UNITED STATES DEPARTMENT OF COMMERCE

WASHINGTON

SURVEY OF CURRENT BUSINESS

DECEMBER, 1929

No. 100



ISSUED BY
BUREAU OF THE CENSUS

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, 1929, semiannual issue

Survey of Current Business No. 100



time it appears fitting to briefly review the growth of this publication since its inception in the spring of 1921. To understand the reason for its growth is to understand the growth itself. When America entered the World War we were confronted with an amazing lack of facts pertaining to the fundamental necessities such as steel, copper, cotton, wool, leather, cement, etc. This was the beginning of a new era in our economic life in that it compelled American mobilization officers, in cooperation with the Nation's business and industrial executives, to

obtain facts hitherto unavailable in order to set up properly the policies of government.

The business depression of 1920-21, consequent upon a post-war boom, also left its impress upon the minds of business leaders everywhere. Out of these conditions, and in the realization that the new order of business required facts and not guesses, the Survey of Current Business found its origin.

In 1921 this publication carried data on about 200 individual statistical series, the most of which had very little historical background. With this number there are more than 1,800 individual series, each of which has considerable history for comparative purposes. Were it not for the almost immediate appreciation of the worth of business data on the part of Government, trade, and industry, as represented by trade associations and individual firms, this vast growth in current statistical information would not have been possible.

During the eight years which have elapsed since the first issue of the Survey of Current Business, which, incidentally, was only a sample mimeographed set of sheets numbering 10, evidences have been accumulating of the large and growing interest in current business statistics. During this period the Bureau of the Census has undertaken, at the request of about 50 industries, the collection of current information covering such items as production, stocks, orders, unfilled orders, shipments, etc., while correspondence concerning the services of the Department of Commerce in connection with these facts has multiplied many fold.

The monthly Survey of Current Business has appropriately been called the "clearing house of business statistics" in that it brings together the current reports on business activities issued by this bureau, as well as those compiled by other governmental agencies and private organizations, including trade associations. The data which are published in the volume cover more than 240 commodities.

In addition to the publication of the monthly number, the Survey of Current Business is now issued in the form of weekly supplements in the realization that current statistics are highly perishable and to be of use they must reach the business man at the earliest possible moment. The monthly information contained in these bulletins is republished in the Survey, except for the weekly chart, "Weekly Business Indicators," which has become one of the most important single features. In connection with the weekly business indicators, press statements are issued which have wide publication throughout the country. Services to the press and other interested parties have expanded tremendously over the period so that at the present time much of the work finds expression only in these services.

The Survey of Current Business, as at the time of origin, is to-day an important governmental adjunct. It provides current weekly and monthly statistical information on the state of the Nation's business to many branches of Government, including the War Department, the Federal Reserve Board, the Department of Agriculture, and the Treasury Department. Paralleling the demands of the Government are the growing needs of business. Together these are providing, more and more, the facts which are so essential for the setting-up and execution of forward-looking policies.

While it may be too early to say that the utilization of business data has entirely eliminated the business cycle, there is agreement to-day among business leaders everywhere that the wider use of facts will mitigate in a large degree many of the disastrous effects of the one-time recurrent business cycle.

The Nation's business executives, as in 1921, are now engaged in formulating plans to provide an enduring soundness for our economic fabric. It is a singular coincidence and yet entirely fitting that Nos. 1 and 100 of this publication should have reached their readers at a time when interest in business conditions has been so similarly keen, though circumstances are not at all parallel.

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.



