 140 11, 838	112 120 12,571	147 148 13, 858	140 10, 079	91 141 17, 523	163 127 7, 962	103 120 6, 600	-25.4 +0.7 +73.9	+17.5	88, 694		+34. 2
Exports thous, of dolls Rim production thous, of rims New passenger-car registrations:	2, 429	2, 210	2, 319	2, 316	2, 115	1, 727	1, 385	-8.7	+52.7	18, 038	21, 929	+21.6
Totalnumber of cars Highest price groupnumber of cars	317, 032 11, 648 64, 480	324, 021 11, 310 67, 902	329, 827 11, 482 76, 968			7 185, 921 7 9, 274 7 55, 485	183, 979 12, 152			8 85, 378	8 2, 481, 872 8 101, 010	+18. 3
Second highest groupnumber of cars	90, 176 150, 028	84, 248 159, 916	76, 158 164, 682	61, 579 137, 403		7 57, 975 7 62, 239	47, 292 53, 300 70, 841			8 529, 767 8 543, 563 8 1, 044, 439	\$ 534, 641 \$ 683, 946 \$ 1, 156, 357	+25.8
Miscellaneousnumber of cars	700	645	537	470		7 948	394			12, 588	6 5, 918	-53.0
FUELS Coal and Coke				į								
Bituminous: Production—												
United Statesthous. of short tons Canadathous. of short tons	35, 963 1, 331	36, 276 1, 309	41, 108 1, 535	41,301 1,396	50, 360 1, 702	41, 763 1, 342	⁷ 43, 827 ⁷ 1, 480	+21.9 +21.9	+14.9 +15.0 +19.6	436, 181 13, 798	403, 334 14, 190	+2.8
Exports thous, of long tons Consumption— By vessels thous, of long tons	1, 2 77	1, 503 314	1, 618 356	1, 577 313	1, 497 417	1, 313 369	1, 252 351	-5. 1 +33. 2	+19.6	14, 142 3, 442	11, 729 3, 283	-17. 1 -4. 6
plantsthous. of short tons	3, 039	⁷ 3, 170	7 3, 440	3, 420	****	3, 566	3, 666	700.2	710.0	8 30, 940	⁶ 29, 928	-3. 3
By railroadsthous. of short tons By coke plants—	6, 927	7,002	7, 403	7, 627		7 7, 660	8, 418			⁸ 70, 981		-3.9
United Statesthous. of short tons Canadathous. of short tons Prices—	6, 167 271	6, 046 279	6, 194 269	6, 180 270	6, 726 294	5, 898 219	6, 006 223	+8.8 +8.9	$+12.0 \\ +31.8$	62, 667 2, 394	62, 736 2, 634	+0.1 +10.0
Mine aver. (spot) dolls. per short ton Wholesale, comp.dolls. per short ton Retail, composite dolls. per short ton	1. 73 3. 973	1. 70 3. 984	1. 76 4. 009	⁷ 1. 81 4. 019	1, 87 4, 020	2, 08 4, 274	1, 95 4, 199	+3.3 0.0	-4.1 -4.3			
Anthracite:	8. 72 5, 301	8. 69 4, 475	8. 74	8, 84 6, 036	8. 96 8, 554	9. 20 6, 596	9. 33	+1.4	-4.0			 -6. 2
Productionthous, of short tonsthous, of long tons	209	167	6, 883 278	265	405	290	⁷ 7, 353 310	+41.7 +52.8	+16.3 +30.6	2, 479		
Wholesale, compdolls. per long ton Retail, compositedolls. per short ton	12. 949 14. 61	12, 965 14, 63	12. 853 14. 76	13. 040 14. 93	13. 040 14. 98	13. 353 15. 03	13. 389 15. 07	0.0 +0.3	-2.6 -0.6			
Coke: Production, U. S.— Beehive———thous. of short tons—	302	271	288	312	421	7 470	⁷ 43 1	+34.9	-2.3	6, 429	3 562	-44. 6
By-productthous. of short tons Production, Canada_thous. of short tons	3, 961 195	3, 911 200	3, 995 191	3, 959 194	4, 219 210	3, 603 150	3, 720 152	+6.6 +8.2	$+13.4 \\ +38.2$	36, 775	39, 265 1, 890	+14.8
Exportsthous. of long tons Price, furnace, Connellsvilledolls. per short ton	126 2, 80	79 2. 79	70 2. 88	77 2. 88	100 2. 91	76 3. 00	69 2. 91	+29.9	+44.9	581	818	+40.8
Petroleum	2. 00	2. 10	2.00	2.00	2. 81	3.00	2. 91	+1.0	0. 0			
Crude petroleum:	79 596	75, 426	77 600	76 404	70.889	75 000	77 *94		10.7	751 005	744 600	
Productionthous. of bbls Stocks, end of month— Total (comparable)thous. of bbls	72, 526 370, 751	369, 243	77, 829 368, 653	76, 404 366, 652	79, 662 368, 031	75, 909 339, 472	77, 534 345, 864	+4.3 +0.4	+2.7 +6.4	751, 685	744, 609	-0.8
Tank farms and pipe	328, 094	326, 314	326, 399	326, 153	328, 201	301, 259	307, 310	+0.6	+6.8			
Refineries thous, of bbls California— Light thous of bbls	42, 657 19, 197	42, 929 18, 215	42, 254 18, 310	40, 499 16, 870	39, 830 16, 670	38, 213 22, 826		-1.7 -1.2	+3.3 -23.1			
Heavythous, of bbls	94, 234 6, 553	95, 663 7, 878	95, 057 6, 141	96, 563 7, 140	97, 097 6, 703	93, 820 5, 122	92, 233 4, 633	+0.6 -6.1	+5.3 +44.7 +10.9	46, 834	65, 868	+40.6
Consumption (run to stills) thous, of bbls. Refinery operationper ct. of capacity	75, 681 81	80, 700 82	81, 582 83	79, 810 84	79, 603 82	68, 532 79	71, 761 80	-0.3 -2.4	+2.5		753, 584	9.6
Price, Kansas-Oklahomadolls. per bbl Oil wells completednumber Mexico—	1. 190 1, 056	1. 195 1, 096	1. 210 1, 247	1. 210 1, 192	1. 210 1, 224	1. 198 1, 048	1. 240 1, 049	$^{0.0}_{+2.7}$	-2.4 + 16.7	12, 547	10, 286	-18.6
Production thous of bbls thous, of bbls thous, of bbls	4, 049 2, 808	4, 040 3, 249	4, 047 2, 212	3, 716 2, 244		4, 774 3, 867	4, 932 2, 768			8 49, 539 8 39, 622	8 38, 768 8 26, 884	
Venezuela— Production——thous. of bbls—	8, 339	9, 398	9, 031	9, 478	10, 520	5, 762	6,024	+11.0	+74. 6	40, 254	84, 538	+68.
Exportsthous, of bbls Gasoline: Production—	8, 231	8, 808	8, 933	8, 615	9, 283	4,742	5, 928	+7.8	+56.6	41, 496	80, 947	+95.
Raw (at refineries)thous, of bbls Natural gas (at plants) _thous, of bbls	30, 675 3, 317	32, 884 3, 410	34, 037 3, 421	33, 543 3, 452	34, 319 3, 695	3, 245	3, 419	+2.3 +7.0	+18.8 +8.1 +3.0	273, 210 31, 831	34, 310	+13.3 +7.8 +20.9
Exports thous. of bbls Consumption thous. of bbls Stocks, end of month—	4, 614 29, 022	5, 108 31, 985	4, 452 33, 148	4, 670 29, 691	3, 919 30, 610	3, 481 28, 400	3, 805 25, 515	-16.1	+3.0 +20.0	36, 500 249, 488	44, 137	+20.9 +9.7
Raw (at refineries)thous, of bbls Natural gas (at plants)thous, of bbls	34, 393	30, 392	27, 197	26, 405	26, 453	29, 775	29, 551	+0.2			1	11

• Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(十) OR	CUMULATI FROM JAN. OCT	1 THROUGH	Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cum lativ 1925 from
FUELS—Continued												
Petroleum—Continued												ļ
asoline—Continued. Prices—												
Wholesale, New Yorkdolls. per gal Retail, wagons, 50 cities.dolls. per gal Retail distribution, 41 States.thous. of gals	. 170 . 153 861, 547	. 173 . 156 864, 427	. 180 . 160 7 983, 644	. 163	. 180 . 163		. 170 . 143 810, 470	0.0	+5.9 +14.0		87, 144, 232	+9
Terosene: Production thous of bbls thous of	4, 849 1, 632	4, 994 1, 826	5, 389 1, 653	5, 037 2, 068	5, 186 1, 749	4,686	4, 883 2, 193	+3.0 -15.4	$+6.2 \\ -20.2$	46, 420	50, 278 18, 563	+8
Exports thous of bbls. Consumption thous of bbls. Stocks at refineries, end mo thous of bbls. Retail distribution, 13 States thous of bbls. Price 150° water white dolls. per gal.	2, 385 8, 370	3, 079 8, 470	3, 261 8, 922	3, 276	3, 465 8, 614	1, 652 3, 198 8, 523	2, 193 3, 585 7, 611	+5.8	-3.3	36, 935		-16
Retail distribution, 13 States thous of bbls.	30, 719 . 073	31, 427 . 068	40, 170 . 072		. 082	37, 179 . 068	32, 995 . 073					
Price 130 water writedons. per gall- las and fuel oils: Productionthous. of bbls	35, 565	36, 941	37, 449		37, 4 11	32, 295	33, 901	-4.7 -0.1	+12.3 9.2	326, 256		
Consumption—	4, 307	4, 101	4, 564		4, 560	4, 436	4, 594	1		41, 676		1
Consumption— By vessels—thous of bbls— By electric pow. plants_thous of bbls— By roilroads—thous of bbls—	498 3, 819	553 4, 071	608 4, 087	600		7 4, 157	503 4,652			\$ 5, 125 8 35, 694	8 5, 012	ll ∸3
By railroadsthous. of bbls Stocks at refineries, end mo.thous. of bbls Price, Okla. 24-26, refineries.dolls. per bbl	36, 015 , 719	37, 410 . 670		40,067	39, 626 . 650	31, 631 . 850	33, 191 . 865	1. 1	$+19.4 \\ -24.9$			
ubricating oil	3, 009	2, 827	2, 891		2, 979	2,782	9 757	150	+8.1			+8
Production thous. of bbls_ Consumption thous. of bbls_ Stocks at refineries, end mo.thous. of bbls_	2, 143 7, 832	1, 930 7, 667	2,035 7,711	1,973	2, 145 7, 830	1, 965 7, 447	1, 781 7, 584	+8.7	+20.4 +3.2	18, 248		+i
Price, cylinder oll	. 220	. 226	. 229		. 240	. 255	. 253		-5.1			
Production thous. of short tons Stocks, end of month thous. of short tons	332 271	329 251	316 226		321 211	333 177	333 189	+4.9 +3.9	-3.6 +11.6		2, 887	+0
Imports tons of short tons	3	11	13	1	11	14	14	+175.0	-21.4	138		-42
Production thous of short tons Stocks, end of month thous of short tons.	118 344	127 385	136 402		125 394	98 314	102 331		+22. 5 +19. 0	935	1, 162	+24
Wax: Productionthous. of lbs Stocks, end of monththous. of lbs	50, 792 91, 989	45, 273	54, 084		54, 546	47, 888	49, 476	+7.6		482, 162	519, 236	+7
RUBBER	91, 909	84, 476	79, 136	84, 330	91, 789	170, 172	170, 362	7-8.8	46. 1			
Crude Rubber	ŀ											
World shipments, plantationlong tons	40, 927	52, 831	1 58, 345	50, 760		48, 186				8 448, 946	⁸ 326, 466	-27
Imports (including latex)long tonslong tonsthous. of lbs	27, 764 53, 159	31, 258 47, 128	32, 712 62, 224	39, 732 55, 351	44, 058	33, 301 37, 341	30, 184 37, 130	+10.9	+46.0	356, 929 8 411, 366	357, 684 8 451, 698	+0
Consumption (quarterly): Totallong tons For tireslong tons	2 95, 220			² 108, 167		3 82, 073		+13.6		8 268, 335	8 298, 660	
				1		VI.		+14.6		⁸ 230, 594	,	
Total long tons. Manufacturers long tons. Dealers long tons. Afloat long tons.	² 87, 771 ² 77, 132	 		2 68, 729 2 54, 418		\$ 90, 861 \$ 72, 989		-21.7 -29.4	-24. 4 -25. 4			Į.
Afloat long tons	² 10, 639 ² 38, 478			2 14, 301 2 43, 492		3 36, 006		+34.4 +13.0	+20.0			
World stocks, end of month: World totallong tons	2 212, 527	208, 789	201, 188	68, 851		260, 790	263, 683					!
World total long tons. Un ted States long tons Europe long tons Producing countries long tons.	90, 198 2 42, 365 20, 664	83, 242 39 269 21, 578	35, 865	35, 210	66, 421	97, 829 72, 748 27, 822	97, 453 73, 876 27, 654		-31.8			
Afloat long tons	59, 300	64, 700	74, 500			62, 400						
Tires and Tubes												
Pneumatic tires: Productionthousands	5, 030	4, 881	5, 607	5, 101		3,638	3, 603			8 38, 148	8 44, 284	+16
Stocks, end of monththousands	9, 150	8, 396	7,539	7,324		7,325	7, 287					
Domestic thousands Export thousands	5, 162 184	5, 811 121	6, 131 179	5, 191 168		4, 168 136	3,484 133			8 36, 656 8 1, 561	8 42, 945 8 1, 380	+1' -1
nner tubes: Productionthousands Stocks, end of monththousands	5, 222	5,009		5, 327		4, 247	3,809			8 41, 553	8 46, 892	+12
Shinmente	12, 892	11, 248	,	1		10, 162	i .	li				
Domestic thousands Export thousands	5, 254 105	6, 469 83	6, 886 132	5, 245 121		4, 973 103	3, 685 93			8 42, 995 8 884	\$ 45, 352 \$ 896	+1
Solid and cushion: Productionthousands Stocks, end of monththousands	49	46				36	34			8 471	8 399	-18
Shipments—	156 45	152 45		ŀ		173	162			8 409	0.000	
Domestic thousands thousands thousands	45 5	45	49 5			42				\$ 409 \$ 52	8 373 8 34	
Other Rubber Products				1								
Reclaimed rubber (quarterly): Productionlong tons	2 51 100			2 52 822		3 20 440		+3.4	+33.9	8 126, 193	⁶ 155, 044	+22
Stocks, end of quarterlong tons_crap rubber (quarterly):				² 14, 963		3 17, 812		-3. 2	-16.0			
Stocks at reclaimerslong tons	² 51, 518			2 61, 016	l	3 55, 547		+18.4 +1.4	+9.8	II]	H

² Quarter ending in month indicated.

³ Quarter ending Sept. 30, 1927.

⁷ Revised.

⁶ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	CREASE	ent in- (+) or ase (-)	FROM JAN.	IVE TOTAL 1 THROUGH 1. 31	Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may beyfound on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cumi lativ 1928 from 1927
RUBBER-Continued												
Other Rubber Products—Continued												
Rubber-proofed fabrics: Production— Totalthous, of yds	2, 953	3, 447	4, 613	4 966		4, 545	4, 634			§ 26, 926	8 28, 744	+6.
Auto fabricsthous. of yds_ Raincoat fabricsthous. of yds_	895 1, 351	763 1, 951	764 2, 598	780 3, 179	609	756 3, 123		-21.9	-25.6		7,533	-6.
All other thous. of yds. New orders, auto fabrics thous. of yds.	707 884	733 497	1, 251 688	1, 085		666 955	636 827	+12.6	+47.8		17,628	+63.
Production, relative to capacity _per cent_ Rubber heels: Productionthous. of pairs	į į	25. 9 17, 620	39. 1 21, 289	40.0	31. 2	28, 7	31. 2 21, 151	-22.0		l	6 170 741	1.00
Shipments— To shoe manufacturers thous, of pairs.	18, 763 9, 166	12, 070	11, 642			18, 452 8, 882	·	-		8 139, 398 8 72, 990		!!
To repair tradethous, of pairs	9, 022	7, 372 457	9, 244 729	9, 199		8, 170 722	9, 305 913			§ 61, 050	8 71, 044	+16
Stocks, end of monththous. of pairs Rubber soles:	50, 569	49, 679	49, 511	49, 751		38, 696	39, 723					
Production thous of pairs Shipments—	3, 321	3, 168	3, 461			2,634	3, 697	i i		1	1	+77
To shoe manufacturers thous of pairs To repair trade thous of pairs thous of pairs	1, 977 948 41	1, 897 808 55	2, 209 917 46	893		1, 390 996 27	2, 169 1, 096 46			8 11, 420 8 4, 899 8 697	8 8, 342	+70
For export thous, of pairs. Stocks, end of month thous, of pairs. Mechanical rubber goods:	4, 687	5, 067	5, 633	5, 501		3, 068	3, 899			- 091		
Shipments— Total———thous. of dolls—	6, 126	5, 157	6, 306	5, 393		5, 467	5, 244			§ 52, 540	§ 52, 805	+0.
Belting thous, of dolls. Hose thous, of dolls.	1, 568 2, 298	1, 396 1, 795	1, 888 2, 068 2, 360	1, 731		1, 963	1, 368 1, 837			8 13, 662 8 20, 831 8 18, 149	8 13, 090 8 19, 771	-5
All other thous. of dolls	2, 260 192 717	1, 966 173 477	2, 360 193 583	186	216 559	2,007	2,039 196	+161		8 18 , 14 9	8 19, 953 1, 935	
HIDES AND LEATHER	'*'	21.	000		000							
Hides												
mports: Total hides and skinsthous. of lbs Calfskinsthous. of lbs	58, 091 4, 457	50, 175 4, 134	47, 056 4, 053	34, 448 2, 707	35, 982 3, 318	43, 665 4, 545	36, 356 3, 699	+4.5 +22.6	-1.0 -10.3	370, 637 37, 314	450, 802 35, 181	
Cattle hides thous of lbs. Goatskins thous of lbs.	34, 168 8, 383	28, 193 7, 873	26, 540 7, 951	18, 504 6, 728	17, 883 7, 993	25, 383 6, 485	21, 561 5, 700	-3.4 +18.8	$-17.1 \\ +40.2$	192, 134	252, 260	+31
Sheepskinsthous. of lbs	7, 323	6, 171	6, 773	4, 902	3, 785	4, 510	3, 195	-22.8	+18.5	48, 891	54, 632	+11
Total hides and skinsthous. of lbsthous. of lbsthous. of lbs	244, 746 196, 561	239, 877 194, 668	243, 591 197, 086	203, 227		243, 327 188, 797	248, 187 200, 220					l
Calf and kip skinsthous. of lbs Sheep and lamb skinsthous. of lbs Prices:	29, 159 19, 026	25, 551 19, 658	25, 758 20, 747	24, 059 21, 986		33, 024 21, 506	27, 942 20, 025					
Green salted, packers' heavy	. 224	. 239	. 236	. 246	. 219	. 224	. 233	-11.0	-6.0			
native steersdolls. per lb_ Calfskins, country No. 1dolls. per lb_ nspected slaughter of livestock:	. 266	. 278	. 275	. 275	. 246	. 210	. 218	-10.5	+12.8			
United States— Cattle thous. of animals— Calves thous. of animals—	706 398	662	717 369	764 352	801 405	828	895	+4.8	-10.5	7, 877		-10
Swinethous. of animals_ Sheepthous. of animals_	4, 078 1, 109	362 2, 984 1, 076	2, 545 1, 196	2, 508 1, 307	3, 713 1, 409	357 2, 534 1, 185	413 2, 969 1, 194	+15, 1 +48, 0 +7, 8	$ \begin{array}{r} -1.9 \\ +25.1 \\ +18.0 \end{array} $	35, 079	39, 477	+12
Canada— Cattle and calvesno, of animals	99	100	105	96	111	98	1, 101	+15.6	-5. 1	937	938	+0
Swineno. of animals_ Sheepno. of animals_	205 25	164 45	140 62	161 86	200 142	174 89	208 138	+24. 2 +65. 1	-3.8 + 2.9	2, 038 442	2,077	+1
Leather												
ole and belting leather: Production—				•								
Sole only thous of backs, bends, sides. Sole and beltingthous of lbs.	1, 399 24, 971	1, 436 25, 070	1, 463 25, 701	7 1, 324 23, 510	1, 450	1, 337 24, 447	1, 325 24, 230	+9.5	+9.4	13, 340 226, 834	13, 663 § 220, 902	$+2 \\ -2$
Stocks, end of month— In process of tanning—thous. of lbs—Finished—thous. of lbs—	91, 781 63, 921	90, 949 69, 557	89, 508 72, 439	85, 990 74, 243		81, 015 61, 355	79, 600 60, 811					
Exports thous of lbs. Price oak, scoured backs dolls, per lb.	538	531 . 67	996	733 . 65	825 . 63	730 . 53	800 . 55	+12.6 -3.1	+3.1 +14.5	8, 190	8, 338	+1
Jpper leather: Productionthous, of sq. ft	66, 047	66, 464	73, 150			69, 399	70, 081		, 22, 0	600, 761	8 612, 814	+2
Stocks, end of month— In process of tanning_thous. of sq. ft	143, 099	147, 443	147, 602	146, 010		144, 881	147, 790					
Finishedthous. of sq. ft Exportsthous. of sq. ft Chrome calf, "B" gradesdolls. per sq. ft	262, 667 8, 949 . 53	254, 563 8, 403 . 57	253, 854 9, 000 . 57	247, 386 7 9, 093 . 57	11, 174 . 55	241, 835 10, 518 . 51	244, 268 12, 177 . 51	+22.9 -3.5	-8.2 +7.8	117, 238	114, 261	
Leather Products	. 30	.01	.57	. 01	. 55	. 01	.01	-0.0	77.0		••••••••	
Shoes: Productionthous, of pairs	27, 284	28, 154	7 34, 974	30, 793		33, 933	32, 267			8 261, 843		
Exportsthous. of pairs Wholesale prices—	318	344	331	275	340	312	376	+23.6	-9.6	4, 700		
Men's black calf blucher, Massdolls. per pair	6. 75	6. 75	6. 75	6. 75	6. 75	6. 50	6. 50	0.0	+3.8			
Men's dress welt, tan calf, St. Louisdolls. per pair Women's black kid, dress	5. 00	5.00	5. 00	5. 00	5. 00	5.00	5. 00	0.0	0.0			
welt, lace, oxforddolls. per pair Hoves, cutdozen pairs	4. 15 228, 039	4. 15 202, 051	4. 15 237, 043	4. 15 213, 945	4, 15	4.00 229,999	4, 00 244, 090	0.0	+3.8	⁸ 1, 961, 901	8 1, 912, 163	2
, putton	7 Revised		, 0	, 0 = 01			ive through	Sept. 30		.,,	.,	-