SURVEY OF CURRENT BUSINESS



PUBLISHED BY

UNITED STATES DEPARTMENT OF COMMERCE

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No. 100

WASHINGTON

December, 1929

CONTENTS

Business conditions in October 4 Metals and metal products 10 24— Monthly business indicators (table and chart) 2, 3 Measures of industrial and commercial activity (charts): New building contracts and automobile production Mineral production and railroad ton-mileage 8 Factory employment, manufacturing, and electric power production 6 Check payments and retail trade 8 Stone, clay, and glass products 12 33, 3 Stone, clay, and glass products 15 Chemicals and oils 35— Metals and metal products 10 24— Metals and metal products 11 28, 3 Automobiles and rubber 11 30, 3 Automobiles and rubber 11 30, 3 Stone, clay, and glass products 12 33, 3 Stone, clay, and glass products 12 34, 5 Chemicals and oils 35—	SUMMARIES	Page	INDEX BY SUBJECTS	Text page	Table page
Business conditions in October 4 Monthly business indicators (table and chart) 2, 3 Measures of industrial and commercial activity (charts): New building contracts and automobile production Mineral production and railroad ton-mileage 8 Factory employment, manufacturing, and electric power production Check payments and retail trade 8 Indexes of business 15 Metals and metal products 10 24- Metals and metal products 11 28, 3 Automobiles and rubber 11 30, 3 Paper and printing 31, 3 Building construction and housing 12 Stone, clay, and glass products 12 34, 3 Chemicals and oils 35-	Preliminary summary for November	1	Textiles	9	23, 24
Measures of industrial and commercial activity (charts):Automobiles and rubber1128, 3New building contracts and automobile production.8Hides and leather1130, 3Mineral production and railroad ton-mileage8Paper and printing31, 3Factory employment, manufacturing, and electric-power production8Building construction and housing1233, 3Check payments and retail trade8Stone, clay, and glass products1234, 3Indexes of business15Chemicals and oils35-3	Business conditions in October	4		10	24-28
Measures of industrial and commercial activity (charts): New building contracts and automobile production. Mineral production and railroad ton-mileage	Monthly business indicators (table and chart)	2, 3	Fuels	11	29
Mineral production and railroad ton-mileage 8 Paper and printing 31, 3 Stone, clay, and glass products 12 34, 3 Stone, clay, and glass products 35-3 Chemicals and oils 35-3	Measures of industrial and commercial activity (charts):			11	28, 30
Mineral production and railroad ton-mileage 8 Paper and printing 31, 3 Stone, clay, and glass products 12 34, 3 Stone, clay, and glass products 35-6 Chemicals and oils 35-6	New building contracts and automobile production.	8		11	30, 31
Factory employment, manufacturing, and electric-power production	Mineral production and railroad ton-mileage	8			31, 32
Check payments and retail trade Stone, clay, and glass products 12 34, 35 Chemicals and oils 35-3	Factory employment, manufacturing, and electric-				32
Check payments and retail trade Stone, clay, and glass products 12 34, 5 Chemicals and oils 35-6	power production	8	Lumber products	12	33, 34
Indexes of business 15 Chemicals and oils 35-8	Check payments and retail trade	8	Stone, clay, and glass products	12	34, 35
	Indexes of business	15	Chemicals and oils		35–37
			Foodstuffs and tobacco	13	37-40
DETAILED TABLES Transportation and public utilities 14 40-4	DETAILED TABLES		Transportation and public utilities	14	40-42
	Paint, varnish, and laquer products	18		5	42, 43
	·	18		14	44
	<u> </u>	19		14	44-47
		21	,		47-48

PRELIMINARY SUMMARY FOR NOVEMBER

The dollar volume of trade during November, as reflected by check payments covering the early weeks, was considerably greater than in the corresponding period of 1928. Industrial activity, as indicated by operations in steel plants, was lower than in either the preceding month or November of last year. Activity in the automobile industry, as reflected by figures covering Detroit factory employment, was also lower in November than in either the preceding month or the same period in 1928. Petroleum output was substantially lower than in October but was still above the level which prevailed a year earlier. The movement of goods into consumption was slightly lower than in November of last year.

The volume of building contracts awarded during the month was running lower than in either the preceding month or the same period of 1928. Receipts of cattle and hogs showed very little change from a year ago. Wheat receipts, however, were lower than in November of last year, while cotton receipts into sight were on about the same level of last year.

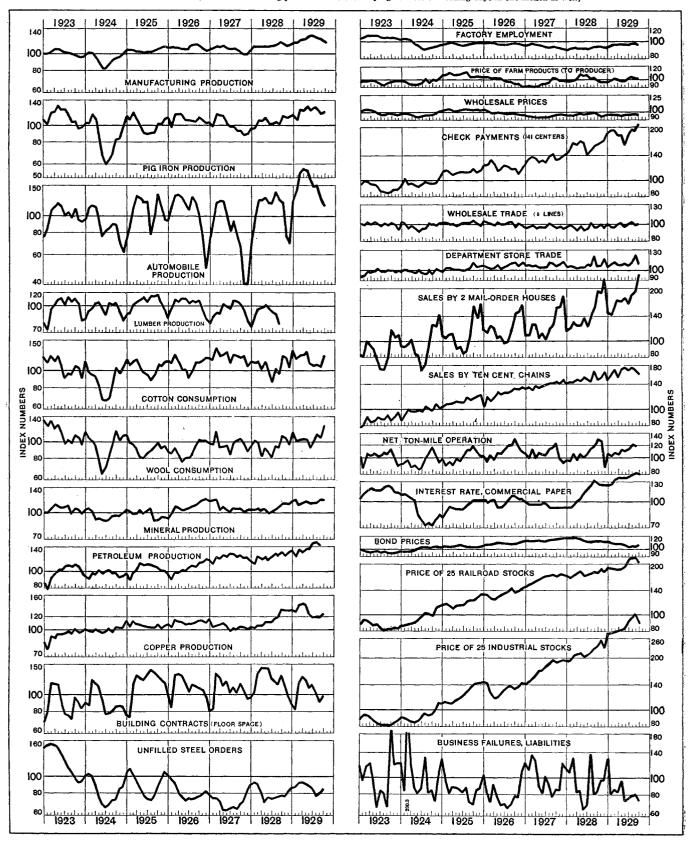
Loans and discounts of Federal reserve member banks, though declining from the high point reached early in the month were higher at the end of November than at the end of the preceding month. The Federal reserve ratio averaged lower than in October but was above the level of last year. Call-money rates averaged lower than in either the preceding month or November a year ago.