The cumulatives shown are through October, except where otherwise noted.			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATIV FROM JAN. 1 OCT.	THROUGH	Per ci in- crease (+) or de
be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
PAPER AND PRINTING												1521
Wood Pulp												
Mechanical: Production short tons Consumption and shipments short tons Stocks, end month short tons Imports short tons	133, 854 135, 917 184, 314 20, 528	112, 403 125, 465 171, 098 14, 553	114, 668 138, 309 147, 611 17, 233	133, 006	146, 383 118, 182	92, 025 120, 326 156, 574 28, 389	121, 051 130, 465 147, 160 21, 190	+21.6 +19.2 -11.1 +8.8	+12.2 -19.7	1, 371, 864	1, 325, 014 1, 366, 136 204, 081	+0. -0. +6.
Chemical: Productionshort tons_	217, 456	200, 654	222, 116	,	· '	209, 776	213, 472	+13.3	+7.0	'	2, 151, 628	-0.
Consumption and shipments short tons stocks, end of month short tons Imports short tons Price sulphite dolls. per 100 lbs.	214, 068 45, 870 122, 474 2. 53	204, 512 42, 580 129, 910 2, 53	221, 008 44, 686 120, 643 2. 53	204, 378 7 42, 510 124, 048	231, 720 45, 522	211, 744 38, 286 119, 090 2, 60	213, 524 38, 234 133, 170	+13.4	+8.5 +12.0	2, 161, 330 1, 134, 670	2, 161, 2 2 2	0.
Newsprint Paper												
Production: United States, totalshort tons_	119, 673	110, 313	115, 940	102, 852	121, 613	114, 659		+18.2	+7.5	1, 248, 822	1, 165, 713	-6.
Ratio to capacityper cent_ Canadashort tons_ Consumption by publishersshort tons_ Shipments:	192, 391 170, 892	184, 199 152, 763	200, 656 162, 184	185, 059 169, 625	216, 602	178, 815 169, 286	191, 171 184, 805	+17.0	+13.3	1, 710, 220	1, 949, 882	+14.
United States short tons Short to	116, 901 190, 926 163, 807	109, 611 181, 834 174, 667	114, 539 196, 894 173, 872	194, 233	221, 743	114, 003 177, 195 168, 630	188,769	+12.1 +14.2 +21.7	+17.5	1, 688, 895	1, 948, 215	+15
Exports: Canadashort tons_ Stocks, end of month: At mills—	174, 031	167, 456	179, 334	170, 840	214, 228	168, 855	159, 284	+25.4	+34.5	1, 532, 695	1, 797, 238	+17
United Statesshort tonsshort tons	39, 979 47, 937 186, 307	40, 386 48, 270 199, 214	209,044	43, 800 191, 287	37, 018	33, 384 225, 310	214, 872	-15.5	+3.5			
At publishers short tons In transit to publishers short tons Price, roll f. o. b. mill dolls. per ton	42, 767 3. 25	44, 266 3. 25	39, 744 3. 25	3. 25	3. 25	45, 570 3. 25	45, 789 3. 25	0.0	0.0			
Printing Book publication:												
American manufactureno. of titles Importedno. of titles Sales books:	745 113	555 128		261		830 89	143			8 6, 360 8 1, 007	8 5, 996 8 1, 335	+32
New orders thous, of books. Shipments thous, of books.	12,711 13,100	12, 098 9, 986	13, 738	11,976	14, 605	12, 387	12,898	+22.0	+0.8 +13.2	122, 802 117, 152	124, 951 122, 406	+1 +4
Printing activityweighted index number Bash checks, shipmentsthous. of checks Blank forms, new ordersthous. of sets	94, 668 53, 774	70, 710 48, 963	68, 482	85, 489	86, 889	76, 364 35, 088	71,625	+1.6	+21. 3 +82. 4	759, 955 333, 419	777, 700 488, 386	+4
Box Board												
Operationthous. of inch hours Operationper et. of capacity	8, 200 75. 3	7, 992 76. 2	81. 6	7 83. 0	81.9	8, 673 82. 8	77.8	-1.3	+5.3	80, 892	84, 959	1
Production short tons. Vew orders short tons.	228, 646 228, 252	201, 153 209, 976	236, 682	7 234, 449	240, 753	235, 936	220, 215	+2.7	+8.8 +9.3	2, 076 2, 111	2, 236 2, 250	#
Infilled orders, end of monthshort tons Consumption of waste papershort tons	77, 782 204, 468	79, 492 190, 810	213, 626	7 237, 361	239, 258	216, 652	219, 627	+0.8	-19.4 +8.9 +8.2	:	2, 112	+
Shipmentsshort tonsshort t	223, 901 53, 560	203, 741 49, 969			245, 295 42, 271	228, 213 42, 923	226, 647 41, 630	+7. 2 -6. 6	+8.2 +1.5	2,085	2, 235	
On hand	130, 484 43, 480	132, 265 62, 056	117, 009 48, 108	7 116, 197 7 53, 344								
Other Paper							}					
Binder's board, productionshort tons_ Book paper:	2, 705	2, 153	3, 092	2, 431		2, 461	2, 537	:		8 22, 809	⁸ 28, 106	+2
Production short tons Ratio to capacity per cent	122, 387 84	117, 492 80				106, 205 84	109, 391 83				1, 258, 712	+1
Shipments short tons Stocks, end of month short tons	120, 551 89, 385	118, 314 88, 491	133, 024	120, 895	133, 429	106, 417	110, 813	+10.4	+20.4	1, 101, 444	1, 252, 348	+1
New orders— Coatedp. ct. of normal production Uncoatedp. ct. of normal production Unfilled orders, end of month—	75 73	77 80				76 82			+9.2			
Coatedp. ct. of normal production Uncoated_p. ct. of normal production	. 9	10 8			10	7			+25.0			
Vrapping paper: Productionshort tons	90, 577	88, 477		7 83, 582		89, 696		+14.9	+3.5	904, 813		JI.
Ratio to capacityper cent_ Shipmentsshort tons_ Stocks, end of monthshort tons_	89, 339	94, 228 92, 467	100, 174	7 86, 173	94, 900	86, 646	92, 424	+10.1	+2.7	880, 918	931, 814	+
Fine paper: Productionshort tonsshort tonsper cent	38, 225	33, 984		34, 885			38, 814	+13.7		371, 916	386, 020	+
Ratio to capacityper cent_ Shipmentsshort tons_ Stocks, end of monthshort tons_ All other grades:	. 38, 875	34, 562 53, 156	38, 938	34, 885	39, 782	36, 769	38, 892	+14.0	+2.3	373, 196	383, 749	+
Production short tons. Shipments short tons. Stocks, end of month short tons. Fotal paper (inc. newsprint and box board):	104, 725 104, 977 71, 006	95, 454 96, 056 70, 575	109, 154	102, 437	115, 643	102, 311	103, 040	+12.9	+12.5	996, 370	1, 023, 328 1, 052, 361	
Potal paper (inc. newsprint and box board): Production short tons Ratio to capacity per cent Shipments short tons	704, 413	77	78	81	83		. 85	+2. 5	-2.4	4		
Stocks, end of monthshort tons	405, 429 vised.	396, 044		7 378, 839			348, 207			1		

⁷ Revised.

⁸ Cumulative through Sept. 30.

The cumulatives shown are through		1.	1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
PAPER AND PRINTING—Continued												
Paper-Board Shipping Boxes												
Production: Totalthous. of sq. ft Corrugatedthous. of sq. ft Solid fiberthous. of sq. ft Operating activity:	423, 282 341, 291 81, 991	404, 520 335, 732 68, 788	441, 792 364, 756 77, 036	434, 371 359, 553 74, 818	454, 662 374, 342 80, 320	386, 039 308, 585 77, 454	427, 263 348, 835 78, 428	+4.7 +4.1 +7.4	+6, 4 +7. 3 +2. 4	982, 382 3, 191, 543 790, 839	3, 329, 527	1 -1-4.3
Totalper cent of normal. Corrugatedper cent of normal. Solid fiberper cent of normal.	76 74 83	72 71 75	79 77 84	79 78 80	88 89 83	80 79 84	85 85 83	+11. 4 +14. 1 +3. 8	+3.5 +4.7 0.0			
Other Paper Products			ļ		ļ							
Rope paper sacks, shipments_rel. to 1921-22	83	89	111	102	113			+10.8				-
Abrasive paper and cloth: Domestic sales reams. Foreign sales reams.	88, 569 18, 829	81, 689 17, 657	99, 789 17, 875	95, 131 18, 281		85, 379 14, 361	85, 155 18, 389			8 763, 835 8 141, 781	8 802, 614 8 165, 059	
BUILDING CONSTRUCTION AND HOUSING												
Rental advertisements, Minneapolis_number Building Costs	4, 378	4, 060	7,712	7, 930	6, 454	7, 800	6, 711	-18.6	-3.8	53, 389	50, 065	-6. 2
Building materials:						İ						ĺ
Frame house, 6-room	176 181 191 207 198	175 181 191 207 198	177 181 191 207 200	177 181 191 208 201	184 184 191 209 202	179 187 191 204 201	181 185 191 202 201	+1. 1 +1. 7 0. 0 +0. 5 +0. 5	0.0 +3.5			
Frame rel. to 1913	100. 90 203 212	100, 09 204 213	101. 20 204 213		100. 67 204 213	104, 51 205 215	104. 71 205 215	0.0	-3.9 -0.5 -0.9			
Brick, wood frame rel. to 1913. Brick, steel frame rel. to 1913. Reinforced concrete rel. to 1913.	198 201	198 201	198 201	198 201	197 201	197 200	196 201	-0.5 0.0	+0.5			
Contracts and Losses Contracts awarded (36 States):												
Commercial buildingsthous. of sq. ft Industrial buildingsthous. of sq. ft Residential buildingsthous. of sq. ft Educational buildingsthous. of sq. ft	13, 982 10, 523 52, 030 6, 978	16, 835 6, 214 43, 093 5, 586	11, 974 8, 548 42, 859 5, 418	11, 442 10, 348 38, 744 5, 651	13, 194 9, 705 48, 298 4, 876	9, 723 5, 453 38, 046 4, 114	11, 821 5, 544 45, 608 4, 103	+15. 3 -6. 2 +24. 7 -13. 7	+11.6 +75.1 +5.9 +18.8	394, 528	126, 352 78, 928 471, 606 52, 200	+37.7 +19.5
Other public and semi- public buildingsthous. of sq. ft Grand totalthous. of sq. ft	7, 192 90, 971	6, 605 78, 778	6, 392 78, 638	6, 278 73, 146	6, 477 82, 906	6, 810 64, 858	6, 393 73, 765	+3. 2 +13. 3	+1.3 +12.4	64, 577 684, 944	60, 143 797, 028	-6.9 +16.4
Contracts awarded, value (38 States): Commercial buildingsthous. of dolls Industrial buildingsthous. of dolls Residential buildingsthous. of dolls	90, 914 57, 464 250, 818	93, 144 31, 193 221, 345	57, 178 41, 318 207, 521	58, 525 112, 925 196, 850	63, 263 61, 170 234, 654	56, 938 48, 052 196, 501	77, 726 50, 370 236, 870	+8.1 -45.8 +19.2	-18.6 +21.4 -0.9	769, 993 398, 473 2, 079, 833	717, 735 533, 522 2, 346, 352	-6.8 +33.9 +12.8
Educational buildingsthous. of dolls Other public and semi- public buildingsthous. of dolls Public works and utilitiesthous. of dolls Grand totalthous. of dolls.	43, 787 56, 605 124, 636 624, 224	35, 315 50, 380 132, 853 564, 229	33, 559 45, 470 114, 714 499, 760	37, 088 51, 317 115, 808 572, 513	30, 746 46, 820 146, 041 582, 693	28, 344 52, 742 123, 254 505, 830	29, 699 48, 555 105, 932 549, 152	-17. 1 -8. 8 +26. 1	+3.5 -3.6 +37.9	315, 672 557, 952 1, 052, 342 5, 176, 276	332, 738 463, 307 1, 124, 857 5, 5 36, 742	-17.0
Grand totalthous, of dolls Contracts awarded, Canadathous, of dolls Building volume (A. G. C.)rel. to 1913 Fire losses: United States and Canada	59, 926 244	38, 360 237	39, 449 239	45, 439 266	44, 585 243	32, 788 236	47, 135 222	+1.8 -1.9 -8.6	+6. 1 -5. 4 +9. 5	352, 009	424, 090	+20. 5
(Journal of Commerce)thous. of dolls_ Canada (Monetary Times)_thous. of dolls_ LUMBER PRODUCTS	11, 123 1, 909	17, 106 1, 491	17, 724 2, 356	17, 183 1, 739	22, 414 1, 795	21, 875 1, 789	22, 327 1, 778	+30.4 +3.2	+0.4 +1.0	269, 670 19, 411	249, 476 20, 971	-7. 5 +8. 0
Soft Wood Lumber												
Southern pine: Production (computed) M ft. h m	404, 67 9 96	405, 937 88	42 5, 493 87	386, 671 88	427, 623 90	457, 587	438, 708	+10.6 +2.3	2. 5	4, 314, 488	4, 216, 208	-2.3
Operation per cent of full time. Shipments (computed) M ft. b. m. New orders (computed) M ft. b. m.	416, 006 406, 470	435, 223 434, 061	468, 672 479, 370	423, 218 434, 884	464, 558 444, 566	477, 046 483, 097	446, 696 453, 811	+2.3 +9.8 +2.2	$^{+4.0}_{-2.0}$	4, 297, 727 4, 406, 788	4, 469, 377 4, 486, 463	+4.0 +1.8
Stocks, end of mo. (computed). M ft. b. m Unfilled orders, end mo. (com.)*M ft. b. m Exports, limber	1, 090, 126 323, 985 54, 313 12, 933 36, 40	1, 063, 109 335, 836 62, 094 12, 302 36. 16	1, 019, 050 339, 038 43, 287 7, 465 36, 34	991, 781 340, 875 40, 837 14, 891 37, 73	954, 846 320, 883 75, 504 14, 104 37, 73	1, 193, 268 320, 096 48, 260 16, 775 37, 49	346 715	-3. 7 -5. 9 +84. 9 -5. 3 0. 0	-19.8 -7.5 +55.2 -19.6 -0.7	614, 950 156, 540	584, 911 146, 756	-4.9 -6.2
Production (computed)	480, 326 583, 733 508, 976	415, 417 484, 803 453, 467	358, 566 389, 454 381, 396 257, 845	296, 343	337, 527 301, 267 302, 610	542, 102 492, 860 487, 936	538, 968 491, 070	+13. 9 -4. 4 -6. 2	-37. 4 -38. 7 -34. 8	5, 037, 381 5, 079, 909 5, 087, 518	4, 325, 623 4, 539, 211 4, 680, 606	-14. 1 -10. (-8. (
Unfilled orders end of month. M ft. b. m. Exports, lumber	429, 688 85, 174 43, 142 16. 68	456, 601 54, 181 45, 471 16. 99	257, 845 59, 236 40, 837 17. 75	293, 657 64, 265 44, 264 17. 32	297, 686 65, 795 39, 330 18, 06	73, 717 64, 781 16. 39	56, 204 15, 498	+2. 4 -11. 1 +4. 3	+17. 1 +153. 8 +19. 1	572, 784 425, 684	647, 605 406, 996	+13. 1 -4. 4
Price, flooring, 1 x 4, "B" and better, V. Gdolls, per M ft. b. m	35. 15	3 6. 13	37. 19	38. 85	40. 61	35, 83	35. 47	+4.5	+14.5			
California redwood: Production (computed)	36, 190 38, 825 38, 022 46, 519	30, 092 29, 615 31, 620 48, 910	41, 137 43, 983 39, 855 45, 093	34, 329 33, 107 33, 519 47, 916	27, 851 32, 744 33, 115 40, 350	42, 343 41, 418 39, 680 53, 807	42, 676 36, 492	-18.9 -1.1 -1.2 -15.8	-9.3	451, 144	377, 614	-4.0 -14.2 -15.0

⁸ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19:	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
LUMBER PRODUCTS—Continued											,	
Soft Wood Lumber—Continued											!	
California white pine:* M ft. b. m. Production	133, 064 107, 019 477, 079 89, 802	123, 923 105, 482 506, 119 96, 433	145, 491 118, 310 516, 764 102, 805 181, 014	538, 136	119, 074 552, 422 100, 760	133, 659 104, 699 629, 284 90, 886	109, 490 111, 508 623, 671 97, 683	+2.7 +13.1 +2.7 +16.2	+3.1	931, 897 954, 969 883, 823	1, 043, 799 1, 029, 720 901, 105	+7.8
Unfilled orders, end of monthM ft. b. m Western pine: Production (computed)M ft. b. m	183, 610 163, 399	190, 185 190, 727	181, 014		183, 493	187, 878 145, 101	189, 947 134, 691	-2.8	Ì	8 1 224 983	8 1, 275, 875	+4. 2
Shipments (computed)	169, 719 419, 573 119, 473	166, 087 833, 576 118, 791	182, 662 905, 298 113, 662	172, 991 875, 733		150, 768 1, 089, 500	153, 019			8 1, 256, 887	8 1, 384, 161	+10. 1
North Carolina pine: Production (computed)	57, 904 59, 528 59, 360	44, 471 48, 433 43, 920	45, 437 48, 643 49, 560	39, 900	51, 590	52, 129 52, 234 46, 900	57, 295 56, 133 42, 560	+28. 4 +29. 3 +15. 7	-8.1	514, 997	489, 412 511, 839 524, 410	-0.6
Lumber— Production	51, 756 47, 243 47, 018	52, 384 48, 300 41, 820	47, 755	44, 618	51, 378	46, 852 39, 195 32, 098	41, 148 39, 175 33, 698	+6.6 +15.2 -7.0	+31.1	429, 325 394, 183 362, 419	451, 017 425, 869 395, 520	+5.1 +8.0 +9.1
Production Mft. b. m. Shipments Mft. b. m.	11, 706 11, 151	13, 476 9, 734				11, 979 11, 819	9, 034 7, 941	-5.2 + 0.4		108, 278 110, 599	96, 031 85, 663	$ \begin{array}{r r} -11.3 \\ -22.5 \end{array} $
Northern hemlock: Production Mft. b. m Shipments Mft. b. m	18, 426 22, 343	16, 348 18, 920	20, 449 22, 661			14, 277 19, 187	9, 188 17, 914			8 158, 515 8 185, 285	8 150, 287 8 150, 698	-5. 2 -18. 7
Hardwood Lumber Walnut lumber:							·				·	
Production	3, 422 3, 000 13, 530 2, 538 5, 216	2, 527 2, 742 13, 116 2, 731 5, 088	2, 931 2, 860 13, 166 2, 990 5, 270	3, 299 12, 625 2, 635	3, 419 12, 249 4, 174	3, 000 2, 798 11, 796 3, 046 7, 364	2, 921 2, 967 11, 739 2, 335 6, 982	+3. 9 +3. 6 -3. 0 +58. 4 +15. 7	$+15.2 \\ +4.3 \\ +78.8$	29, 497	29, 251 29, 848 30, 170	+1. 1 +1. 5 +2. 3
Walnut logs: Purchased	2, 519	2, 633	2, 736	1		3,773	2, 549	+18.8			24, 809	-14.6
Made into lumber and veneer	2, 670 2, 752	2, 527 2, 996	2, 579 3, 058			2, 995 3, 465	2, 814 3, 166	-1.4 -1.8			25, 309	-2.8
Northern hardwoods: Production	28, 705 28, 498	23, 673 26, 194	20, 073	16, 624		18, 536 26, 475	15, 488 27, 623			8 295, 575 8 257, 652	8 284, 348 8 244, 742	-3.8 -5.0
Lower Michigan hardwoods: Production	7, 049 6, 683 23, 610	5, 438 7, 252 20, 605	5, 502 7, 349	4, 915		4, 257	5, 388 7, 348			8 64, 831	8 66, 960 8 63, 342	+3, 3
Gum: Stocks, total, end of monthmill. ft. b. m Stocks, unsold, end of month.mill. ft. b. m Unfilled orders, end of month.mill. ft. b. m Oak:	555 424 7 130	542 419 7 124	410	396 133		447 346 7 100	7 110					
Stocks, total, end of month_mill. ft. b. m_Stocks, unsold, end of month_mill. ft. b. m_Unfilled orders, end of month_mill. ft. b. m_All hardwoods:	1, 000 854 7 146	974 809 7 165	800 7 159	775 161		975 791 7 173	1,006 794 7 181 383					
Production mill. ft. b. m. Shipments mill. ft. b. m. New orders mill. ft. b. m. Stocks, total, end month mill. ft. b. m. Stocks, unsold, end month mill. ft. b. m. Unfilled orders, end month mill. ft. b. m. Production 10 exprises	236 248 263 2,817 2,289 7 528	244 263 262 2, 786 2, 225 7 547	2, 771 2, 211 7 557	293 293 2, 731 2, 164 566		398 308 319 2, 610 2, 090 7 520 2, 487, 728	311 326 2, 664 2, 126 7 537		-13.9			-5.2
Production, 10 speciesM ft. b. m Exports, planks, joists, etcM ft. b. m Retail yards, Minneapolis district:	į			170, 457	204, 979	188, 579	171,074	+20.3	+19.8	1, 823, 041	1, 931, 582	+6.0
Sales Mft. b. m. Stocks, end of month Mft. b. m. Retail yards, Kansas City district:	22, 081 88, 355	15, 937 87, 345	17, 632 86, 807	84, 984	81,035	14, 122 85, 970	15, 961 80, 080	$\begin{array}{c c} +2.1 \\ -4.6 \end{array}$			132, 284	+14.2
Sales Mft. b. m. Stocks, end of month Mft. b. m. Composite lumber prices:	5, 200 45, 540	5, 679 44, 874				5, 979 44, 396	6, 467 43, 114			51, 874	51, 461	-0.8
Hardwoods dolls. per M ft. b. m. Softwoods dolls. per M ft. b. m.	38, 42 28, 74	40.06 28.81			40.05 30.36	41, 64 29, 74	40.02 31.77	+0.4 +3.7	+0.1 -4.4			
Flooring Maple flooring:												
Production M ft. b. m. Shipments M ft. b. m. Stocks, end of month M ft. b. m. New orders M ft. b. m. Unfilled orders, end of month M ft. b. m.	7, 608 8, 686 26, 271 7, 867 10, 500	7, 784 8, 311 24, 667 7, 466 10, 076	23, 232 8, 851	7, 929 22, 554 7, 110	21, 352 7, 230	10, 283 9, 843 25, 921 7, 748 9, 619	10, 558 8, 124 26, 837 7, 493 8, 202		-20.4 -3.5	97, 239 73, 939	76, 812 81, 110 77, 841	
Oak flooring: M ft. b. m. Production	44, 444 49, 475 71, 425 48, 873	46, 065 47, 832 68, 851 45, 972	51, 529 51, 860 67, 864	45, 926 45, 020 68, 456	51, 225 45, 652 72, 689	7 46, 105 7 44, 471 7 76, 616	7 45, 292 7 45, 091 7 77, 438	+11.5 +1.4 +6.2 -11.6	+13.1 +1.2 -6.1	447, 257 440, 657	446, 888 462, 111 460, 777	-0.1 +4.9

⁷ Revised.

⁸ Cumulative through Sept. 30.

^{*} See table on p. 48 of the September, 1928, issue for earlier data.

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT IN- CREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct in- crease (+)
	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	or decreased (-) cum lative 1925 from 1927
LUMBER PRODUCTS—Continued												
Doors at Wholesale												
White pine, wholesale: Receiptsnumber Shipmentsnumber Stocks, end of monthnumber Unsold stock, end of monthnumber	16, 540 17, 002 59, 535 45, 015	11, 687 13, 698 59, 231 37, 900										
Fir: Receipts	17, 290 10, 209 43, 658 30, 215	8, 182 9, 720 42, 803 30, 755	14, 758 12, 549									
Production number Shipments number Stocks, end of month number New orders number number unfilled orders, end mo number number	393, 224 386, 636 293, 505 221, 896 535, 697	434, 299 431, 800 302, 990 327, 387 470, 617	314, 154 344, 643 267, 118 227, 311 344, 094	273, 076 305, 555 238, 399 237, 769 300, 106	362, 004 243, 946 285, 147			$+18.5 \\ +2.3 \\ +19.9$				
Wooden Furniture	·											
Grand Rapids district: Unfilled orders, end of monthNo. of days' production New ordersNo. of days' production ShipmentsNo. of days' production	46 27 17	54: 31 22	53 30 31	49 31 30		50 30 29	24	-22. 4 0. 0 +23. 3				
Outstanding accounts, end of month	44 10. 0 95. 0	48 5. 0 88. 0	56 7.0 92.0	9. 0 101. 0	10. 0 103. 0	58 7. 5 99. 0	58 11.0 100.0	0. 0 +11. 1 +2. 0	+12. 1 -9. 1			
New orders (average per firm)dollars Unfilled orders, end of month (average per firm)dollars Shipments— Value (average per firm)dollars	5, 145 1, 372 5, 812	4, 662 1, 183 4, 914	6, 396 2, 323 5, 251	3, 012 8, 343		10, 988 3, 884 9, 863	5, 331					
Quantity (total)pieces	7, 414	6, 223	6,020	9, 826		12, 469	17, 401					
Plywood and Veneer Douglas fir plywood:					l 							
Production thous. of sq. ft. of surface_ Shipments thous. of sq. ft. of surface_ New orders (sales), thous. of sq. ft. of surface_ Unfilled orders, end of month thous. of sq. ft. of surface_		8, 218 8, 387 8, 782	11, 094 10, 988 11, 030	9, 426 9, 257 10, 245	1			+38.8 +29.7 +23.5				
Stocks, end of month thous. of sq. ft. of surface month thous. of sq. ft. of surface.	8, 156 7, 284	7, 494 7, 251	8, 024 7, 358	7, 715 7, 309	6, 628 7, 704			-4.1 +5.4				
Other plywood: New ordersthous. of sq. ft. of surface Shipmentsthous. of sq. ft. of surface Unfilled orders, end of monththous. of sq. ft. of surface	3, 237 2, 713	2, 920 2, 523	4, 239 2, 961	3, 381 3, 177		3, 415 3, 310	3, 516			8 27, 377 8 24, 797	8 27, 205 8 25, 228	
Bushel baskets: Production dozens Shipments dozens Stocks, end of month dozens	3, 504 188, 021 254, 432 602, 083	3, 918 229, 342 294, 662 565, 911	5, 131 243, 056 262, 810 570, 726	5, 469 177, 982 283, 813 409, 110	156, 521 156, 407	3, 767 356, 573 418, 181 386, 918	193, 120	-12.1 -44.9	—19.0	2, 296, 267		-15 -10
Rotary-cut veneer: Receiptsnumber of carloads Purchasesnumber of carloads	164 244	181 249	259 325			112 105		+38.1	+233.7 +222.8	978 979	1, 791	+83 +115
STONE, CLAY, AND GLASS PRODUCTS							•	, 20,2	1 222.0	""	2,100	110
Face brick, averages per plant: Production	844 876 2, 495 950	763 815 2, 439 1, 046	890 841 2, 282 989	900 850 2, 523 1, 101	819 2, 320	798 693 2, 466 880	724 2, 679		+13.1 -13.4	6, 969	7, 429	+6
Stocks, end of month— Burned thousands. Unburned thousands. Shipments thousands. Unfilled orders, end of month. thousands. Plants closed down number. Price, red, New York dolls. per thous. Porcelain plumbing fixtures:	302, 249 130, 990 219, 522 260, 970 3 13. 50	408, 563 208, 202 238, 941 299, 457 11 13, 50	491, 088 206, 938 218, 339 221, 625 14 13, 50	257, 692 167, 078 213, 274 21	122, 078 145, 427 49	489, 566 158, 761 176, 315 219, 244	169, 238 214, 169 182, 462 71	-31.8 +133.3	-19. 0 -46. 1 -43. 0 -20. 3 -31. 0	8 1, 641, 344	⁸ 1, 792, 189	+9
Porcelain plumbing fixtures: Net new orders	13, 405	12, 976 20, 253 81, 699	12, 960 22, 970 65, 029	9, 939 16, 525	22, 665 17, 018	20, 046 21, 870 34, 972	14, 065 19, 582	0.0 +128.0 +3.0 -7.4	+61.1 -13.1			
of month pieces. Vitreous china plumbing fixtures: New orders pieces. Shipments pieces. Unfilled orders, end of month pieces. Stocks, end of month pieces.	40, 823 ⁷ 225, 954 ⁷ 274, 611 ⁷ 466, 919 ⁷ 444, 399	48, 621 7 185, 043 7 248, 623 7 403, 339 7 460, 360	7 267, 870		304, 284	235, 883 325, 069	227, 896 245, 725 307, 240	0.0 +23.6 +10.4 -4.5	-1.8 -3.2 -1.0	2, 293, 708 2, 563, 672		+14 +3
Terra cotta, new orders: Quantitynet tons Valuethous. of dolls	16, 108 1, 558	14, 191 1, 385	12, 058 1, 123	10, 570 1, 005	15, 597 1 , 46 0		11, 907 1, 049	+47. 6 +45. 3	+31.0 +39.2	126, 103		
Production thousands. Shipments by rail. thousands. Shipments by trucks thousands. Stocks, end of month thousands. Unfilled orders, end of month thousands.	19, 133 5, 120 14, 437 11, 656 11, 718	18, 072 6, 055 11, 772 12, 591 11, 762	21, 680 8, 284 13, 215 14, 446 14, 503	15, 304	14, 446	6, 729 11, 815 18, 689	5, 134 13, 623 14, 423	+40.1 -5.6	+8.3 +16.0	63, 467	57, 325 116, 537	$-9 \\ +5$

⁷ Revised.

⁸ Cumulative through September 30.

The cumulatives shown are through October, except where otherwise noted.			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	I THROUGH	Per ct in- crease (+) or de
Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
STONE, CLAY, AND GLASS PROD- UCTS—Continued												1321
Portland Cement												
Production thous. of bbls. Operation per ct. of capacity. Shipments thous. of bbls. Stocks, end of month thous. of bbls. Stocks, clinkers, end of month thous. of bbls. Wholesale prices, composite dolls. per bbl.	17, 469 90. 1 18, 421 25, 029 12, 944 1, 683	17, 445 87. 0 19, 901 22, 580 11, 707 1. 683	18, 730 93, 1 21, 970 7 19, 374 9, 357 1, 683	17, 856 91. 7 7 20, 460 7 16, 799 7 7, 566 1. 650	17, 533 87, 1 19, 836 14, 495 5, 975 1, 650	17, 505 92, 3 19, 828 13, 996 6, 490 1, 683	17, 174 87, 4 18, 105 13, 141 5, 960 1, 683	$\begin{array}{c} -1.8 \\ -5.0 \\ -3.0 \\ -13.7 \\ -21.0 \\ 0.0 \end{array}$	+9.6 +10.3 +0.3	153, 103	156, 120	+2.
Highways												
Concrete pavements, new contracts: Total thous. of sq. yds. Roads thous. of sq. yds. Federal-aid highways: Completed—	15, 446 8, 997	13, 123 6, 984	16, 889 9, 254	14, 752 9, 630	7, 068 3, 856	11, 581 6, 872	9, 800 5, 527	-52. 1 -60. 0	-27, 9 -30, 2	111, 242 64, 123	131, 533 83, 153	+18. +29.
Cost thous of dolls. Distance miles. Under construction, end of month miles.	18, 802 661 9, 494	8, 828 483 9, 497	12, 145 599 9, 547	26, 105 1, 169 9, 427	13, 413 598 9, 337	23, 354 927 9, 921	29, 206 1, 151 9, 466	-48.6 -48.8 -1.0			132, 944 5, 707 89, 695	-11.
Plate Glass]			ļ			}				Í
Production, polishedthous. of sq. ft	10, 723	9, 346	11, 474	10, 248	10, 505	9, 353	8, 703	+2.5	+20.7	95, 371	102, 068	+7.
Glass Containers]										
Actual production: Quantity thous of gross Relation to capacity per cent New orders thous of gross Shipments thous of gross Unfilled orders, end of month thous of gross	2, 589 86. 7 2, 225 2, 552 9, 642	2, 374 77. 2 2, 008 2, 311 9, 166	2, 686 80. 9 1, 909 2, 654 8, 467	78. 7 2, 122 2, 433 8, 084		2, 325 8, 606	1, 969 66. 3 2, 314 2, 054 8, 681			8 19, 078 8 19, 706 8 19, 789	8 21, 942 8 21, 047 8 21, 887	+6.
Stocks, end of monththous. of gross Illuminating Glassware	6, 220	6, 267	6, 297	6, 173		5, 925	5,878	••				
Production:					ļ						,	1
Total number of turns Ratio to capacity per ct. of capacity New orders per ct. of capacity per ct. of capacity per ct. of capacity	3, 365 44. 2 41. 6 42. 6	1, 748 22. 3 40. 2 26. 8	2, 985 36. 5 44. 5 42. 5	44. 2	4, 193 52. 0 53. 5 53. 9	40. 7 43. 4	3, 814 50. 6 44. 0 45. 2	+31. 4 +20. 9 +21. 0 +25. 3	+2.8 +21.6	29, 109		
Unfilled orders, end of monthnumber of weeks' supply Stocks, end of month.number of weeks' supply	1.3 4.4	1. 6 4. 6	1.8 4.3		1. 7 4. 1		1. 4 3. 8	0.0 -4.7	$+21.4 \\ +7.9$			
CHEMICALS AND OILS					Į				,			
Chemicals Sulphuric acid:												
Exports thous of lbs Price, wholesale dolls per 100 lbs Nitrate of soda:	733 78 76, 135	774 78 28, 150	291 78 75, 318		442 78 48, 385	^ 75		-24. 1 0. 0			6, 046	
Imports long tons Production in Chile—Quantity metric tons	252, 300	264, 300	275, 000	· .	282, 300	64, 753 143, 700			i		901, 943 2, 584, 000	ll
Potash saits: Imports (commercial)long tons	14, 525	38, 461	57, 327		28, 242						310, 652	11
Production in France— (K2O content)metric tons Sales in Germany—	34, 000	30, 260	34, 300	••		31, 800	33, 000					
(K ₂ O content)metric tons Superphosphate (acid phosphate):	99, 948	102, 608	108, 696	· '		118, 629					8 1, 155, 100	11
Production short tons Stocks, end of month short tons Shipments short tons	299, 444 1, 041, 542 59, 899	293, 250 1, 258, 339 64, 401	294, 381 1, 416, 348 82, 876	1, 366, 402		7 264, 634 7 1, 365, 635 7 201, 913	1,580,756			8 1, 337, 095	8 2, 869, 225	11
Fertilizer: Exports long tons Consumption, Southern States, short tons	111,581	98, 803	103, 575	·	86, 289	'			-10.7			ll .
Consumption, Southern States.short tons Dyes and dyestuffs, exports: Vegetablethous. of lbs Coal tarthous. of lbs	47, 236 272 1, 726	19, 251 254 8, 340	62, 903 237 1, 335	138, 470 157	151, 128 231 5, 194	175, 070 229	7 127, 422 359	+9.1 +47.1	+18.6 -35.7	4, 335, 049 2, 972	5, 383, 023	+24. -12.
Arsenic	1, 120	0, 910	1, 550	1,330	0, 104	2,409	1,000	7-280. 3	7102.0	22, 021	21,909	+ Z3.
Crude: Production	1, 703 2, 099	1, 385 2, 105	2, 086 2, 999	1, 079 2, 978		1, 472 1, 422				⁸ 10, 531	⁸ 12, 410	+17.
Production short tons Stocks, end of month short tons	732 1, 916	728 1,568	803 1, 618			873 1, 787				8 7, 774	⁸ 6, 607	-15.
Price index numbers: Crude drugsrel. to Aug., 1914 Essential oilsrel. to Aug., 1914	199 166	197 162	193 161	192		202 203	207					
Drugs and												

⁷ Revised.

⁸ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) or	CUMULATI FROM JAN. 1 OCT.	1 THROUGH	Per of in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cum lativ 1928 from 1927
CHEMICALS AND OILS—Continued												
Wood Chemicals	Į į								!			
Acetate of lime: Production—												
United States thous. of lbs Canada thous. of lbs	9, 342 720	9, 340 443	⁷ 9, 150 None.	7 8, 235 446	9, 957 999	12, 856 427	13, 849 1, 091	$+20.6 \\ +124.0$		130, 374 7, 409	105, 963 7, 608	-18 + 2
Shipments— United States thous of lbs. Canada thous of lbs. Stocks, end of month—	10, 175 887	13, 302 882	⁷ 12, 504 2, 098	⁷ 12, 920 348	9, 782 990	13, 369 830	17, 141 1, 462	$-24.3 \\ +184.5$	-42.9 -32.3	130, 287 6, 696	118, 877 9, 351	
Stocks, end of month— United States———thous. of lbs—	15, 128	11, 411	7 8, 054		3, 121 349	19,452	16, 185 1, 283	-6.2			••	
Canada thous of lbs. Exports thous of lbs. Price, wholesale dolls per cwt.	2, 848 215 3, 50	2, 333 1, 792 3. 50	140 1, 141 3. 88	449		1, 823 None. 3, 50	915 3. 50	+90. 7		9, 380	11, 129	+18
Methanol, crude: Production—	3. 30	3. 30	3.60	4.00	4.00	3.00	5. 50	0.0	711.0			
United Statesgallons Canadagallons States at crude plants, end of month—	510, 627 27, 741	518, 220 14, 885	None.	18, 816	45, 768	622, 594 17, 777	692, 299 48, 179	+143.2	-5.0		5, 891, 582 311, 753	-1: -1
United States gallons Canada gallons	289, 433 34, 950	285, 139 38, 485	7 224, 267 37, 933		291, 672 34, 399	314, 231 31, 824	369, 965 39, 414	+48.3 +151.7	-21.2 -12.7			
Stocks at refineries and in transit— United States———————————————————————————————————	558, 483 73, 955	277, 077	160, 156		161, 723 57, 814	1, 467, 460 1, 590	1, 181, 225 27, 995	-2.0 -14.1				
Stocks at remeries and in transit United States. gallons. Canada gallons Exports. gallons. Wood at chemical plants:	66, 785	66, 518 54, 535			20, 408	20, 526	57, 983	-37. 3			463, 762	+109
Consumption— United Statescordscords	56, 829 3, 498	53, 247 1, 938	⁷ 51, 095 None.		60, 022 5, 366	79, 350 2, 401	73, 159 5, 121	+32.4 +148.4		722, 029		
Stocks, end of month— United Statescords_ Canadacords_	501, 021	502, 576			547, 087	617, 360	599, 314	+7.5	-8.7			
Canadacords	73, 900 3, 266	73, 699 3, 250				66, 624 3, 395	74, 942 3, 339	-0.9 0.0				
Shutdowncords Methanol, refined:	697	, 200 807	1, 053	1, 113		391	145		2.2			
Production— United States————gallons— Canada————gallons	603, 247 6, 200	541, 113 10, 800			487, 384 56, 700	441, 771 28, 293	688, 535 6, 700	+37. 2 +46. 9	-29. 2		4, 778, 329 335, 350	+8 +5
Stocks, end of month— United States———————————————————————————————————	541, 083	444, 496	,	300, 478	325, 914	382, 876	396, 137	+8.5	-17.7		-	
Canadaganons_	45, 733	39, 210		1		i		-29.5	İ			
United States gallons Canada gallons Price, wholesale, N. Y dolls. per gal	596, 502 11, 462 . 46	667, 549 12, 672 . 47		7 25, 396	48, 330	506, 914 23, 982 . 55	⁷ 698, 476 38, 569 . 53	+18.9 +90.3 +6.3	+25.3	247, 737	4, 935, 077 239, 586	+
Ethyl Alcohol												
Productionthous. of proof gals_ Withdrawn for denaturization	13, 036	16, 618	18, 764									
thous, of proof gais_	16, 336	14, 927	· 1	1					i l	'	8 110, 307	+:
monththous. of proof gals	6, 646	7, 351	9, 263	11, 295		9,838	7, 931					
Black powder, permissible, and other high ex-												
Productionthous. of lbs	32, 625	30, 084	35, 092				38, 918	+9.4		344, 703	328, 253	
Shipmentsthous. of lbs New ordersthous. of lbs	32, 816 31, 305 16, 732	29, 561 27, 993		33, 611	36, 347	35, 304	36, 747	+3.7 +8.1 -1.6	-1.1	331, 031	320, 509 313, 129	
Stocks, end of monththous. of lbs	10, 752	17, 158	18, 554	10, 274	10,011	17, 132	11,011	-1.0	-10. 3			
Purpentine (gum):												
Net receipts, southern portsbarrelsbreeks at ports, end of monthbarrels	48, 111 61, 336	46, 637 69, 245	73, 304	73, 595	79, 509		80, 473		-1.2	[284, 193	—1
Price, southern, New York_dolls. per gal_ Rosin (gum):	. 57	. 55			·		į į	+1.9 -0.7			956, 387	
Net receipts, southern portsbarrels_ Stocks at 3 ports, end of monthbarrels_ Price, B. New Yorkdolls. per bbl_	148, 041 165, 604 8, 10	148, 250 178, 225 9. 71	227, 517	230, 672	216, 917	229, 426	222, 167	-6.0 +1.4	-2.4			
Rosin (wood): Productionbarrels_ Stocks, end of monthbarrels_	36, 054 108, 200	37, 016 112, 703			36, 942 111, 728	34, 839 76, 327	35, 963 82, 717	+4.1 -1.1			351, 115	
Furpentine (wood): Productionbarrels_ Stocks, end of monthbarrels_	5, 700 8, 510	6, 304 7, 786	6, 274 6, 898		6, 486 5, 704	6, 562 10, 232	6, 901 12, 163	+3.7 -5.4		67, 667	61, 486	-
Pine oil:	191, 947	238, 767	225, 668	211, 828	219, 525	244, 445	237, 625	+3.6	-7.6		2, 272, 864	_
Production gallons Stocks, end of month gallons	829, 507	824, 671			845, 645	555, 818		0.0	+43.6			
Roofing, felt:	00.15	07.000		6. 6.	60.000	OF 000	05.500		10.0	grs Moo	940 501	
Production, dry felttons_ Stocks, end of month, dry felttons_	28, 476 2, 153	25, 810 2, 798	25, 574 3, 56		23, 930 3, 367			-1.7 -1.8	-13.0 -10.2		249, 521	
Prepared roofing: Shipmentsthous. of roof squares	3, 236	2, 398	2, 447	3, 774		3, 287	3, 218		l	8 24, 109	8 24, 034	-

⁷ Revised.