Bond prices were somewhat higher than in October but were lower than last year. Interest rates on time funds averaged lower than in either period. Prices for stocks were lower than in either the preceding month or November of last year. Brokers' loans showed a substantial decline from both the preceding month and November a year ago. Business failures showed practically no change from November of last year.

Digitized for FRASER 82029—29—1 http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

MONTHLY BUSINESS INDICATORS, 1923-1929

atio charts—see explanations on inside front cover. The curves on check payments, wholesale trade, 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.

							l		28						192	,,,				
ITEM	1923	1924	1925	1926	1927	1928	Sept.	Oct.	Nov	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oc
		' <u></u>						1923	-192	5 mon	thly a	verag	== 10()					·	
Industriat production:							.													
* Total manufacturing	101.0		105.0							113.0			1	1		l .			t	1
* Total minerals			99.0							112.0			l l			112.0		ſ	I .	1
Pig iron	111,7	1	101. 5		5	1	4			112.8	i	1			130. 5	!	ı			Ł
Steel ingots		1	106. 4			l .			123. 2		l				152. 5	l	1			1
Automobiles			107. 5			1			77. 8		l)	1		182. 7	l .	ľ	150.7	1	í
Cement		l .	108. 1		ı			1	124.5) .				129. 9			1		
Cotton (consumption) Wool (consumption)	105. 9 112 8	!	104. 4 92. 6	108. 5 89. 7				1	119. 0 105. 7		130. 2 114. 0	116. 5 101. 3		123. 1 103. 8	130. 2 102. 9		1	108.7 111.1	1	1
taw material output:							ĺ													
Animal products	100.0	104. 0	96.0	96.0	97.0	99.0	92.0	102.0	93.0		96.0			99. 7		1	i .	į.	1	ŧ.
Crops	4		104.0	109, 0	113.0	119.0	178. 3	252, 1	179. 7					57. 4		55. 7	l .		1	ŀ
Forest products		97.0	104.0	98. 0	93. 0	88. 2	78.0	84. 0	84.0			74.0		90. 2		89. 9		í	i i	F
Crude petroleum.			103.7	104. 6		122. 2	124.5	129. 5	123. 8	129. 4	133. 5			130. 5				1		1
Bitumlnous coal		92. 5	99. 5	109 7	99.0	95. 8	96.3	117. 5	107. 4	101. 2	118.1	108, 5	90. 3	84. 7	92. 2	87. 4	93. 3	100.7	102. 2	11
Copper	93. 4	100. 2	106. 4	110. 2	104. 9	114. 9	118.8	131. 1	129. 5	129. 8	130.9	128. 5	142.1	143. 9	141.6	124. 9	120. 1	119.6	120. 4	12
Power and construction:	00.5	00.1	100 5	100.0	100.0	140 0	145. 2	180.0	154.0	157.8	164.3	148. 1	159. 3	157. 1	161. 2	154. 9	159.8	166, 6	160.7	17:
Electric power	92. 5 89 7		109. 5 117. 6	122.6 111.0					111. 1	1 !	88.6		117.1	1	122, 4	109.7				
nfilled orders:																				
General index	121.7	87.0	91.3	84. 6	74.0	76. 2	74.7	71. 5	72.7	71.0	76.8	79. 5	85. 5	93. 1	88. 4	83. 4	82, 1	76.0	76. 8	73
U. S. Steel Corporation	125.8	83. 6	90. 6	82. 1	71. 1	80. 7	77.4	78. 6	76. 9	83. 3	86. 1	86.8	92, 4	92. 7	90. 1	89. 2	85. 6	76. 6	81. 7	88
stocks:		100.0	102 5	114.0	100.0	100 5	110.0	120 0	137. 0	141, 5	138. 4	137. 0	133. 6	127. 8	122. 3	119.8	121, 5	126.9	138. 6	153
General index	94.5		103. 5	114.6	120.8		116.0		113.7		125. 2	126. 4	123. 2	120. 5		120. 2	119. 6	115.0	113. 1	110