⁸ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. 1 OCT	THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
CHEMICALS AND OILS—Continued												
Fats and Oils	ļ	,				•						
Total vegetable oils and copra: Exportsthous. of lbs Importsthous. of lbs	1, 652 59, 951	1, 145 53, 379	56, 364	3, 222 80, 914	3, 681 82, 176	2, 086 55, 985	5, 307 55, 387	+14. 2 +1. 6	+48.4	575, 766	45, 508 620, 845	+7.8
Copra, importsshort tons Copra or coconut oil: thous. of lbs Consump. in oleomargarinethous. of lbs	20, 488 12, 671 11, 791	24, 407 19, 629 10, 642	12, 581	20, 754 34, 008 14, 452	22, 897 31, 534	21, 694 25, 936 10, 436	15, 660 22, 702 12, 286	+10.3 -7.3		i	188, 229 224, 522 8 113, 273	+9.1 -4.0 +34.3
Dleomargarine: Production thous. of lbs. Consumption thous. of lbs. Animal glues, shipments thous. of lbs.	23, 738 23, 926 5, 887	21, 444 20, 490 6, 621	23, 610 24, 965	28, 446 29, 002 6, 256	**	23, 495 23, 981 6, 075	26, 041 26, 823 7, 113	+3. 9 +20. 3		8 197, 299 221, 604 62, 979	8 226, 390 256, 194 66, 158	+14.7
Cottonseed	3,301	9,021	3,100	-,	.,	•	,,	120.0	, ,,,,	32,000	,	
Cottonseed: Receipts at millsshort tons_ Consumption (crush)short tons_ Stocks at mills, end of month _short tons_	16, 798 39, 041 30, 194	23, 923 32, 336 21, 781	73, 795	420, 883	1, 519, 076 903, 031 1, 182, 175	1, 031, 414 585, 275 651, 572	⁷ 1, 266, 288 ⁷ 863, 455 ⁷ 1, 054, 405	+74.7 +114.6 +108.7	+20.0 +4.6 +12.1	4, 256, 842 4, 501, 307	3, 232, 377 3, 044, 340	-24. 1 -32. 4
Octonseed oil, crude: Productionthous. of lbs Stocks, end of monththous. of lbs	13, 445 33, 509	11, 285 19, 457	20, 863	126, 584	280, 383 123, 167	178, 960 87, 463	7 268, 966	+121.5 +81.3	+4.2	1, 364, 176	968, 009	-29.0
Production thous of the	22, 779 415, 428	26, 404 335, 406	236, 200	61, 889 159, 629	204, 255 220, 449 . 099	99, 806 226, 211	194, 676 7 310, 567	+230.0 +38.1	-29.0		887, 555	-26. 7
Stocks, end of monththous. of lbs_ Price, yellow, prime, N. Ydolls. per lb Consumption in oleomargthous. of lbs Cottonseed cake and meal:	2, 106	. 101 1, 867	. 094 2, 062	. 099 2, 4 37	.099	. 107 2, 113	. 109 2, 228	0.0	—9. 2 	8 17, 979	8 19, 112	+6.3
Production short tons Stocks, end of month short tons Exports short tons	18, 457 45, 387 143	13, 769 32, 601 71	34, 760 19, 794 944	185, 723 61, 350 22, 013	405, 150 124, 196 60, 015	260, 110 108, 572 26, 306	⁷ 384, 603 ⁷ 108, 610 53, 834	+118.1 +102.4 +172.6	+5.3 +14.4 +11.5	2, 028, 791	1, 384, 031 189, 856	-31, 8 -43, 1
Flaxseed												
Production, crop estimatethous. of bushs Minneapolis and Duluth:					4 20, 026		⁵ 26, 570					
Receipts thous. of bushs Shipments thous. of bushs Stocks, end of month thous. of bushs	681 392 764	320 272 411	426 310	1, 260 615	6, 578 2, 347 2, 585 1, 209	5, 512 1, 102 1, 583 1, 716	8, 230 2, 008 5, 246 1, 758	+79.0 $+86.3$ $+320.3$ -3.6	+16.9 -50.7	6, 450	15, 720 7, 601	$\begin{vmatrix} -13.2 \\ +17.8 \\ -24.0 \end{vmatrix}$
mportsthous. of bushs inseed oil: Shipments from Minneapolis_thous. of lbs	1, 664 17, 196	1, 484 12, 229	13, 571		15, 437	12, 970	13, 202		i i		146, 862	İ
Price, New Yorkdolls. per lb_inseed cake and meal: Shipments from Minneapolis_thous. of lbs_	. 103 11, 421	. 100 10, 057	. 098 16, 051	. 098 26, 257	. 101 30, 071	. 104 19, 420	. 099 31, 492		-4.5	145, 819	217, 228	+49.0
Exportsthous. of lbs	45, 135	47, 258	52, 392	38, 772	51, 894	52, 984	48, 625	+33.8	+6.7	550, 778	470, 849	-14. 8
FOODSTUFFS Wheat												
Production, monthly estimate:				,							ĺ	
Winterthous. of bushs_ Springthous. of bushs_ Totalthous. of bushs_					4 578, 599 4 325, 266 4 903, 865		5 553, 288 5 319, 307 5 872, 595					
Visible supply, end of month: United Statesthous. of bushs	40, 480	55, 362			138, 239		94, 607	+20.7				
Canadathous. of bushs_ teceipts, principal marketsthous. of bushs thipments, principal markets_thous. of bushs txports:	99, 228 15, 544 14, 840	72, 891 72, 618 33, 543	32, 728 84, 221 46, 105	78, 069 73, 322 39, 508	158, 204 84, 423 30, 365	22, 958 79, 740 50, 374	62, 492 73, 244 49, 252	+102.6 $+15.1$ -23.1	+15.3	409, 911	446, 292 248, 480	+8.9 -4.4
United States— Wheat onlythous. of bushs_ Including wheat flour_thous. of bushs_	5, 006 8, 093	4, 153 7, 064		17, 939 22, 528	22, 058 28, 272	33, 775 39, 536	29, 236 36, 045				78, 068 122, 215	
Canada— Wheat onlythous, of bushs Including wheat flour_thous, of bushs Prices:	21, 960 25, 182	32, 426 35, 944	25, 057 29, 224	26, 923 30, 928	43, 687	14, 071 17, 118	19, 430 23, 4 75	+62.3	+124.8	157, 449 189, 651	240, 924	+53.0
No. 2, red winter, Chicago_dolls. per bush_ No. 1, northern spring, cash, Minneapolisdolls. per bush_	1. 65 1. 376	1. 52 1. 300		1. 40 1. 201	1. 44 1. 185	1, 32 1, 323	1. 34 1. 275	,	i	11		
Wheat Flour										1		ĺ
rind of wheat: United Statesthous. of bushs Canadathous. of bushs	35, 633 6, 304	39, 077 6, 769	47, 528 7, 330	⁷ 47, 975 8, 554	52, 788	48, 131 6, 925	49, 792 9, 138	+10.0	+6.0	413, 364 8 53, 879	430, 088 8 63, 617	
Production: United States, actualthous. of bbls_United States, proratedthous. of bbls_Capada	7, 665 8, 854	8, 416 9, 409	10, 341 11, 563	7 10, 504 11, 197	11, 565	10, 470 11, 816	10, 817 12, 540 2, 005	+10.1	+6.9	90, 209 8 89, 058 8 11, 810	93, 158 8 91, 991 8 13, 814	+3.3
Canada thous of bbls_ Production, grain offal thous of lbs_ Capacity operated, flour millsper cent_ Consumption (computed) thous of bbls_	1, 359 636, 308 44 8, 269	1, 458 688, 711 51 7, 762	817, 831 58	7 820, 229 66	908, 996	1, 528 833, 108 64 9, 346	2,005 866,428 63 11,617	+10.8 0.0	+4.9 +4.8	7, 137, 118		
Stocks, all positions, end of month (computed) thous. of bbls_Exports:	6, 200	7, 847	7, 400	8, 500		8, 490	7, 900				9, 811	
United States thous. of bbls Canada thous. of bbls	686 716	647 782				1, 281 677	1, 513 899	$\begin{array}{c c} +35.4 \\ +31.6 \end{array}$	-8.7	10, 362 7, 156	8, 655	+20.

⁴ As of Nov. 1, 1928.

⁵ Final estimate for 1927.

⁷ Revised.

Cumulative through Sept. 30.

the cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. 1 OCT.	THROUGH	Per of increase (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cum lativ 192 from
FOODSTUFFS—Continued												
Wheat Flour—Continued											-	
Vholesale prices: Standard patents,												
Minneapolisdolls. per bbl Winter straights,	7. 95	7. 36	6. 62	6. 59	6. 41	7. 07	7. 23	-2.7	-11.3			
Kansas City dolls. per bbl	7. 18	6. 44	5. 66	5. 65	5. 59	6. 64	6. 54	-1.1	14. 5			
Corn roduction, crop estimatethous. of bush					4 2 905 440		⁵ 2,773, 708					
xports, including mealthous, of bush	1, 045 17, 451	891 12, 479	1, 018 9, 985		4 2,895, 449 870 7, 725	571 25, 110	538	+30. 2 +8. 6	+61. 7 -64. 6	12, 910	18, 488	+4
isible supply, end monththous. of bush.eceipts, principal marketsthous. of bush.nipments, principal marketsthous. of bush.	18, 771 20, 221	23, 742 16, 080	21, 467 15, 778	19, 658 11, 949	13, 323 9, 044	22, 116	18, 448	-32.2 -24.3	-27.8	193, 353 110, 773	261, 414 182, 033	
rindings (starch, glucose)thous. of bush	6, 427	5, 843	5, 193			7, 561	8, 612	+18.1			72, 837	
Chicagodolls. per bush	1. 03	1. 08	. 97	. 99	0. 94	. 99	. 88	-5.1	+6.8			
Oats					4 1 450 600		5 1 104 146					
roduction, crop estimatethous. of bushs_ teceipts, principal marketsthous. of bushs_ 'isible supply, end of monththous. of bushs_	7, 144 3, 392	6, 610 1, 954	27, 271 15, 687	14, 375 18, 004	4 1,452,966 13,872 17,882	17, 223 26, 430		-3.5 7		126, 093	132, 251	
rices, contract grades,	78	104	2, 403	2, 308	1, 653	647	569	-28.4		9, 504	8, 810	
Chicagodolls. per bush_trindings, Canadathous. of bushs_	. 71 753	$\frac{.61}{723}$. 39 988	. 43 1, 100	. 45	. 49 1, 107	. 50 1, 027	+4.7	-10.0	⁸ 6, 906	8 8, 113	+1
roduction, oatmeal and rolled oats, Canadathous. of lbs	9, 974	9, 320	5, 968			13, 357	11, 650			8 81, 417	8 96, 292	il .
Barley										-		
roduction, crop estimatethous. of bushs	0.050		00 611		4 350, 593		⁵ 264, 392				00 045	
eceipts, principal markets_thous. of bushs_isible supply, end mothous. of bushs_xportsthous. of bushs_	2, 652 711 1, 910	2, 217 685 2, 242	23, 611 6, 313 8, 758	8,084	16, 797 8, 962 11, 639	15, 547 4, 900 6, 830	4, 398	$ \begin{array}{r} -22.6 \\ +10.9 \\ 21.5 \end{array} $	$+54.0 \\ +103.8 \\ +60.8$	53, 654 30, 154	88, 645 45, 461	
rice, fair to good, malting, Chicago dolls. per bush	. 96	. 83	. 73	. 67	. 62	. 83	· [-21.5 -7.5		30, 104	40, 401	+
Rye		.00	. 10		.02		. 02	-7.0	-21. 1			
roduction, crop estimatethous, of bushs					4 43, 274		\$ 58,811					<u> </u>
Receipts, principal marketsthous. of bushs risible supply, end mothous. of bushs	781 1, 465	571 1, 146	2, 636 1, 44 0	7 1, 927	6, 770 4, 4 37	10, 512 2, 207	1,595	+12.8 +130.3	+178.2	34, 746	24, 327	
Exports, including flourthous. of bushs- Price, No. 2, Chicagodolls. per bush	1, 297 1. 26	195 1, 13	709 . 98		3, 098 1. 05	7, 743 . 97	6, 425 1. 00	+25.4 +5.0	$-51.8 \\ +5.0$	31, 975	12, 771	
Total Grains												
otal grain exports, incl. flour_thous. of bushs	12, 423	10, 496	27, 476	42, 805	45, 533	55, 327	50, 817	+6.4	-10.4	271, 849	203, 707	-2
Rice												
Production, crop estimatethous. of bushs outhern paddy, receipts at millsbbls	129, 752	16, 892	338, 269	1, 197, 924	4 40, 422 2, 113, 697	1, 167, 281	8 44, 339 1, 719, 740	+76. 4	+22.9	7, 111, 524	7, 368, 665	
Bhipments: Total from millspockets (100 lbs.) New Orleanspockets (100 lbs.)	531,073		346, 076	777, 583	1, 245, 714	849, 908	1, 200, 174	+60.2			7, 916, 218	
stocks, end of monthpockets (100 lbs.)_ Exportspockets (100 lbs.)_	115, 399 1, 067, 092 291, 287	35, 274 829, 608 189, 472	96, 643 695, 660 126, 668	147, 464 1, 108, 564 152, 906	202, 697 2, 142, 144 228, 255	195, 155 1, 581, 097 132, 903	2, 247, 038	+37. 5 +93. 2 +49. 3	-4.7		1, 559, 583 2, 842, 509	11
mportspockets (100 lbs.)	14, 815	31, 688	6, 026	15, 412	8, 864	27, 217		-42.5		444, 540	289, 547	-:
Other Crops Apples:				į)
Production, crop estimate thous of bush Cold-storage holdings,	None	None		7.1.691	183, 309		5 123, 455		144.0			
end of monththous. of bbls Car-lot shipmentcarloads	None. 1, 040	None. 3, 369	84 4, 170		8, 640 44, 034	1, 038 11, 039	5, 992 31, 6 12	+143.5	+44. 2 +39. 3	76, 017	88, 610	+
Production, crop estimate_thous. of bushs_ Car-lot shipmentscarloads_	29, 152	20, 972	15, 538	20, 267	4 465, 651 28, 921	23, 674	5 406, 964 37, 410	+42.2	-22. 7	212, 627	220, 161	
Onions, car-lot shipmentscarloads Citrus fruits, car-lot shipmentscarloads	1, 200 5, 134	1, 652 5, 070	2, 561	6,009	4, 115	4, 473	5, 754	-31.5 +61.4		27, 210	29, 990 69, 191	+1
Hay, all tame: Production, crop estimate_thous. of tons_					4 92, 688		§ 106, 468					
Receipts tons tons	43, 622	43, 770	59, 774	64, 511	60, 558	64, 440	69, 233	-6.1	-12.5	589, 041	545, 067	-
Cattle and Beef Cattle movements, primary markets:												ļ
Receiptsthousands Shipments, totalthousands	1, 558 594	1, 650 608		2, 191 1, 067		1, 988 906		+15.9 +24.4	-3.6 +5.4		18, 003 7, 466	- -
Shipments, stocker and feeder_thousands_ Local slaughterthousands_	184 963	196 1,013	336 1,007	563	799	407	675	+41.9 +11.6	+18.4	2,678	3, 216 10, 359	iii +:
Beef products: Production, inspectedthous, of lbs_	406, 060	375, 745	398, 056	418, 882	430, 688	453, 993	475, 455	+2.8		ll .		_
Apparent consumption thous, of lbs Exports thous, of lbs	7 418, 874 1, 392	⁷ 386, 214 1, 510	7 407, 512	7 436, 958	422, 049	7 458, 073	7 477, 129	-3.4 +100.6	-11.5	4, 517, 314	4, 059, 072 11, 635	<u>-</u>
Cold-storage holdings, end of monththous. of lbs_	32, 238	32, 442		1	1	İ	, ,	+55.4			,	
Prices: Cattle, corn-fed, Chicago_dolls, per 100 lbs	13. 56	14. 99				13. 31	14. 33	-9.6	+2.1			
Steer rounds No. 2dolls. per lb Western dressed steers, N. Y.dolls. per lb	. 212							-1.5 -0.7				1

⁴ As of Nov. 1, 1928.

⁵ Final estimate for 1927.

⁷ Revised.

⁸ Cumulative through Sept. 30.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN.	THROUGH	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
FOODSTUFFS—Continued												
Hogs and Pork												
Hog movements, primary markets: Receipts	3, 548 1, 299 56 2, 269	2, 924 1, 193 45 1, 719	43	1, 093 55	3, 664 1, 341 65 2, 309	2, 565 1, 051 48 1, 512	3, 039 1, 137 78 1, 883		+20.6 $+17.9$ -16.7 $+22.6$	714	37, 677 14, 186 625 23, 449	+12. +15. -12. +10.
Production, inspected thous. of lbs. Apparent consumption thous. of lbs. Exports thous. of lbs. Cold-storage holdings, end of month—	704, 468 598, 167 82, 936	537, 820 560, 122 84, 290	466, 696 550, 185 81, 924	7 588, 472	623, 716 678, 536 75, 384	458, 919 576, 349 89, 829	497, 128 615, 065 72, 251	+43.6 +15.3 +14.9		5, 507, 726	6, 868, 140 6, 055, 715 886, 522	+8. +9. +7.
Totalthous, of lbs. Fresh and curedthous, of lbs. Lard (included in pork products):	1, 129, 839 915, 360	1, 024, 124 819, 185	859, 903 682, 015		513, 320 430, 888	726, 941 608, 767	539, 240 467, 119	-20.0 -16.3	-4.8 -7.8			:.
Exportsthous. of lbs	146, 520 53, 436	108, 522 52, 940	92, 401 50, 658		59, 865	89, 704 59, 736	92, 860 50, 355	+29.7	+18.9	8 1, 198, 205 568, 812		+5. +6.
Cold-storage holdings, end of monththous. of lbs Prices:	214, 479	204, 939	177, 888	⁷ 126, 890	82, 432	118, 174	72, 121	-35.0	+14.3	1i I		1
Hogs, heavy, Chicagodolls. per 100 lbs Hams, smoked, Chicagodolls. per lb Lard, prime contract, N. Ydolls. per lb	10. 12 . 215 . 122			. 254	10, 03 , 260 , 124	10. 85 . 224 . 133	11. 06 . 233 . 130	$ \begin{array}{r r} -19.3 \\ +2.4 \\ -6.1 \end{array} $	-9.3 +11.6 -4.6			
Sheep and Lambs												
Sheep movement, primary market: Receipts thousands. Shipments, total thousands. Shipments, stocker and feeder thousands. Local slaughter thousands.	1, 913 904 278 1, 020	1, 898 828 234 1, 068	2, 362 1, 250 564 1, 097	2, 161 1, 080	3, 938 2, 485 1, 466 1, 403	2, 848 1, 734 947 1, 101	3, 587 2, 413 1, 560 1, 148	+16.3 +15.0 +35.7 +15.7		10, 771 4, 230	21, 934 11, 539 4, 273 10, 319	+7. +7. +1. +7.
Lamb and mutton: Production, inspectedthous, of lbs Apparent consumptionthous, of lbs Cold-storage holdings,	40, 693 39, 923	39, 394	44, 525 44, 443	49, 237	54, 107 51, 790	45, 378 45, 098	46, 188 45, 855	+9.9 +5.6	+17.1	414, 692	435, 927 437, 355	+5. +4.
end of monththous. of lbs Prices:	1, 947	1, 822	1, 691		4, 428	1, 991	2, 958	+109.3		li l		
Sheep, ewes, Chicagodolls. per 100 lbs Sheep, lambs, Chicagodolls. per 100 lbs	5, 88 13, 03	5. 38 15. 18	5, 72 14, 31	5, 50 14, 16	5, 35 13, 08	5. 19 13. 56	5. 25 13. 87	-2.7 -7.6				
Miscellaneous Meats												
Cold-storage holdings, end mothous. of lbs Total Meats	63, 941	63, 610	56, 888	7 49, 798	52, 081	58, 163	49, 235	+4.6	+5.8			
Production, inspects Cold-storage holdings, end mothous. of lbs. Apparent consumptionthous. of lbs.	1, 227, 965	952, 959 1, 121, 998 7 985, 784	909, 277 949, 547 71, 002, 140	902, 414 7 731, 111 71, 074, 472	1, 108, 511 627, 664 1, 152, 376	822, 973	1, 018, 772 635, 349 1, 138, 049	+22.8 -14.1 +7.3	-1.2		11, 254, 514 10, 556, 143	+0. +1.
Poultry												
Receipts at 5 marketsthous. of lbs Cold-storage holdings, end of mo.thous. of lbs Fish	18, 849 38, 230		22, 361 40, 749		35, 620 58, 452	24, 391 43, 201	29, 103 52, 315	+49.3 +34.1	+22.4 +11.7	212, 489	225, 134	+6.
Total catch, prin. fishing ports*_thous. of lbs_Cold-storage holdings, 15th of mo_thous. of lbs_	29, 809 40, 946				27, 129 73, 320	26, 633 60, 330		+11.7 +2.8		253, 527	252, 189	-0.
Canned salmon: Shipments, United Statescases_ Exports, Canadacases_	240, 311 23, 106	454, 600 26, 333	8, 321, 632 121, 152	168, 962	252, 265	1, 138, 147 97, 163	791, 856 120, 446	+49.9	+110.3	828, 963	1, 024, 000	+23.
Butter												
Production (factory) thous. of lbs. Receipts, 5 markets thous. of lbs. Cold-storage holdings, creamery,	182, 016 69, 650				104, 702 41, 956	113, 546 42, 234	102, 399 38, 301			1, 322, 190 515, 162	1, 299, 662 505, 366	-1.
end of month thous. of lbs. Apparent consumption thous, of lbs. Wholesale price, New York dolls. per lb.	69, 750 204, 173 . 44	186, 188	186, 461	168, 408	148, 598	179, 878	176, 176	$\begin{array}{c c} -17.3 \\ -11.8 \\ -2.0 \end{array}$	-15.7	1, 766, 382	1, 723, 094	-2.
Cheese Total, all varieties: Production (factory) thous. of lbs. Receipts, 5 markets thous. of lbs. Apparent consumption thous. of lbs. Cold-storage holdings, end mo.thous. of lbs.	58, 880 19, 216 45, 778 68, 613	21, 741 32, 146	18, 727 35, 189	18, 222 41, 291	18, 669 48, 357	38, 776 21, 522 43, 641 85, 131	18, 995 47, 212	+2.5 +17.1	+2.4	190, 059 414, 215		-10.
Imports. thous. of lbs. Exports, United States thous. of lbs. Exports, Canada thous. of lbs. American whole milk:	6, 581 180 5, 849	5, 937 172 20, 095	5, 597 215 15, 788	6, 744 141 17, 123	9, 410 204 24, 282	5, 102 225 19, 040	8, 441 211	+39.5 +44.7	+11.5 -3.3	63, 347 2, 855	63, 187 2, 133 93, 148	 −25.
Cold-storage holdings, end mo.thous. of lbs_ Wholesale price, New York_dolls. per lb_	53, 648				. 26	65, 453 . 27			- 7, 1			
Eggs												
Receipts, 5 marketsthous. of cases Cold-storage holdings, end of month:	1				i			ļi —			14, 987	0.
Cases thous of cases Frozen thous of lbs	10, 002 77, 744				6, 249 73, 281	7, 960 71, 20 ₀			+13.9 +18.1	1		

⁷ Revised.

⁸ Cumulative through Sept. 30.

^{*} See table on p. 18 of the September, 1928, issue for earlier data.

		1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. OCT	1 THROUGH	Per ct. in- crease (+)
June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	or de- crease (-) cumu lative 1928 from 1927
								··········			
31, 087 25, 255	30, 397 20, 794	30, 542 19, 332	27, 837 7 17, 604	23, 949 14, 213	38, 357 19, 566	35, 932 14, 956	-14.0 -19.3	-33.3 -5.0			
25, 081 13, 368	23, 594 8, 611	24, 159 8, 367	21, 821 6, 275	17, 787 4, 829	33, 004 6, 500	30, 535 5, 970	-18.5 -23.0	-41.7 -19.1			
3, 054 5. 83	3, 011 5. 97	3, 246 6. 18	3, 405 6. 18	2, 531 6. 18	2, 439 6, 00		$ \begin{array}{c c} -25.7 \\ 0.0 \end{array} $		29, 561	32, 397	
187, 789	180, 377	161, 679	165, 682	164, 866	222, 482		-0.5				
5, 464 4. 28	5, 180 4. 34	6, 343 4. 45	5, 583 4. 58	5, 264 4. 58	3, 756 4, 58	5, 130	-5.7 0.0	+2.6	58, 854		+11.
269, 421	171, 065	152, 451	136, 170	121, 287	117, 792	110, 967	-10.9	+9.3	1, 667, 132	1, 626, 743	-2.
21, 517	22, 632 350	19, 941	⁷ 18, 857	16, 377	10, 646	9, 261	-13.2	+76.8	2 602	2 151	+17.
6, 129	6, 264	. 6, 736	5, 662	6, 276	6, 531	5, 735	+10.8	+9.4			
19, 151 115, 866	19, 215 122, 100	19, 081 117, 162	17, 329 113, 552	116, 849	17, 586 111, 582	17, 987 114, 981	+2.9	+1.6			+1.: +2.:
32, 686	2 8, 374	24, 4 13	21, 572	20, 274	19, 046	20, 217	-6.0	+0.3	253, 134	267, 902	i
7, 034	6, 652	7, 014	8, 530		6, 410	7, 332			⁸ 54, 504	⁸ 66, 789	+22.
180, 861 208, 241 404 120	102, 353 253, 613 433, 367	89, 047 274, 366	315, 722	257, 825	74, 520 278, 078	76, 540 319, 464	-18.3	-19.3	3, 250, 708	3, 019, 787	-7.
682, 591	595, 214	488, 161	465, 386	357, 506	258, 427	254, 963	-23. 2	Į	!!!		
34, 166 5, 364	24, 930 10, 313	34, 049	26, 725	32, 920	37, 536	35, 128	+23. 2	-6.3			
. 043	. 042	. 041	. 042	. 039	. 048	. 047	-7.1	17. 0			
. 067 133	. 066 133	. 063 129	. 063 127	. 062 126	. 064	.064	-1.6 -0.8	-3. 1 -3. 8			
224, 869	299, 714	182, 414 348, 808	168, 638 370, 339	154, 547 323, 317	167, 805 292, 816	151, 747 304, 118	-8.4 -12.7	+1.8 +6.3			
1, 127, 054	1, 017, 638	829, 437	630, 548	446, 210	671, 952	531, 142	-29. 2	-16.0			
l i	821	925	1, 655	809	667	976	-51.1	17. 1	'	10, 147	+17.
861	850	793	5, 378 702 1, 040	693	4, 622 547 1 407	634	-1.3	+9.3		11. 798	-6.
1, 100	1, 105	1, 057	997	1, 330	1, 335	1, 604		-17. 1	11, 944	11, 501	-3.
. 157	. 165	. 173	. 173	. 178	. 135	. 147	+2.9	+21.1	0, 230		
4, 863	7, 209	8, 086	9, 754	10, 512	9, 586		+7.8	+8.5	69, 997	71, 302	+1.
.325	. 325	. 325	. 325	. 310	. 345	. 345	-4. 6	-10. 1			
7, 601 23, 336	6, 316 12, 971	4, 011 13, 461	3, 724 6, 388	15, 326 5, 450	11, 022 10, 444	11, 340	+311.5 -14.7	$+59.4 \\ -51.9$	178, 767 161, 862	187, 901 148, 498	
. 1450	. 1550	. 1213	. 1163		. 1525	, 1563					
				41, 346, 566		⁵ 1, 211, 301					
	9, 723, 647	10, 627, 344			8, 994, 416	8, 552, 397	+23. 4 +8. 7	+5.0 +16.0	82, 212, 393	89, 864, 438	+9.
30, 796	20, 252	26, 833	57, 509	88, 509	38, 692	47, 527	+53.9	+86. 2	409, 174	437, 107	+6.5
1, 032, 268 144 6, 492	227	860, 791 70, 579	961, 827 133, 718	956, 846 122, 627	371, 168 136, 824	672, 015 162, 386	-0.5 -8.3	+42.4 -24.5	6, 179, 588 685, 630	9, 482, 337 533, 066	+53.4
	31, 087 25, 255 25, 081 13, 368 3, 054 5, 83 187, 789 151, 769 5, 464 4, 288 269, 421 21, 517 225 6, 129 19, 151 115, 866 32, 686 7, 034 180, 861 208, 241 404, 120 682, 591 64, 224 44, 166 5, 364 043 059 067 133 123, 340 224, 869 1, 127, 054 906 5, 321 861 1, 303 1, 100 549 1, 127, 054 4, 863 179, 214 575, 996 9, 690, 961 33, 336 1450 575, 996 9, 690, 961 33, 3801 30, 796 9, 690, 961 33, 3801 30, 796 1, 322, 268	31, 087 30, 397 25, 255 20, 794 25, 081 23, 594 13, 368 8, 611 3, 054 3, 011 5, 83 5, 97 187, 789 180, 377 151, 769 124, 738 5, 464 5, 180 4, 28 4, 34 269, 421 171, 065 21, 517 22, 632 225, 359 6, 129 6, 264 19, 151 19, 215 115, 866 122, 100 32, 686 28, 374 7, 034 6, 652 180, 861 102, 353 208, 241 253, 613 404, 120 433, 367 682, 591 595, 214 64, 224 67, 638 34, 166 24, 930 5, 364 10, 313 208, 241 253, 613 208, 241 253, 613 208, 241 253, 613 213, 340 149, 682 24, 869 299, 714 1, 127, 054 1, 017, 638 906 821 5, 321 5, 734 861 103 133 133 123, 340 149, 682 224, 869 299, 714 1, 127, 054 1, 017, 638 906 821 5, 321 5, 734 861 1, 303 1, 168 1, 100 1, 105 549 598 157 . 105 4, 863 7, 209 179, 214 170, 519 575, 996 588, 206 9, 690, 961 9, 723, 647 33, 801 30, 155 30, 796 12, 252 1, 032, 268 1, 078, 362 1, 032, 268 1, 078, 362 1, 032, 268 1, 078, 362 1, 032, 268 1, 078, 362	31, 087 30, 397 30, 542 25, 255 20, 794 19, 332 25, 081 23, 594 24, 159 13, 368 8, 611 8, 367 6, 583 5, 97 6. 18 187, 789 180, 377 161, 679 151, 769 124, 738 101, 819 5, 464 5, 180 6, 343 4, 28 4, 34 4, 45 269, 421 171, 065 152, 451 225 6, 129 6, 264 6, 736 122, 100 117, 162 32, 686 28, 374 24, 413 7, 034 6, 652 7, 014 180, 861 122, 100 117, 162 32, 686 28, 374 24, 413 7, 034 6, 652 7, 014 180, 861 122, 100 117, 162 32, 686 28, 374 24, 413 7, 034 6, 652 7, 014 180, 861 102, 353 89, 047 208, 241 263, 613 274, 366 682, 591 595, 214 488, 161 64, 224 67, 638 82, 773 34, 166 24, 303 36, 407, 127 682, 591 595, 214 488, 161 64, 224 67, 638 82, 773 34, 166 24, 303 31, 11, 329 123, 340 149, 682 182, 414 224, 869 299, 714 348, 808 1, 127, 054 1, 017, 638 829, 437 906 821 925 5, 321 5, 734 5, 515 861 850 793 1, 303 1, 168 1, 181 1, 100 1, 105 19, 214 170, 519 179, 106 325 325 325 325 7, 601 6, 316 4, 011 23, 336 179, 214 170, 519 179, 106 325 325 325 7, 601 6, 316 4, 011 23, 336 12, 971 3, 461 170, 519 179, 106 325 325 325 7, 601 6, 316 4, 011 23, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 336 12, 971 13, 461 123, 340 129, 340	31, 087 30, 397 30, 542 27, 837 25, 255 20, 794 19, 332 7 17, 604 25, 081 23, 594 24, 159 21, 821 3, 368 8, 611 8, 367 6, 275 3, 034 3, 011 3, 246 3, 405 4, 28 4, 34 4, 45 4, 58 4, 28 4, 34 4, 45 4, 58 4, 28 4, 34 4, 45 4, 58 6, 129 6, 264 6, 736 5, 662 6, 129 6, 264 6, 736 5, 662 6, 129 6, 264 6, 736 5, 662 19, 151 19, 215 19, 081 17, 329 115, 866 28, 374 24, 413 21, 572 7, 034 6, 652 7, 014 8, 530 180, 861 102, 353 89, 047 107, 175 228, 241 253, 613 274, 366 315, 722 288, 241 243, 367 471, 175 417, 933 404, 120 433, 367 471, 175 417, 934 682, 591 595, 214 488, 161 465, 386 44, 120 433, 367 471, 175 417, 934 682, 591 595, 214 488, 161 465, 386 464, 224 67, 638 82, 773 66, 428 34, 166 24, 930 34, 049 26, 725 564 10, 313 11, 329 7, 413 12, 340 129, 313 129 127 123, 340 149, 682 182, 414 168, 638 224, 869 299, 714 348, 808 370, 339 1, 127, 054 1, 017, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 638 829, 437 630, 548 479, 214 170, 519 179, 106 194, 681 1, 303 1, 168 1, 181 1, 040 1, 105 1, 057 599 598 548 570 133, 801 30, 155 349, 811 31, 789 325	31, 087 30, 397 30, 542 27, 837 23, 949	31, 087 30, 397 30, 542 27, 837 23, 949 19, 566 25, 255 20, 794 19, 332 717, 604 14, 213 19, 566 25, 255 20, 794 19, 332 717, 604 14, 213 19, 566 25, 25, 255 20, 794 19, 332 717, 604 14, 213 19, 566 25, 251 23, 594 24, 159 24, 821 17, 757 33, 004 3, 011 3, 246 3, 405 2, 531 6, 2439 5, 58 5, 97 6, 18 6,	31, 087 30, 307 30, 542 27, 837 23, 049 38, 357 35, 932 25, 255 20, 794 19, 332 717, 604 14, 213 19, 566 14, 956 25, 081 23, 504 24, 159 21, 521 17, 787 33, 004 30, 535 5, 30 3, 054 3, 013 3, 246 3, 405 2, 633 2, 439 2, 700 3, 054 3, 011 3, 246 3, 405 2, 633 2, 439 2, 700 3, 054 3, 011 3, 246 3, 405 2, 633 2, 439 2, 700 3, 054 4, 28 124, 738 101, 819 134, 224 138, 999 198, 281 183, 293 3, 246 3, 405 2, 439 4, 45 4, 58	June July August Septem October Septem October Septem Sep	June July August Septem October Septem Sept	June	June

⁴ As of Nov. 1, 1928. ⁸ Final estimate for 1927. See tables on p. 25 of the November, 1928, issue for earlier data.

 ⁷ Revised.
 ⁸ Cumulative through Sept. 30.
 ** See table on p. 47 of the October, 1927, issue for earlier data.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) or	CUMULATI FROM JAN. OCT	1 THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
TRANSPORTATION												
River and Canal Cargo Traffic Panama Canal:												
Total eargo traffic thous, of long tons. In American vessels thous, of long tons. In British vessels thous, of short tons. Sault Ste. Marie canals thous, of short tons. New York State canals thous, of short tons. Cape Cod Canal short tons. Welland Canal short tons. St. Lawrence Canal slott of short tons. Mississippi River Govt. barges short tons.	2, 140 1, 097 537 12, 633 400 120, 261 1, 031, 051 1, 143, 735 90, 658	2, 292 1, 212 535 13, 247 414 135, 702 1, 006, 713 1, 225, 338 112, 248	707 13, 680 517 148, 691 1, 115, 601 1, 359, 561	12, 812 411 130, 566 996, 833 1, 150, 058	1, 195 679 13, 603 536 160, 903 1, 115, 190	1,090,647	2, 718 1, 396 714 11, 231 381 7 89, 029 1, 130, 277 1, 198, 952 104, 923	+11. 6 +4. 8 +12. 8 +6. 2 +30. 4 +23. 2 +11. 9 +10. 4	-14.4 -4.9 $+21.1$ $+40.7$	24, 041 13, 135 5, 477 75, 288 2, 255 624, 565 6, 539, 731 6, 950, 960 918, 632	7, 244, 159	$\begin{array}{c c} -13.9 \\ +23.3 \\ 0.0 \\ +24.7 \\ +72.8 \\ -3.4 \\ +4.2 \end{array}$
Ohio River, Pittsburgh, Pa., to Wheeling, W. Vashort tons. Allegheny Rivershort tons. Monongahela Rivershort tons.	931, 641 225, 960	947, 227 306, 010	1, 034, 775 346, 670	963, 766 288, 629		988, 412 421, 985	894, 938 444, 358	+4. 9 +30. 9 +3. 9	+13.0 -15.0 +12.4	8, 112, 678 2, 431, 180 20, 416, 530	8, 469, 721 2, 409, 291	+4.4 -0.9
Ocean Traffic	2, 100, 002	2,000,000	2,002,020	_, 500, 001	2,000,000	1 2, 101, 201	_,,	1 9.0	,		,	'
Clearances, vessels in foreign trade: Totalthous. of net tons_ Americanthous. of net tons_ Foreignthous. of net tons_	7, 371 2, 847 4, 524	7, 781 3, 056 4, 725	8, 377 3, 173 5, 204	7, 365 2, 912 4, 453	7, 806 3, 252 4, 554	7, 232 2, 712 4, 520	6, 974 2, 939 4, 035	+6.0 +11.7 +2.3	+10.6	24, 376	66, 012 25, 804 40, 208	+4.5 +5.9 +3.9
Shipbuilding	-			·								
Completed during month: Totalgross tons. Steel seagoing.gross tons. Building or under contract, end of month:			12, 537 2, 245			31, 510 23, 303	9, 290 3, 364					
Merchant vesselsthous, of gross tons Freight Cars	264	256	235	242		216	241					
Tregint Cars Surplus (daily av. last week of month): cars Total cars Box cars Coal cars	336, 181 170, 606 114, 710	271, 017 137, 618 90, 513	201, 864 114, 355 47, 615	53, 170	105, 017 54, 263 21, 128	135, 059 74, 126 34, 805	168, 829 82, 411 61, 455	+1. 1 +2. 1 -3. 1	-34.2			
Shortage (daily av. last week of month): Total	None. None. None.	32 None. 32	None.	,	44 None. 44	371 None. 371	302 None. 103	-84. 2 -72. 3	85, 4			
Car loadings: Total	4, 923, 304 172, 234 125, 933	3, 942, 931 207, 175 90, 919	231, 181 98, 944	5, 586, 284 295, 779 164, 412	4, 700, 796 219, 298 154, 620	5, 488, 107 294, 144 158, 749	74, 464, 872 7 219, 251 7 158, 314	15. 9 25. 9 6. 0	+5.3 0.0 -2.3	43, 637, 626 1, 976, 065 1, 268, 053	42, 917, 925 2, 059, 419 1, 247, 880	-1.6 +4.2 -1.6
Coal and coke .cars Forest products .cars Ore .cars Merchandise and l. c.l .cars Miscellaneous .cars	773, 431 330, 023 327, 983 1, 260, 705 1, 932, 995	239, 751 250, 069 986, 115	686, 417 266, 137 253, 085 1, 027, 132 1, 667, 913	322, 538 319, 579 1, 297, 461	867, 999 265, 872 240, 988 1, 079, 167 1, 871, 652	964, 038 338, 165 279, 483 1, 310, 558 2, 142, 970	7 800, 449 7 268, 690 7 192, 182 7 1, 078, 569 7 1, 747, 417	-9. 0 -17. 6 -24. 6 -16. 8 -16. 2	$ \begin{array}{r} -1.0 \\ +25.4 \\ +0.1 \end{array} $	2, 917, 970 1, 772, 759	2, 799, 468 1, 703, 950 10, 938, 720	-4.1
Railroad Operations												
Operating revenue: Freight	370, 268 81, 708 502, 474 375, 086 85, 997 37, 304	82, 722 512, 953	85, 102 557, 856 383, 908	80, 098 556, 044 375, 646 134, 513		7 426, 937 7 86, 319 7 565, 469 7 386, 607 7 133, 094 42, 954	580, 498 399, 504 133, 776					
Railway Equipment							*					
Lecomotive (Am. Ry. Assn.); Owned, end of month— Quantitynumber Tractive powermills. of lbs In bad order end of month—	60, 094 2, 591	59, 975 2, 590	59, 769 2, 585		59, 371 2, 578	61, 455 2, 605	61, 305 2, 606	-0.4 -0.2	-3. 2 -1. 1			
Quantity number Per cent of total in use per cent Installed number Retired number New orders number	8, 006 13. 4 95 284	8, 310 14. 0 116 235 32	13. 4 114 320	13. 2 93 260		8, 345 13. 6 177 262 6	8,778 14.4 195 345 8	+4.6 +5.3 +9.7 +27.3 -50.0	-47.7 -4.1	1, 671 2, 828	1, 190 2, 600 253	
Shipments, manufacturers' (Census)— Totalnumber_ Steam, domesticnumber_ Electric, domesticnumber_	51 39 11	46 19 5	34 23 4	41 28	36 26	127 86 7	112 81 12	-12. 2 -7. 1	-67.9	950	471 311 87	-50. 4 -52. 4 -32. 0
Unfilled orders (railroads), end of mo.— From manufacturersuumber. In railroad shopsnumber. Unfilled orders, manufacturers' (Census)— Totalumber.	90 30 201	56 17 198	81 19 204	178	104 17 170	271	53 27 182	+6.1 +13.3 -4.5	-6.6			
Steam, domesticnumber_ Electric, domesticnumber_ Exports, steamnumber_ Freight cars (Am. Ry. Assn.):	109 37 15	98 59 32		118 27	113 29 8	167 49 8	97 45 19	-4.2 +7.4	+16.5 -35.6			-12.1
Owned, end of month— Quantity	2, 300, 669 210, 386	2, 300, 034 210, 437	2, 299, 157 210, 483	⁷ 2, 296, 273 ⁷ 210, 335	2, 292, 090 210, 089	2, 326, 616 211, 970	2, 325, 027 212, 027	-0.2 -0.1				
In bad order, end of month— Quantitycars_ Per cent of total in useper cent. New orderscars	145, 210 6. 5 2, 286	151, 867 6. 7 307	6.6	6. 6	6. 2	6.0	139, 441 6. 1 326	$ \begin{array}{r r} -6.8 \\ -6.1 \\ +32.3 \end{array} $	$ \begin{array}{r} -0.9 \\ +1.6 \\ +401.5 \end{array} $			

The cumulatives shown are through			1928			19	27		ent in- (+) or ase (-)	CUMULATI FROM JAN. OCT	1 THROUGH	Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cum lativ 1928 from 1927
TRANSPORTATION—Continued												
Railway Equipment—Continued	İ							l				
reight cars—Continued.	ļ		·									
Shipments— Total—————————cars—	5, 147	4, 963	5, 295	3, 220	2, 507	4, 397	4, 320	-22.1	-42.0	47, 966	36, 157	-24.
Domesticcars Unfilled orders (railroads)—	5, 115	4, 908	5, 261	3, 000	2, 345	4, 393		-21.8			35, 108	25.
Total cars From manufacturers cars	12, 446 9, 316	13, 531 10, 371	8, 177 5, 673	6, 619 3, 878	5, 437 1, 880	14, 437 10, 799	10, 901 6, 991	-17.9 -51.5	-50.1 -73.1			
In railroad shopsears	3, 130	3, 160	2, 504	2,741	3, 557	3, 638	3, 910	+29.8	-9.0			
New orderscars	57	19	589	2	56	19	18		+211.1	1,033	1, 760	+70
Total cars Domestic cars	95 95	123 123	147 144	146 143	68 68	201 201	119 119	-53.4 -52.4	-42.9 -42.9		885 815	
Passenger Travel	•	0		110	00			02. 1	12.0	1,010	010	
Jational parks:												
Visitorsnumber	271, 621 60, 324	553, 394 111, 642	499, 633 98, 523	222, 698 44, 873	68, 997 10, 466	199, 336 29, 089	50, 101 12, 862	-69. 0 -76. 7		1, 914, 692 365, 265		+3 +3
rrivais from aproad:	20, 419	20, 682	24, 629		10, 100	31,000	31, 719			8 242, 058	8 217, 218	il .
Immigrants number United States citizens number pepartures abroad:	27, 201	32, 974	63, 191	80, 233		75, 557	50, 254			8 318, 984	8 350, 659	
Emigrantsnumber United States citizensnumber	7, 205	7, 804	6, 488	8, 093		7, 625	6, 402			8 48, 764	⁸ 55, 307	
assports issuednumber	53, 028 29, 674	68, 463 15, 776	50, 323 9, 866	42, 105 8, 056	8, 494	39, 748 8, 474	24, 396 8, 063	+5.4	+5.3	8 333, 772 165, 447	8 369, 776 171, 813	
rullman company operations: Revenuethous. of dolls_ Passengers carriedthousands	7, 432	7, 279	7, 593	7, 297		7, 625	6, 494			8 62, 133	⁸ 61, 916	
Passengers carriedthousands lotel room occupancyper ct. of capacity	3, 095 64	3, 073 60	3, 312 63	3, 081 68	72	3, 288 68	2, 851 72	+5.9	0.0	8 26, 910	8 25, 962	-3
Warehouses		•				: : :	ļ	1				
ublic merchandise warehouses,	İ							!				
space occupiedper ct. of total	67. 2	67. 1	67. 9	66. 1		:						
PUBLIC UTILITIES												
elephone companies: Operating revenuethous. of dolls.	68, 783	67, 676	68, 784	68 422		66, 529	65 933			8 585, 194	8 609, 002	+4.
Operating incomethous. of dolls	16, 941	15, 019	15, 985	16, 496		16, 322	16, 445			8 143, 416	8 149, 041	∔ ŝ
Commercial telegraph tolls_thous. of dolls	11, 169	10, 618	11,530	11,010		11, 172	10, 979			8 95, 267	96, 874	$^{+1}_{+2}$
Operating revenue thous. of dolls Operating income thous. of dolls	14, 036 1, 906	13, 375 1, 428	14, 328 1, 887	13, 911		13, 822 2, 085	2,009			8 118, 180 8 16, 221	8 121, 258 8 15, 576	-4 -4
as and electric companies: Gross earningsthous. of dolls	178, 835	173, 000	174, 000	179, 000		169, 414	177, 734				⁸ 1, 637, 818	
Net earnings thous of dolls lectric railways (212 companies):	67, 633	61, 000	60, 000	67, 000		61, 897		 		8 560, 766	6 618, 458	
Passengers carried thous. of persons Average fare cents	760, 509 8. 081	728, 849 8. 081	736, 223 8. 121	717, 810 8, 121	795, 140	728, 371 7. 952	790, 712 7. 985		+0.6	7, 791, 941	7, 712, 505	-1
Clectric power production: Total mills, of kw. hours	7, 010	⁷ 7, 143	7 7, 505			6, 605	6, 932	Ì		8 59, 186	8 64, 291	+8
By water powermills. of kw. hours By fuelsmills. of kw. hours	3, 104 3, 906	3, 075 7 4, 068	7 3, 045 7 4, 460	2, 785		2, 201 4, 404	2, 390			8 22, 245 8 36, 941	8 26, 329 8 37, 966	+18
In street railways, manfg. plants, etcmills. of kw. hours	372	381	382			439	450			8 4, 071	8 3, 871	
n central stationsmills. of kw. hours Electric power production (Canada):	6, 638	6, 759	7 7, 123	6, 915		6, 166	6, 482			8 55, 115	8 60, 419	+9
Total mills. of kw. hours By water power mills. of kw. hours By water power mills. of kw. hours By water power mills.	1, 241	1, 246	⁷ 1, 308 ⁷ 1, 292	1, 278		1, 200 1, 184				8 10, 221 8 10, 084	8 11, 565 8 11, 413	+13 +13
Exportedmills. of kw. hours Electric power, gross	1, 226 127	1, 231 130	145	130		1, 104	1, 293			8 1, 230	8 1,172	-4
revenuethous. of dolls	149, 500	⁷ 146, 600	⁷ 148, 200	156, 100		144, 400	150, 800			8 1, 295, 200	8 9, 899, 900	+664
EMPLOYMENT AND WAGES	ļ					!						H
Employment in factories: Massachusettsrel. to 1919–23	70.0	70.0	74.0	75.0	70.0	87. 1	07.4					
New York Staterel. to 1923	73. 6 82. 2	72. 9 81. 5	74. 2 82. 5	75. 6 84. 3	78. 8 86. 0	87. 5		$\begin{array}{c c} +4.2 \\ +2.0 \end{array}$	-9. 8 -1. 8	[
New Jersey rel. to 1923 Pennsylvania rel. to 1923	90 80	90 79	91 81	94 81	95 82	95 84	95 84	+1.2	-2.4			
Delaware rel. to 1923 Maryland rel. to 1924	74 86. 5	75 85. 6	74 88. 1	77 89. 0	74 90. 4	94.0		-3.9 + 1.6	$+1.4 \\ -2.3$			
Illinois rel. to 1923 Illinois rel. to 1923	124. 1 85. 1	123. 3 83. 4	124. 0 85. 6	124. 0 86. 8	86. 9	118. 8 85. 3	85. 3	+1.6 +0.1	+1.9			
Wisconsinrel. to 1923	92. 9 120. 6	96. 8 125. 7	97. 9 134. 7	97. 1 135. 4	97. 0 131. 3	95. 9 90. 3	94. 9 88. 3	-0.1 -3.0	-+-2, 2			
Cleveland number Detroit number	76, 580 262, 651	76, 679 273, 796	78, 420 293, 457	78, 910 294, 829		72, 247 196, 580	69, 046 192, 411	 -3. 0				
Milwaukee number New York State number	36, 922 454, 952	37, 314 451, 125	37, 385 456, 303	38, 077 466, 357	38, 090 475, 686	35, 544 484, 115	35, 195 484, 819	0.0 +2.0	+8.2			
Oklahoma number Ohio * rel. to 1923	27, 888 104, 7	29, 405	31, 137	30, 812 7 108. 7	31, 960 109. 6	29, 948	27, 624 101, 0	+3.7	+15.7			
otal pay roll:	i	103. 7	106. 3		i	14, 317		+0.8				
New York State (weekly) thous of dolls Oklahoma (weekly) thous of dolls	13, 413 743	13, 149 793	13, 411 877	13, 862 865	14, 171 868	970	14, 195 741	+2.2 +0.3	→-17 1I		1	11.
Wisconsinrel. to 1923	104. 8	98. 7 87. 2	108. 7 89. 0	106. 5 92. 0	110. 2 94. 0	101. 7 95. 0	100. 6 94. 2	+3.5 +2.2	+9.5 -0.2			
New York Staterel. to 1923	89. 0				0 2. 0			,;	٠. - ,			
	89. 0 98 83 78	96 76	99 83 76	102 83 77	105 87 78		102 85 76	+2.9 +4.8 +1.3 +1.5	$^{+2.9}_{+2.4}$			

⁷ Revised.

³ Cumulative through Sept. 30.

^{*} See table on p. 48 of the October, 1928, issue for earlier data.

The cumulatives shown are through			1928			19	27	CREASE	ENT IN- (+) OR ASE (-)	FROM JAN.	IVE TOTAL 1 THROUGH 1. 31	Per c in- crease (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumt lative 1928 from 1927
EMPLOYMENT AND WAGES—Contd.												
Employment, Canadarel. to Jan. 1920 Employment, trade-unions:	116. 3	119. 9	119. 5			109. 0	107. 5					
United States per cent of total Canada per cent of total	89. 0 96. 8	88. 0 97. 5	91. 0 97. 6		91. 0	96. 9	96. 1	+1.1				
Anthracite mines: Employmentrel. to 1923-25	113. 8	105. 1	107. 9		112.8	118.7	119.8	+1.8				
Pay roll rel. to 1923-25	92. 8	62, 0	'		119. 8		109. 4	+29.5	+9.5			11
ington, D. C., end of monthnumber_Average weekly earnings, factories:	61, 388 29. 28	61, 650 27. 45	62, 111 29. 13		28, 57	60, 267	60, 236		0.1			1
Illinoisdolls_ New York Statedolls_ Wisconsindolls_	29. 48 29. 48 27. 03	29. 15 24. 45	29, 39	29.72		27. 65 29. 57 25. 40	28, 59 29, 28 25, 40	$\begin{array}{c c} +0.9 \\ +0.2 \\ +3.6 \end{array}$	+1.7			
Oklahoma dolls Massachusetts rel. to 1914	26, 24 234, 1	26. 97 234. 6	28. 15	28.08	27. 16				+1.0			
New York rel. to 1914 New Jersey rel. to 1923	236. 2 110	233. 6 108	235, 5	238. 1	238. 7	236. 9 109	234. 6	+0.3 +1.8	+1.7]	.
Pennsylvaniarel. to 1923 Delawarerel. to 1923	102 103	96 98	102 102	101	106 104	98 101	101	+5.0 +3.0	+5.0			
Illinois rel. to 1923 Wisconsin rel. to 1923	108. 2 112. 8	101. 4 102. 0	107. 6 111. 0	104. 6		102. 1	105. 6	+0.9	-0.1			
Average weekly earnings (National Industrial Conference Board):								, 5				
Grand total (both sexes)dollars_ Total maledollars_	27, 30 30, 35			30.93		27. 32 29. 70	29. 35					
Skilled maledollars_dollars_dollars_	31, 74 25, 17	31, 35 24, 69	24.78	25. 27		31. 18 24. 29	30. 78 24. 21					 -
Total womendollars	17. 01	17.07				17. 32	1					.
Nominal (both sexes) hours Actual (both sexes) hours	49. 7 47. 7	49. 6 47. 5				49. 5 47. 8	49. 5 47. 4					
Wages, road labor, by districts: New Englandcents per hour	48	47	48		51	49	48	+6.3	+6.3			
Middle Atlantic cents per hour cents per hour East South Central cents per hour	42 26	43 27	41 34	24	26	46 26	46 28	$-2.4 \\ +8.3$	-7.1			.
West South Centralcents per hour.	26 26 30	25 27	29	26	30	25 33	32		-6.2			
East North Central cents per hour- West North Central cents per hour-	37 36	38 36	38	39	39	40 38	38	+5.3 0.0				
Mountain cents per hour Pacific cents per hour	45 53	44 53		54	49 54	46 54	48 56	-5.8 0.0				
United States, averagecents per hour_ Wage rates, U. S. Steel Corpcents per hour_	40 50	40 50	50	43 50	42 50	40 50		$-2.3 \\ 0.0$	+5.0			.]
Wages, steel sheet workers per cent of base Applicants per 100 jobs, employment agencies:	125. 5	125. 5	125. 5	1	125. 5	125. 5	İ	0.0	0.0			
United Statesnumber Eastern Statesnumber	121 147	137 151	129 223	120		121 131	120 129					
Central Statesnumber_ Southern Statesnumber_	161 221	150° 174	132 121			136 114	$145 \\ 122$					
Western Statesnumber_ Canadanumber_	66 118	80 113				79 98	61 116					
Factory Labor Turnover												
(Percentage of number on pay roll)												1
Departures: Totalper cent (annual basis)	39. 5	38.0	⁷ 42. 3	⁷ 50, 6	34. 9	46.2	39. 6	-31.0	-11.9		 	
Totalper cent (annual basis)	27. 1 7. 5	27.2	31.9	40.3	27.3	33.6	25. 3 8. 5	-31.3 -62.0	179			
Dischargesper cent (annual basis)	$\frac{4.9}{41.3}$	4. 9 46. 9	7 5. 3	7 5, 3	1. 9 5. 7 54. 8	6.0 43.6	5.8	+7.5 -3.7	-1.7 +34.3			
Industrial disputes: Disputesnumber	64	⁷ 60	67	59		58	58			1	 	
Workers involvednumber_ Man-days lost in monthnumber_	134, 406 3, 580, 719	7 134, 102 7 3,365,803	⁷ 130, 853 ⁷ 3,610,333	109, 461 2, 651, 055		196, 829 4, 945, 702	82, 095 2, 724, 117					
DISTRIBUTION MOVEMENT				i							}	
Retail Sales												
Mail-order houses: Total sales, 2 housesthous. of dolls	44, 848	40, 253	45, 994	50, 814	63, 587	40, 987	50, 869	+25.1	+25.0	384, 581	443, 314	+15.
Sears, Roebuck & Cothous. of dolls_ Montgomery Ward & Co_thous. of dolls_	25, 669 19, 179	26, 276	28, 986 17, 008	30,004	37, 002 26, 585	24,609	29, 302 21, 567	+23.3 +27.8	+26.3	228, 568 156, 013	268, 367	+17.
Ten-cent chain stores: Total sales (4 chains)thous, of dolls	42, 097	38, 764	41, 050		48, 992	38, 744	7 46, 519	+14.2		374, 686		
Total stores operated (4 chains) _ number _ F. W. Woolworth & Cothous, of dolls_	2, 509 22, 400	2, 526 20, 592	2, 552 21, 812	2, 586	2, 615	2, 371	2, 396 7 26, 034	+1.1	+9.1 +3.3	205, 124	- <i></i>	
Stores operatednumber S. S. Kresge Cothous, of dolls	1, 652 11, 834	1, 658 10, 583	1, 675 11, 272	1,698	26, 895 1, 718 12, 925	1, 568 10, 422	1 584	+1.2 +8.5	-1-8.5	98, 712		
Stores operatednumber McCrory Stores Corpthous, of dolls	450 3, 097	460 2, 950	468 3, 116	474	481 3, 471	413 3,022	419 3, 332	+1.5 +3.8	+14.8	29, 243		
Stores operated number S. H. Kress & Co thous, of dolls	223 4, 766	2, 530 224 4, 639	224 4,850	224	5, 701	215 4,556	5, 332 5, 069	0.0 +13.8	+3.2	41, 607		
Stores operatednumber Metropolitanthous, of dolls_	184 1,027	4, 639 184 908	4, 850 185 985	190	192 1, 232	4, 556 175 977	176 1, 120	+1.1 +10.4	+9.7			
Stores operated number. F. & W. Grand thous, of dolls. Stores operated number.	1, 027 94 1, 259	96 1, 205	97	100	1, 232 104 1, 756	90	1, 120 90 1, 223	+4.0 +21.7	+15.6			
Ctores energed	70	73	1, 236 74	1, 443 76	1, 750	1,005	55	+5.3	+45.5	9, 415	12,000	
W. T. Grant Cothous. of dolls Stores operatednumber	4, 366	3, 731	3, 996		5, 418		4, 275	+15.1		30, 754	39, 145	+27.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN. 1 OCT.	THROUGH	Per ct in- crease (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	or decrease (-) cumu lative 1928 from 1927
DISTRIBUTION MOVEMENT—Contd.												
Retail Sales—Continued						1						
Restaurant chains: Childs Co., salesthous, of dolls Stores operatednumber J. R. Thompson Co., sales thous, of dolls Stores operatednumber Other chain stores:	2,040 117 1,209 121	2,012 109 1,163 121	2, 217 116 1, 190 121	2, 190 113 1, 185 121	110	2, 437 120 1, 161 115	1, 224	+3. 5 -2. 7 +7. 1 0. 0	-4.7 -7.6 +3.7 +4.3		21, 847 12, 123	
Isaac Silver & Brosthous. of dolls Stores operatedumber Hartman Corporationthous. of dolls Stores operated	516 25 1, 170 20	462 26 991 20	460 26 1,416 19	512 29 2, 192 19	610	430 22 1, 919 18	18	+19.1 +3.4	+19.8 +36.4	4, 033 8 13, 366	4, 721 8 12, 717	-4.9
J. C. Penny Co	14, 129 953 6, 740 3, 206 2, 075	11, 734 953 6, 334 3, 226 1, 846	12, 886 981 6, 627 3, 271 1, 912	16, 477 1, 006 6, 622 3, 288 1, 962	19, 443 1, 020 6, 797 3, 315 1, 955	13, 727 884 6, 473 3, 139 2, 164	2, 231	$ \begin{array}{r} +18.0 \\ +1.4 \\ +2.6 \\ +0.8 \\ -0.4 \end{array} $	+13.3 $+14.7$ -0.4 $+5.5$ -12.4	23, 731	132, 254 64, 387 19, 582	+0.3
Stores operatednumber G. C. Murphy Cothous. of dolls_ Stores operatednumber Installment sales in New England dept. stores; ratio to total salesper cent	298 881 116 4. 6	300 796 116 5. 7	300 873 118 12. 1	299 1,046 119 7.5	298 1,056 120	297 771 108 7, 5		-0.3 +1.0 +0.8	+0.3 +20.7 +8.1	7, 305	8, 537	+16.9
Advertising				l								
Magazine advertising thous of lines. Newspaper advertising thous of lines. Air mail, weight dispatched pounds.	2, 571 98, 272 210, 957	2, 139 81, 244 214, 558	1, 755 83, 354 419, 047	2, 279 99, 897 423, 991	2, 871 112, 783	2, 272 100, 039 146, 486	7 114, 109			22, 881 1, 002, 984	23, 857 978, 756	+4.8 -2.4
Postal Business			,									
Postal receipts: 50 selected citiesthous. of dolls 50 industrial citiesthous. of dolls Money orders:	29, 990 3, 094	26, 508 2, 956	27, 951 3, 115	29, 261 3, 074	34, 196 3, 583	30, 152 3, 291		+16.9 +16.6	+5.4 +5.5	302, 417 32, 533	305, 659 33, 036	+1. +1.
Domestic paid (50 cities)— Quantity	11, 145 85, 280 3, 382	9, 627 76, 227 3, 180	10, 183 81, 180 3, 165	7 2, 879	12, 020 99, 310 3, 669	84, 383 2, 994	76, 574 3, 363	+24.3	+3. 1 +29. 7 +9. 1	837, 771 32, 368	108, 147 841, 879 33, 673	+0.
Valuethous, of dolls BANKING AND FINANCE	34, 263	32, 812	32, 886	7 32, 382	37, 554	31, 667	35, 147	+16.0	+6.8	336, 407	343, 074	+2.0
Life Insurance							}					
(Association of Life Insurance Presidents)						ŝ						
Policies, new (45 companies):	200 045	0.4m .0mo	040.00	210 000	000 001		010 004	1 00 0	1.00.0	0 100 505	0 400 400	
Ordinary number of policies Industrial number of policies Group number of contracts. Total number of policies and contracts. Policies and certificates issued:	298, 845 840, 312 190 1, 139, 347	247, 376 753, 773 170 1, 001, 319	242, 065 740, 371 159 982, 595	770, 416 120	946, 284	186, 090 745, 664 115 931, 869	992, 140 148	+22.8 +30.8	+23.6 -4.6 +6.1 +0.4	8, 160, 015 1, 670	1, 629	+6. -2.
Total policies and certificatesnumber Group insurance certificatescertificates	1, 191, 052 51, 895		1, 007, 041 24, 605			945, 250 13, 496		$+17.8 \\ -64.3$	-20.5			
Amount of new insurance (45 companies): Ordinary thous, of dolls. Industrial thous, of dolls. Group, thous, of dolls. Total insurance thous, of dolls.	767, 865 214, 882 113, 711 1, 096, 458	655, 131 194, 642 74, 196 923, 969	193, 365 56, 926	198, 949	72, 119	200, 622 31, 475	265, 974 48, 625	+17.4 -74.1	+7. 2 -12. 2 +48. 3 +3. 8	2, 203, 519 582, 387	2, 243, 528 1, 058, 429	+1. +81.
Total insurance	154, 916 51, 509 5, 574 211, 999		143, 386 50, 228 5, 705	135, 743 49, 343 5, 738	154, 489 55, 691 6, 447	131, 763 45, 741 4, 317	140, 041 49, 272 5, 792	+12.4	+10.3 +13.0 +11.3 +11.0	464, 065 53, 735	516, 488 74, 324	+11. +38.
Grand totalmills. of dolls	12, 197	12, 312]				+1.0	+11.0	li i		
Mortgage loans—	5, 292 1, 600 3, 692	5, 338 1, 601 3, 737	5, 382 1, 602 3, 780	1,604	1, 606	1,620	1,621	+0.1	-0.9			1
Bonds and stocks (book value): Totalmills. of dolls. Government.mills. of dolls. Railroad.mills. of dolls. Public utility.mills. of dolls.	4, 621 905 2, 390 1, 112	4, 665 916 2, 397 1, 128	927 2, 411 1, 138	930 2, 406 1, 151	939 2, 410 1, 163	919 2, 259 887	928 2, 268 911	$\begin{array}{c c} +1.0 \\ +0.2 \\ +1.0 \end{array}$	$+1.2 \\ +6.3 \\ +27.7$			
All other mills. of dolls_ Policy loans and premium notes mills. of dolls_	214 1, 459	224 1, 472	228 1, 486	1		{ }			+54.8			
(Life Insurance Sales Research Bureau)	1, 409	1,472	1, 200	1,497	1, 510	1,000	1,047	7-0.9	(12.1			
Sales of ordinary life insurance (81 companies):			,									
United States totalthous. of dolls Eastern manuf. distthous. of dolls Western maruf. distthous. of dolls Western agric. districtthous. of dolls Southern districtthous. of dolls Far western districtthous. of dolls Canada total, 15 companies. thous. of dolls	805, 695 333, 895 176, 121 121, 089 96, 796 77, 794 51, 844	273, 188 163, 694 107, 659 85, 056 71, 342	273, 055 163, 568 104, 287 86, 288 75, 077	218, 788 136, 379 90, 916 71, 371 60, 739	316, 574 176, 739 112, 916 85, 408 72, 940	237, 184 138, 441 93, 224 76, 998 60, 913	257, 543 148, 380 103, 663 82, 706 67, 083	$ \begin{array}{r} +44.7 \\ +29.6 \\ +24.2 \\ +19.7 \\ +20.1 \end{array} $	+22.9 +19.1 +8.9 +3.3 +8.7	2, 867, 020 1, 559, 581 1, 049, 046 852, 535 706, 731	2, 698, 286 1, 638, 420 1, 107, 889 865, 386 718, 136	-5. +5. +5. +1. +1.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) OR	CUMULATI FROM JAN.	THROUGH	Per ct. in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct. 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
BANKING AND FINANCE—Continued												1021
Life Insurance—Continued							}					
(Life Insurance Lapses)*	į			į								
Total	² 104 ² 98 ² 84 ² 103 ² 93 ² 89			2 103 2 109 2 104 2 89 2 101 2 101 2 86 2 96		3 106 3 108 3 110 3 108 3 102 3 107 3 111 3 105 3 105 3 101		+4.3 +15.7 +4.8 +6.1 +6.0 -1.9 +8.6 -3.4 +11.6 +4.4	-0.1 -3.7 -12.7 -5.6 -9.0 -18.1 -8.6			
Banking												
Check payments: New York Citymills. of dolls Outside New York Citymills. of dolls Canadamills. of dolls Federal reserve banks:	45, 455 27, 029 1, 746	35, 085 23, 897 1, 896	23, 401	38, 726 24, 450 1, 681	45, 189 27, 705 2, 395	33, 369 22, 533 1, 583	34, 091 25, 111 1, 849	$+16.7 \\ +13.3 \\ +42.5$	$^{+32.6}_{+10.3}_{+29.5}$	231, 154	402, 015 250, 662 18, 887	+8.4
Bills discounted mills. of dolls. Notes in circulation mills. of dolls. Total investments mills. of dolls. Total reserve mills. of dolls. Total deposits mills. of dolls.	1, 191 1, 660 430 2, 693 2, 459	1, 086 1, 613 378 2, 756 2, 402	394 2, 765 2, 325	1, 026 1, 704 545 2, 751 2, 414	2, 773 2, 419		862 3, 067 2, 404	$ \begin{array}{r} -9.2 \\ +0.4 \\ +23.1 \\ +0.8 \\ +0.2 \end{array} $	$ \begin{array}{r} -0.4 \\ -22.2 \\ -9.6 \\ +0.6 \end{array} $			
Reserve ratioper cent Federal reserve member banks: Total loans and discountsmills. of dolls Total investmentsmills. of dolls Net demand depositsmills. of dolls Brokers' loans, end of month:	65. 4 16, 089 6, 647 13, 574	68. 6 15, 861 6, 589 13, 186	15, 729 6, 405	66. 8 15, 952 6, 401 13, 226	67. 2 16, 067 6, 430 13, 368	76. 3 14, 942 6, 042 13, 230	15, 029 6, 065	+0.6 +0.7 +0.5 +1.1	+6.9 +6.0			
To N. Y. Stock Ex. members— Total————————————————————————————————————	4, 898 9, 25	4, 837 9. 00	8.80		9. 62	8, 22	8. 57	+6.6 +3.6	+12.3			
banks	4, 307 5. 69 6. 21 4. 88 4. 07 4. 50 5. 47 4. 60	4, 259 6. 00 6. 05 5. 13 4. 25 5. 00 5. 04 4. 75	6. 25 6. 87 5. 38 4. 63 5. 00 5. 04	7. 00 7. 26 5. 63 4. 50 5. 00 5. 04	7. 13 6. 98 5. 50 4. 50 5. 00 5. 04	4. 13 3. 80 4. 00 3. 13 3. 50	4. 32 3. 90 4. 00 3. 25 3. 50 5. 17	+7.4 +1.9 -3.9 -2.3 0.0 0.0 +0.8	+65. 0 +79. 0 +37. 5 +38. 5 +42. 9 -2. 5			
banks, end of monthmills. of dolls	4, 301	4, 283	4, 299	4, 352	4, 345	4,090	4, 085	-0.2	+6.4			
Government debt, gross, end mo_mills. of dolls_Customs receiptsthous. of dolls_Total ordinary receiptsthous. of dolls_Expenditures chargeable to ordinary receiptsthous. of dolls_Money in circulation, end mo: Totalmills. of dolls_Per capitadolls_	17, 604 44, 162 678, 927 404, 607 4, 799 40, 52	17, 526 44, 591 154, 859 278, 620 4, 701 39, 67	52, 797 173, 495 308, 594 4, 803	50, 410 557, 398 482, 600 4, 846	187, 627 368, 653 4, 807	54, 410 590, 192 287, 442 4, 948	56, 617 221, 205 413, 220 4, 946	+1.0 +18.5 -66.3 -23.6 -0.8 -0.9	+5.5 -15.8 -10.8 -2.8	3, 285, 424 2, 843, 767	471, 261 3, 125, 787 3, 157, 557	[]
Gold and Silver	10.02	00.01	10.00	10.02	10.10	12.10	12.12	0.0	1.0			
Gold: Domestic receipts at mintfine ounces Rand outputfine ounces Importsthous of dolls Exportsthous of dolls. Monetary stock, end momills. of dolls. Silver:	70, 205 862, 363 20, 001 99, 932 4, 109	72, 676 867, 211 10, 331 74, 190 4, 113	891, 863 2, 445 1, 698	857, 731 4, 273	990	842, 118 12, 979 24, 444	855, 743 2, 056 10, 698	+46. 0 +4. 7 +234. 9 -74. 0 +0. 4	+4.9 +596.0 -90.7	8, 431, 346 195, 022 68, 340	801, 200 8, 626, 351 114, 336 536, 206	+2. -41.
Production— United Statesthous. of fine oz Canadathous. of fine oz Stocks, end of month— United Statesthous. of fine oz	4, 945 1, 401 479	3, 915 2, 389 262	2, 252	7 4, 087 7 2, 177	2,022	2, 023	1, 696	+4. 9 -7. 1	+19.2	17, 299	46, 055 7, 025	
Canada thous of fine oz. Imports thous of dolls. Exports thous of dolls. Price at New York dolls, per fine oz.	707 6, 221 7, 456 . 600	430 6, 544 6, 160 . 592	720 6, 496 9, 246	1, 457 4, 916 6, 229	718 7, 319	761 4 999	494 5, 069 5, 945	-50.7 +48.9	+45.3 +44.4 +21.7	46, 201 62, 804	56, 728 71, 204	
Business Failures								İ				
Liabilities (United States): Total commercialthous. of dolls Manufacturersthous. of dolls Trade establishmentsthous. of dolls Agents and brokersthous. of dolls Liabilities (Canada)thous. of dolls Firms (United States):	27, 978 12, 723 13, 781 3, 324 1, 681	29, 587 12, 932 12, 899 3, 755 1, 406	16, 877 19, 096 22, 229 2, 589	5, 662 2, 572	4, 232 2, 504	15, 349 12, 052 5, 385 1, 349	17, 134 14, 657 4, 445 7 2, 148	$\begin{array}{c c} -8.4 \\ +27.3 \\ -25.3 \\ -2.6 \end{array}$	$ \begin{array}{r} -21.3 \\ +17.8 \\ -4.8 \\ +16.6 \end{array} $	169, 696 194, 512 68, 688 19, 634	30, 105	$ \begin{array}{c c} -13.8 \\ -2.8 \\ +1.6 \\ +53.3 \end{array} $
Total commercial number. Manufacturers number. Trade establishments number. Agents and brokers number. Firms (Canada) number.	1, 950 513 1, 325 109 127	1, 723 450 1, 161 112 124	1, 241 112		528 1, 369 126	389 1, 083 101	488 1, 170 129	+27.6 +16.7	$\begin{array}{c c} +8.2 \\ +17.0 \\ -2.3 \end{array}$	4, 607 13, 376 1, 137	13, 945 1, 203	+6. +4. +5.

² Quarter ending in month indicated.

² Quarter ending Sept. 30, 1927.

⁷ Revised.

^{*} See table on p. 138 of the August, 1928, issue for earlier data.

The cumulatives shown are through			1928			19	27	PER CE CREASE DECREA	(+) or	CUMULATI FROM JAN. OCT	1 THROUGH	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu lative 1928 from 1927
BANKING AND FINANCE—Continued Business Failures—Continued												
By groups:† Manufacturers— Metals	40 67 76 7 18 45 11 5 9 235	31 61 69 5, 16 47, 18 3 5 195 77, 387,	36, 599 600 4 222 511 8 6 100 237 54 423	35 74 73 8 6 24 15 4 3 212	33 79 94 13 18 47 14 6 7 217 87 503	20 47 52 2 20 27 9 17 3 192 58	9 22 39 8 6 7 231 57 384	+6.8 +28.8 +62.5 +200.0 +95.8 -6.7 +50.0 +133.3 +2.4 +45.0 +33.8	-18. 2 +20. 5 +75. 0 0. 0 -6. 1 +52. 6 +31. 0	683 58 223 369 110 86 68 2, 175 1, 492 3, 949	367 639 758 79 152 421 131 57 81 2, 222	+17. +11. +36. -31. +14. +19. -33. +19. +2. -43. +8.
Clothing number Household furniture number Chemicals and paints number Books and paper number	248 228 57 7 281	202 179 55 14 247	210 171 71 11 307	168 187 43 13 226	225 190 78 10 276	187 160 58 8 277	192 183 60 11 283	+33. 9 +1. 6 +81. 4 -23. 1 +22. 1	+17. 2 +3. 8 +30. 0 -9. 1 -2. 5	2, 324 , 649 121	2, 703 2, 392 676 125 2, 908	+2, +4. +3.
Dividend and Interest Payments												
Grand total thous of dolls. Interest payments thous of dolls. Dividend payments: Total thous of dolls. Industrial and mise thous of dolls. Stoom wilveds thous of dolls.	467, 225 316, 900 150, 325 118, 050 26, 075	719, 196 466, 704 252, 492 184, 892 34, 500	333, 400 182, 000 151, 400 109, 450 35, 200	408, 600 262, 500 146, 100 118, 450 20, 400	156, 200	392, 250 250, 100 142, 150 115, 300 19, 750	369, 850 7 196, 325	+43. 6 +49. 2 +35. 6 +31. 9 +44. 1	+3.6 +5.1 +0.9 +0.3 +3.6	4, 703, 073 2, 913, 123 1, 779, 950 1, 311, 975 291, 950	4, 923, 351 3, 087, 604 1, 835, 747 1, 356, 242 302, 555	+3. +3.
Steam railroadsthous. of dollsthous. of dolls	6, 200	13, 600	6, 750	7, 250	12, 550	7, 100	12, 250	+73. 1	+2.4	96, 525	102, 450	+6.
New Security Issues Foreign loans in the U. Sthous. of dolls	268, 179	43, 591		111, 513	73, 370	94, 395	260, 145	24.0	71 0	1 201 025	1, 281, 639	
Foreign governments. thous of dolls. Total corporation* thous of dolls. Purpose of issue— New capital* thous of dolls.	48, 550 828, 434 645, 883	41, 396 323, 748 284, 803	199, 426 180, 716	43, 500 428, 184 391, 158	36, 750 655, 604	31, 281 451, 364 372, 585	125, 623 734, 081 574, 380	-34. 2 -15. 5 +53. 1 +53. 5		1, 321, 035 673, 779 5, 831, 799 4, 381, 273	620, 120 5, 954, 655 4, 371, 084	-8.0 +2.
Refunding* thous. of dolls. Type of security— Stocks* thous. of dolls. Bonds and notes*	182, 551 409, 611 418, 823	38, 945 208, 212 115, 538	18, 710 73, 892 125, 534	37, 026 172, 047 256, 137	55, 131 390, 610 264, 994	78, 779 109, 576 341, 788	159, 701 134, 568 599, 513	+48.9 +127.0 +3.5	-65. 5 +190. 3 -55. 8	1, 450, 526 1, 361, 469 4, 470, 331	1, 583, 571 2, 396, 390 3, 558, 268	+9.5 +76.6
Class of industry— Railroads	42, 158 378, 637 190, 356 21, 241 74, 071 121, 971	18, 874 57, 598 98, 810 15, 030 64, 538 68, 374	13, 726 97, 776 32, 989 30, 256 44, 678	202, 239 98, 234 57, 517 70, 194	45, 830 214, 466 114, 233 7, 000 85, 627 163, 749	19, 493 200, 174 82, 659 45, 602 93, 437	311, 832	+6.0 +16.3 +48.9 +133.3	$egin{array}{c} +40.8 \\ -31.2 \\ +0.8 \\ -83.3 \\ +16.1 \\ +2.0 \\ \end{array}$	940, 008 375, 138	589, 461 2, 273, 467 1, 167, 311 109, 327 692, 128 1, 104, 032	+24.5 +24.5 -70.9 +21.5
Bond sales (Canada): Govt. and provincial thous. of dolls. Municipal thous. of dolls. Corporation thous. of dolls.	10, 734 2, 158 77, 198	975 9, 565	964 4, 095	9, 733 260 11, 980	18, 061 4, 83 4 16, 487	18, 370 9, 788 52, 973	24, 045 3, 828 74, 936	+85. 6 +37. 6	$-24.9 \\ +26.3 \\ -78.0$	97, 381 55, 609 272, 944	77, 564 22, 204 239, 211	−60. 1
States and municipalities: Permanent loansthous. of dolls Temporary loansthous of dolls Tax-exempt securities outstanding, end of monthmills. of dolls	7 137, 219 44, 621 16, 847	⁷ 75, 886 ⁷ 57, 014 16, 890	⁷ 63, 703	7 71, 388 7 73, 419	92, 828 16, 167	116, 311 73, 088 15, 952	124, 759 69, 561 16, 060	+30. 0 -78. 0	-25. 6 -76. 8	1, 255, 599 554, 050	1, 096, 087 609, 889	-12. +10.
Agricultural Finances	10,011	10,000	10, 511	10,001		10,002	10,000					
Loans outstanding, end mo.: Federal farm loan banksthous. of dolls Joint-stock land banksthous. of dolls Federal intermediate credit	² 1, 268, 612 ² 642, 174			² 1, 277, 359 ² 643, 004		³ 1, 143, 130 ³ 609, 535		+0.7 +0.1	+11.7 +5.5			
banks thous, of dolls. War finance corporation thous, of dolls. Stocks and Bonds	² 68, 978 904	781	747	² 68, 620 583	558	⁸ 62, 879 4, 285		-0.5 -4.3				
Stock prices, average daily closing:						t [
25 industrials, averagedolls. per share 25 railroads, averagedolls. per share 103 stocks, averagedolls. per share Southern cotton millsdolls. per share Stock, prices, average weekly closing:** Industrials, rails, and utilities	252. 94 118. 64 147. 69 110. 42	257. 98 119. 18 146. 71 108. 17	121. 57 151. 24	283. 99 124. 82 154. 87 103. 31		119, 95 140, 67	117. 84 130. 15	-1.1 + 0.1	+4.7 +19.1 -7.3			
(393) rel. to 1926. All industrials (325) rel. to 1926. Railroads (33) rel. to 1926. All utilities (35) rel. to 1926. Automobiles (14) rel. to 1926. Chain stores (18) rel. to 1926. Copper and brass (10) rel. to 1926. Food, other than meat (23) rel. to 1926. Machinery and machine	145. 3 148, 2 126. 7 148. 1 235. 3 136. 8 147. 5 152. 4	144, 2 147, 8 124, 6 145, 3 238, 4 135, 3 150, 0 152, 1	152. 6 126. 5 147. 9 244. 7 142. 9 155. 2	129. 6	154, 5 283, 6 150, 9 185, 1	174. 2	127. 5 124. 3 124. 5 173. 6 127. 4 115. 8	+2.5 -1.1 -0.8 +5.0 +0.3 +7.6	1 -1-24 1			11

² Quarter ending in month indicated. ³ Quarter ending Sept. 30, 1927. ⁷ Revised.

[†] See table on p. 19 of the October, 1928, issue for earlier data. * See table on p. 25 of the November, 1928, issue for earlier data. ** See table on p. 24 of the November, 1928, issue for earlier data.

$\textbf{TREND OF BUSINESS MOVEMENTS} \color{red} \textbf{--} Continued$

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT IN- CREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct in- crease (+) or de	
	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	creas (-) cum lativ 1928 from 1927	
BANKING AND FINANCE—Continued	•												
Stocks and Bonds-Continued	1												
tocks, prices, average weekly closing—Contd. Oil producing and refining (16) rel. to 1926. Railroad equipment (9) rel. to 1926. Steel and iron (10) rel. to 1926. Textiles (23) rel. to 1926.	112. 0 127. 1 137. 7 110. 4	110. 9 125. 1 136. 6 106. 4	112. 6 123. 6 143. 6 105. 9	129. 5 155. 8	158. 7	99. 3 133. 5 143. 6 109. 1	98. 2 125. 4 133. 7 107. 6	+1.9	+18.71				
Theaters, motion pictures, and amusements (7) rel. to 1926.	111. 5	111.0	116. 6		136. 7	103. 7	104. 1	+1.2					
Automobile tires, rubber goods, etc. (7)rel. to 1926	111. 3	113. 3	119. 3		137. 6	128. 1	125. 6	+7.8	+9.6			H	
Tobacco and tobacco products (10)rel. to 1926	134. 9	134.3	137. 6		141.8	149. 4	150. 4	-0. 5		1		ļ	
raction, motor transporta-	1				1								
tion, etc. (9)rel. to 1926 tock yields:	97. 3	96. 0	95. 7		ĺĺ	93.8	94.8	-3. 2					
Common	4. 53 5. 32 63, 741	4. 56 5. 40 39, 001	4. 44 5. 43 67, 704	5, 41 90, 907	5. 44 99, 077	4. 90 5. 45 51, 918	5. 02 5. 45 50, 459	0. 0 +0. 6 +9. 0	+96.4	470, 768	712, 279	1	
Miscellaneousthous. of dolls Liberty-Treasurythous. of dolls Totalthous. of dolls Bond prices:	246, 885 14, 517 261, 402	183, 815 25, 240 209, 055	173, 561 9, 988 183, 549	10, 467 201, 049	11, 949 238, 570	254, 987 24, 326 279, 313	258, 112 13, 187 271, 299	+18.9 +14.2 +18.7	-9.4 -12.1	2, 861, 004 245, 780 3, 106, 784		-38 -18	
Highest-grade rails_p. ct. of par, 4% bond Second-grade rails_p. ct. of par, 4% bond	92. 04 84. 42	90. 62 83. 09	89, 66 80, 99	82. 51	81. 98	95. 19 86. 11	96, 11 87, 24	-0.4 -0.6					
Public utilityp. ct. of par, 4% bond Industrialp. ct. of par, 4% bond	79, 51 79, 39	79. 47 77. 74	79. 08 77. 97	78. 18	78. 34	78. 29 79. 81	79. 00 79. 93	+2.0 +0.2	-2.0				
Comb. price index. p. ct. of par, 4% bond	83, 54	82. 45	81. 68	j	i	84. 35	85. 05	+0.3]]	
5 Liberty bondsp. ct. of par_ 16 foreign govt. and cityp. ct. of par_ Comb. price index, 66 bonds_p. ct. of par_ cond yields:	105. 16 104. 84 101. 14	103. 20 104. 85 100. 05	103, 88 104, 77 100, 36	104. 55		103. 68 105. 64 101. 51	103. 92 104. 65 101. 59	+0. 7 0. 0 +0. 1	-0. 1 -0. 1 -1. 0				
Total, 60 high gradeper cent. Railroads (15)per cent.	4. 50 4. 35	4. 54 4. 44	4. 59 4. 49		4. 57 4. 43	4. 45 4. 27	4. 43 4. 24	0. 0 0. 0	+3. 2 +4. 5				
Industries (15)per cent Utilities (15)per cent	4. 91 4. 66	4. 95 4. 68	4. 96 4. 73	4.95	4. 95	4.80 4.75	4. 79 4. 75	0.0 +0.2					
Municipal (15) per cent Municipal (20) per cent	4, 09 4, 06	4. 13 4. 13	4. 16 4. 18	4. 17	4. 17	3. 96 3. 96	3, 93 3, 95	0.0					
U. S. Treasury notes and certificates, 3-6 monthsper cent	7 3, 92	⁷ 4, 12	4.36		4. 70	2. 81	3.08	+2.8	+52.6	1			
Liberty and Treasury bondsper cent	3. 40	3. 50	3. 56			3. 44	3. 43	+0.3	+3.5				
Grand totalthous. of dolls Purpose of issue—	66, 364	48, 495	21, 947	52, 116	64, 864	42, 763	59, 092	+24.5	+9.8	491, 289	582, 953	+18	
Finance constructionthous. of dolls Real-estate mortgagethous. of dolls	27, 400 6, 763	18, 581 24, 079	9, 970 5, 590		33, 290 11, 898	23, 463 5, 140	35, 819 10, 523	$+646.4 \\ -63.9$	-7.1 +13.1	233, 468 120, 767	227, 800 190, 227	+5	
Acquisitions and improvementsthous. of dolls	2, 610	1, 510	3, 252	1		3, 310	525	+184.7		56, 878	51, 237	l	
Kind of structure— Office and commercial thous of dolls	22, 430	9, 786	4, 785			19, 575	21, 980	+498.3		161, 293	177, 689	İl	
Hotelsthous. of dolls_ Apartmentsthous. of dolls_	885 4, 085	4, 020 4, 600	2, 200 3, 145	400		5, 140 3, 473	3, 845 11, 519		+157.5	41, 816 52, 244	44, 460 38, 702	+0	
FOREIGN EXCHANGE RATES								ļ					
Europe: Englanddolls. per £ sterling.	4. 88	4.86	4. 85	4.85	4. 85	4.86	4.87	0.0	-0.4				
France dolls, per franc- Italy dolls, per lira	. 039 . 053	. 039	. 039	. 039	. 039	. 039	. 039	0.0	0.0				
Belgiumdolls. per franc Netherlandsdolls. per guilder	. 140 . 403	. 139	. 139 . 401	. 139	. 139	. 139	. 139	0. 0 0. 0	0.0				
Sweden dolls, per krone Switzerland dolls, per franc	. 268 . 193	. 268 . 193	. 268 . 193	. 268	. 267	. 269	. 269	-0.4 -0.5	-0.7				
Asia: Japandolls. per yen	. 466	. 459	. 451			. 468	. 466	+0.9					
Indiadolls. per rupee	. 365	. 363	. 363			. 363	. 364	+0.6					
Canada dolls. per Canadian doll. Argentina dolls. per gold peso- Brazil dolls. per mireis Chile dolls. per paper peso-	. 998 . 969 . 120 . 122	. 998 . 961 . 119 . 121	1. 000 . 959 . 119 . 121	. 957 . 119	. 956	1. 001 . 971 . 119 . 121	1. 001 . 972 . 119 . 122	-0.0 -0.1 +0.8 0.0	-1.6 +0.8				
U. S. FOREIGN TRADE					!								
Imp orts												ļ!	
rand total	317, 249 95, 565		7 346, 723		355, 404	342, 154	355, 744 123, 659	+11.2	-0.1	3, 509, 191 8 933, 329	3, 425, 435 8 910, 042	ľ	
Francethous. of dolls_ Germanythous. of dolls_	11, 927	97, 688 11, 293	107, 863 15, 138	13, 780		113, 446 15, 923	18, 297			8 120, 826 8 145, 797	8 112, 365 8 162, 522	-	
Italythous. of dolls United Kingdomthous. of dolls	15, 788 8, 169 27, 854	20, 662 6, 949	21, 025 6, 875	6, 543		20, 162 8, 585 20, 721	11, 369			8 78, 084	* 70, 206 * 257, 873	-10	
North America—		28, 113	27, 517		•	29, 721				8 261, 905 8 742 642		:	
Totalthous. of dolls_ Canadathous. of dolls_ South America—	73, 901 41, 015	77, 735 41, 784	78, 720 43, 240	76, 891 42, 168		77, 784 41, 902	84, 752 44, 670			8 742, 643 8 344, 740	8 722, 612 8 359, 059	+	
CONTROL A DEPOSIT				1			1	1		ıı !		1.1	

⁷ Revised.

⁸ Cumulative through Sept. 30.

48

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 28 to 137 of the August, 1928, "Survey"	1928					1927		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		Per ct, in- crease (+) or de-
	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1928, from Sept., 1928	Oct., 1928, from Oct., 1927	1927	1928	crease (-) cumu- lative 1928 from 1927
U. S. FOREIGN TRADE—Continued												
Imports—Continued						1		1				
By grand divisions—Continued. Asia and Oceania— Totalthous, of dolls_	87, 252	89, 769	100, 888	97. 355		105, 979	98. 994			8 1, 023, 159	8 931, 646	-8.9
Japan thous of dolls Africa, total thous of dolls By classes and commodities:	22, 306 9, 472	24, 890 6, 968	38, 991 8, 782	33, 679 5, 257		35, 369 6, 651	33, 973 5, 071			6 308, 265 8 71, 781	8 284, 249 8 70, 899	-7.8 -1.2
Crude materialsthous, of dolls Foodstuffs, crude, and	109, 666	⁷ 106, 005	⁷ 122, 188	· ·		130, 660	⁷ 119, 220	+6.8		1, 360, 747	1, 240, 428	-8.8
food animals thous of dolls Manufactured foodstuffs thous of dolls. Semimanufactures thous of dolls. Finished manufactures thous of dolls.	48, 325 30, 005 57, 655 71, 597	43, 174 33, 314 7 60, 050 7 75, 246	45, 939 30, 060 7 66, 380 7 82, 155	63, 366	71, 214	63, 094	7 41, 347 7 67, 807	+12.8 +4.7 +12.4 +18.9	-5. 0 -14. 4 +5. 0 +7. 2	386, 245 630, 469	459, 926 345, 954 628, 968 750, 159	-10.4 -0.2
Exports												l
Grand total, including reexportsthous. of dolls_By grand divisions:	388, 563	378, 768	379, 874	⁷ 421, 737	555, 000	425, 267	⁷ 488, 643	+31,6	+13.6	3, 966, 766	4, 112, 596	+3.7
Europe— Total thous of dolls. France. thous of dolls. Germany thous of dolls. Italy. thous of dolls.	161, 481 15, 712 28, 365 11, 254	11, 853	149, 183 15, 167 24, 579 9, 955	20, 048 46, 291 14, 275		211, 728 21, 084 51, 855 8, 169	29, 050 62, 637 14, 494			8 148, 038 8 316, 538 8 86, 324	8 154, 238 8 297, 972 8 112, 995	$\begin{vmatrix} +4.2 \\ -5.9 \\ +30.9 \end{vmatrix}$
United Kingdomthous. of dolls North America— thous. of dolls Totalthous. of dolls Canadathous. of dolls	52, 230 114, 005 81, 888	52, 120 110, 590 77, 325	52, 826 118, 940 85, 851	59, 173 115, 621		72, 463 118, 505 85, 725	89, 958 114, 543 80, 682			8 598, 405 8 941, 333 8 629, 134	8 548, 284 8 973, 663 8 679, 790	
South America— Totalthous. of dolls Argentinathous. of dolls	39, 005 15, 692	43, 907 16, 736	43, 766 17, 348	33, 905		33, 884 12, 976	32, 719 13, 640			8 328, 341 8 119, 440	8 339, 145 8 125, 715	+3, 3
Asia and Oceania— Totalthous. of dolls_ Japanthous. of dolls_ Africa, totalthous. of dolls_ Total domestic exports onlythous. of dolls_	63, 520 21, 628 10, 552 7 380, 385	61, 979 17, 987 9, 950 7 371, 471	59, 973 15, 517 8, 011 7 371, 428	27, 542 7, 544	544, 022	52, 903 17, 923 8, 247 416, 472	77, 031 33, 711 9, 888 7 480, 428	+31, 1	+13, 2	8 549, 685 8 172, 839 8 77, 731 3, 907, 681	8 572, 362 8 183, 959 8 80, 467 4, 026, 578	+6.4 +3.5
By classes of commodities: Crude materialsthous. of dolls.	74, 918	60, 177	⁷ 52, 375	120, 187	176, 359	102, 145	⁷ 160, 282	+46.7	+10.0	929, 321	947, 185	+1.9
Foodstuffs, crude, and food animals thous. of dolls Manufactured foodstuffs thous. of dolls thous. of dolls thous. of dolls thous. of dolls thous. of dolls thous.	17, 158 31, 222 7 63, 066 193, 941	14, 212 30, 666 61, 397 7 205, 019	29, 308 ⁷ 34, 867 56, 093 ⁷ 198, 785	42, 363 35, 897 50, 994 7 165, 537	52, 381 51, 641 59, 992 203, 649	69, 429 38, 562 54, 791 151, 545	55, 001	+23. 6 +43. 9 +17. 6 +23. 0	$-16.1 \\ +13.1 \\ +9.1 \\ +29.6$	584, 085	234, 566 375, 865 597, 610 1, 871, 352	-0.8 + 2.3
Agricultural exports (quantities): All commoditiesrel. to 1910–14_ All commodities except cottonrel. to 1910–14_	76 91	64 84	75 126	138 168	201 232	142 211		+45.7 +38.1	+8.6 +6.4			
CANADIAN FOREIGN TRADE												
Total trade: Importsthous. of dolls Exportsthous. of dolls	110, 694 109, 139	103, 404 127, 369	114, 175 113, 904	106, 066 111, 856	112, 341 143, 955	91, 803 99, 335		+5.9 +28.7	+19.6 +36.0	910, 289 951, 088	1, 024, 608 1, 070, 794	

⁷ Revised.

⁸ Cumulative through Sept. 30.

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.

OFFICEROF THE SECRETARY

Commercial and Government Radio Stations of the United States. iv+176 pages. This publication contains list of the commercial and government land and ship radio stations, aircraft stations, commercial broadcasting stations, radiobeacons operated by the Lighthouse Service, and abbreviations used in

radio transmission. Price, 15t.

Radio Service Bulletin, Oct., 1928. 21 pages. Issued monthly by the Radio Division of the Commerce Department. Contains lists of radio stations and references to current radio

therature. Single copies, 5¢; annual subscription, 25¢.
United States Department of Commerce, Brief Description of Activities of the Several Bureaus of Department. ii+65 pages, 11 illus. This publication describes the activities of the various bureaus and offices of the Department of Commerce.

BUREAU OF THE CENSUS

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

Stocks of Leaf Tobacco, and the American Production, Imports, Exports, and Consumption of Tobacco and Tobacco Products. Bulletin 163. This report deals with the stocks of leaf tobacco held by certain classes of manufactures of and

dealers in leaf tobacco. Paper. 45 pages. Price, 10¢.

Financial Statistics of Cities having a Population of over
30,000, 1926.—Annual investigation of the Bureau of the
Census, which shows the financial transactions of 250 cities, the assessed valuation of taxable property in those cities, and the taxes levied thereon; also their indebtedness and specified assets at the close of the year. Cloth. 505 pages. Price, \$1.25.

BUREAU OF FOREIGN AND DOMESTIC COM-MERCE

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

Annual Report of Director of Bureau of Foreign and Domestic

Commerce to Secretary of Commerce for Fiscal Year Ended June 30, 1928. iv+54 pages, 1 chart. Price, 5¢. Commerce Yearbook, 1928: Vol. II, Foreign Countries. vi+751 pages, 64 illus., 10 maps. Commencing with this issue the Commerce Yearbook will be designated by the year in which it is published, and there will be no issue bearing the date 1927. This volume of the 1928 Yearbook gives a brief review of economic conditions in 65 countries and contains many statistical tables comparing the activities of the different countries.

Price, \$1.25.
Monthly Summary of Foreign Commerce of United States,
Sept., 1928. Parts I and II. Part I contains statistics of
exports of domestic merchandise, and imports by articles for exports of domestic merchandise, and imports by articles for September, 1927 and 1928, and for nine months ended September, 1927 and 1928. 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.

Analyzing Retail Selling Time, Cost of Selling Commodities
Over Retail Counter, by G. E. Bittner. Distribution Cost
Studies No. 2; 15 pages, charts. Data regarding the salaries and wages paid in retail stores, the amount of time spent, and the cost of making sales, and the amount and cost of nonproductive time.

ductive time.

Government Publications Relating to Textiles. Revised editions. ii+52 pages. This is a revision of a pamphlet issued previously showing all the publications issued by the

government relating to textiles.

Practical Aids to American Exporters. viii+14 pages. This pamphlet describes the activities of the Bureau of Foreign and Domestic Commerce in promoting foreign trade through the informational service of its various divisions and district and cooperative offices, the trade opportunity information furnished,

and publications issued.

External Trade of New England, by Robert J. McFall.

Domestic Commerce Series No. 22; iv+44 pages, 20 illus.

Study of the movement of goods into and out of the New England States by freight, express, and mail. Price, 10¢.

BUREAU OF STANDARDS

Bureau of Standards Journal of Research, Sept., 1928. Pages 297-485, illus., plates. This journal contains the papers formerly issued as the Technologic and Scientific papers series,

which series have been discontinued. The articles in the journal are known as the Research Papers series and are issued separately after publication in the journal. Single copies, 25¢;

annual subscription, \$2.75.
Same, Oct., 1928.
Same, Nov., 1928.
Pages 487–684, illus., plates.
Pages 685–866, illus., plates.

BUREAU OF FISHERIES

Electric Fish Screen, by F. O. McMillan. Document No. 1042. (From Bulletin of Bureau of Fisheries, Vol. XLIV, 1928, pp. 97-128, 1 illus., 2 pages of plates, 16 charts.) Report on experiments with electric screens to be placed in streams to direct the movements of fish and prevent their destruction through entry into irrigation canals or power plant currents. Price, 15¢.

BUREAU OF MINES

Eighteenth Annual Report of Director of Bureau of Mines to Secretary of Commerce for Fiscal Year Ended June 30, 1928.

to Secretary of Commerce for Fiscal Year Ended June 30, 1928, vi+57 pages, 1 chart. Price, 10¢.

Five Hundred Tests of Various Coals in House-Heating Boilers, by P. Nicholls, S. B. Flagg, and C. E. Augustine. Bulletin 276; iv+74 pages, 12 illus. A bibliography of fuels and heating equipment is included. Price, 15¢.

Mineral Resources of United States, 1926.—Additional reports released since the November announcement:

Coal in 1926. (Pt. II, pp. 419-585, 16 illustrations.) Price, 30¢. Gold and Silver in 1926. (Pt. I, pp. 673-709.) Price, 10¢. Gold, Silver, Copper, Lead, and Zine in Arizona in 1926. (Pt. I, pp. 627-672.) Price, 10¢.

Mineral Resources of United States, 1927.—The following have been released since the November announcement and may be obtained at 5¢ each:

Abrasive Materials in 1927. (Pt. II, pp. 91-98.)
Antimony in 1927. (Pt. I, pp. 39-49.)
Asphalt and Related Bitumens in 1927. (Pt. II, pp. 67-80.)
Bauxite and Aluminum in 1927. (Pt. I, pp. 7-24.)
Mercury in 1927. (Pt. I, pp. 51-74.)
Platinum and Allied Metals in 1927. (Pt. I, pp. 25-38.)
Slate in 1927. (Pt. II, pp. 81-90.)

Analyses of West Virginia Coals.—Technical Paper 405; iv+343 pages, 1 illus. Discusses the distribution of coal in West Virginia, mining methods employed and transportation facilities available, with analyses of mine samples. Price, 20¢.

Production of Explosives in United States During Calendar Year 1927, by William W. Adams. Technical Paper 435; ii+49 pages. Shows the production of explosives in the United States, and the amount used by various industries in this country and abroad. Price, 106.

BUREAU OF NAVIGATION

American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over, Oct., 1928. ii+72 pages. Published monthly. Single copies, 10¢; annual subscription, 75¢.

COAST AND GEODETIC SURVEY

Tidal Bench Marks, State of New Jersey, by L. A. Cole. Special Publication No. 148; ii+18 pages, 2 pages of plates. Price, 10¢.

LIGHTHOUSE SERVICE

Light List, Ohio, Tennessee, Kanawha, Monongahela, and Allegheny Rivers, 14th Lighthouse District, 1928, corrected to Sept. 15. 130 pages. Describes all aids to navigation maintained by the Government on the rivers named. Price, 206.

STEAMBOAT INSPECTION SERVICE

Bays, Sounds, and Lakes Other than Great Lakes: General Rules and Regulations Prescribed by Board of Supervising Inspectors as Amended at Board Meeting of Jan., 1928.—
Form 801C; viii+204 pages, 6 illus. In addition to the regulations governing equipment of vessels, there is given a list of approved vessel instruments and machines.

Rivers: General Rules and Regulations Prescribed by Board

of Supervising Inspectors as Amended at Board Meeting of Jan., 1928.—Form 801D; viii+194 pages, 6 illus. Regulations for river vessels, with list of approved equipment, and rulings in connection with handling of so-called dangerous

articles.

CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

WILLIAM F. WHITING, Secretary of Commerce

WALTER F BROWN, Assistant Secretary of Commerce. EPHRAIM F. MORGAN, Solicitor

AERONAUTICS BRANCH

WILLIAM P. MCCRACKEN, Jr., Assistant Secretary of Commerce for Aeronautics

Establishment of civil airways and maintenance of aids to air navigation; inspection and registration of aircraft and licensing of pilots; enforcement of air traffic rules; investigation of accidents; encouragement of municipal air ports; fostering of air commerce; scientific research in aeronautics; and dissemination of information relating to commercial aeronautics. of these functions are performed by special divisions of the Lighthouse Service, the Bureau of Standards, and the Coast and Geodetic Survey.)

BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

Taking censuses of population, inmates of institutions, mines and quarries, forest products, and water transportation every 10 years; censuses of agriculture and electrical public utilities every 5 years; and a census of manufactures every 2 years.

Compilation of statistics of wealth, public debt and taxation, including financial statistics of local governments, every 10 years; annual compilation of financial statistics of State and municipal governments.

Compliation of statistics of marriage, divorce, births, deaths, and penal institutions annually, and of death rates in cities and automobile accidents weekly.

Compilation quarterly or monthly of statistics on cotton, wool, tobacco, leather, and other industries; publication in the Survey of Current Business of monthly commercial and industrial statistics.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

Julius Klein, Director

The collection of timely information concerning world market conditions and openings for American products in foreign countries, through commercial attaches, trade commissioners, and consular officers, and its distribution through weekly Commerce

Reports, bulletins, confidential circulars, the news and trade press, and district and cooperative offices in 65 cities.

The maintenance of commodity, technical, and regional divisions to afford special service to American exporters and

The compilation and distribution of lists of possible buyers and agents for American products in all parts of the world and publication of weekly lists of specific sales opportunities abroad.

The publication of statistics on imports and exports. The study of the processes of domestic trade and commerce.

BUREAU OF STANDARDS

GEORGE K. BURGESS, Director

Custody, development, and construction of standards of measurement, quality, performance, or practice; comparison of standards used by scientific or other institutions; determination of physical constants and properties of materials; researches and tests on materials and processes; and publication of scien-tific and technical bulletins reporting results of researches and fundamental technical data.

Preparation of specifications for Government purchases, through the Federal Specifications Board.

Collection and dissemination of information concerning building codes and the planning and construction of houses.

Establishment of simplified commercial practices through

cooperation with business organizations in order to reduce the wastes resulting from excessive variety in commodities.

BUREAU OF MINES

SCOTT TURNER, Director.

Technical investigations in the mining, preparation and utilization of minerals, including the study of mine hazards and safety methods and of improved methods in the production and use of minerals.

Testing of Government fuels and management of the Government Fuel Yard at Washington.

Research on helium and operation of plants producing it. Studies in the economics and marketing of minerals and collection of statistics on mineral resources and mine accidents.

The dissemination of results of technical and economic researches in bulletins, technical papers, mineral resources series, miners' circulars, and miscellaneous publications.

BUREAU OF FISHERIES

HENRY O'MALLEY. Commissioner

The propagation and distribution of food fish and shellfish, in order to prevent the depletion of the fisheries; investigations to promote conservation of fishery resources; the develop-ment of commercial fisheries and agriculture; study of fishery methods, improvements in merchandising and collection of fishery statistics; administration of Alaska fisheries and fur seals; and the protection of sponges off the coast of Florida.

BUREAU OF LIGHTHOUSES

GEORGE R. PUTNAM, Commissioner

Maintenance of lighthouses and other aids to water navigation. Establishment and maintenance of aids to navigation along civil airways.

Publication of Light Lists, Buoy Lists, and Notices to Mariners, giving information regarding these aids to navigation.

COAST AND GEODETIC SURVEY

E. LESTER JONES. Director

Survey of the coasts of the United States and publication of charts for the navigation of the adjacent waters, including Alaska, the Philippine Islands, Hawaii, Porto Rico, the Virgin Islands, and the Canal Zone; interior control surveys; magnetic surveys; tide and current observations; and seismological investigations.

Publication of results through charts, coast pilots, tide tables,

current tables, and special publications.

BUREAU OF NAVIGATION

ARTHUR J. TYREE, Commissioner

Superintendence of commercial marine and merchant seamen. Supervision of registering, enrolling, licensing, numbering, etc., of vessels under the United States flag, and the annual publication of a list of such vessels.

Enforcement of the navigation and steamboat inspection laws, including imposition of fees, fines, tonnage taxes, etc.

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

The inspection of merchant vessels, including boilers, hulls, and life-saving equipment, licensing of officers of vessels, certification of able seamen and lifeboat men, and the investigation of violations of steamboat inspection laws.

UNITED STATES PATENT OFFICE

THOMAS E. ROBERTSON, Commissioner

The granting of patents and the registration of trade-marks, prints, and labels after technical examination and judicial proceedings.

Maintenance of library with public search room, containing copies of foreign and United States patents and trade-marks. Recording bills of sale, assignments, etc., relating to patents and trade-marks. Furnishing copies of records pertaining to

Publication of the weekly Official Gazette, showing the patents and trade-marks issued.

RADIO DIVISION

W. D. TERRELL, Chief

Inspection of radio stations on ships; inspection of radio stations on shore, including broadcasting stations; licensing radio operators; assigning station call letters; enforcing the terms of the International Radiotelegraphic Convention; and examining. and settling international radio accounts.