Manfd. commodities (28)	93. 8		103.0	106.3	112. 5		111.3		1		169.8	149. 5	130. 5	109. 9	88. 4	70. 9	54. 2	58.2		
Cotton	102.5 106.4	1 6	106. 2 73. 1	145, 5 64, 8	153, 1 85, 4	123, 8 58, 4	89. 5 45. 8		181. 4 46. 1		55. 4	48. 8	46.8	50.8	62. 2	73. 4	86. 3	92.2		
Employment:				Ì																_
Factories	106. 6	96. 2	97. 2	97. 9	94. 4	91. 9	93. 0	93. 9	93. 4	93. 5	93. 2	95. 4	96. 6	97. 1	97. 2	96. 8	96. 2	9 6 . 6	97. 3	96
Prices: Farm products, to producers	97. 8	97. 1	106. 5	98. 6	94.9	100. 7	102. 2	99. 3	97. 1	97. 1	96. 4	98. 6	101. 4	100. 0	98. 6	97. 8	101. 4	103, 6	102 . 2	101
Wholesale, all commodities	99. 9	97. 4	102.8	99. 3	94.7	97. 0	99. 4	97. 1	1 1		96. 5	96.0	96, 8	96. 1	95. 1	95. 7	97. 3	97.0	96. 8	95
Retail food	97. 6	97. 6	104. 9	107. 6	103. 6	102. 9	105. 4		105. 1	104. 1	103.3	103. 2	102. 2	101. 3	102. 4	103. 4	105. 9	107. 0	107.4	107
Cost of living (including food)	98. 2		1	102. 4	100.0		99.4	99. 4	, ,	98. 8	98. 2	98. 2	97.6	97. 0	97. 0	97. 6	98. 8	99.4		99
listribution, (values):			İ																	
Bank debits, 141 cities	91. 2		111.9	119.6		158. 2	156. 9		165. 1		187. 2	194. 3	195. 1		180. 5	159.0			192. 8	
Wholesale trade			102. 0	101. 0	97. 0	96. 0	96, 4	97. 4	1		101.1	96. 3	97. 0	100.0		97.0		l 8		100
• Department stores, sales	98. 0		103. 0	106. 0	107. 0	108.0	119. 0		, ,			110.0	113.0	- 1			106.0		123.0	
Mail-order sales, 2 houses		98. 1	112.7	120. 2	126. 2	147. 6			188. 4		144. 9	141.8		170. 0		176. 4			192.8	242
• 10-cent chains, sales		99. 0	113. 0	125. 0		150.0				163.6	145.8			153. 0		174.0		174.0		159
Imports	97. 8	93. 1	109.0	114.3	108.0	105. 5	99. 0	110.0	101. 1	105.0	114.2	114.4	118.8	127. 1	123. 9	109. 4	109.6	114.3		121
Exports	91. 5	100. 8	107.8	105. 5	106. 8	112. 6	111.1	145.1	143. 5	125. 3	128. 5	116.4	129. 0	112. 2	101.4	103. 6	106. 2	100.4	115, 3	137
ransportation: Freight, net ton-miles	102. 2	95. 9	101. 9	109. 1	106. 0	106. 5	117.4	129. 2	124.6	88. 4	104.8	102. 2	107. 8	102. 7	112. 6	109. 1	112. 5	120. 4	118. 5	
inance:														i	ļ					
Member bank loans and discounts	94. 1	98. 5	107. 4	112.9	117. 3	126.8	127.3				128.7	130.6	132. 4	131. 3	129.3	135. 1	136. 2	135.3	139. 1	151
Interest rate (commercial paper)	116. 2	90.0	93. 5	100. 9		112.8	130. 6	127.6	124.8	124.8	124.8	127. 6	136. 4	139. 2	139. 2	139, 2	139. 2	142. 2	145. 0	145
Federal reserve ratio	99. 0		96. 9	96.0	1	89. 1			84.5		89. 9	90. 5	92.6	94. 9	96. 5	94. 4	96.4	97.7	94. 2	89
Price, corporation bonds	96. 4	99. 9	103.6		112. 5	113.0				110.7	110.8	109.6	108.0	107. 6	106. 7	105.4	104.9	104 1	103.9	105
Price, railroad stocks	86. 0	- 1	117. 9		162. 7				,	180.3	1		184.9	183.7	184. 4	192. 1				203
,	- 1													005.0	000 0					
Price, industrial stocks	86. 1	91. 9	122.0	132, 4	171.4	214.8	226, 9	234.5	252. 6	229. 0	275.0	280. 3	283.7	285. 8	290. 31	297. 8	330.8	344. 5	300. 01	316

^{*} Seasonal adjustments.

BUSINESS CONDITIONS IN OCTOBER

PRODUCTION

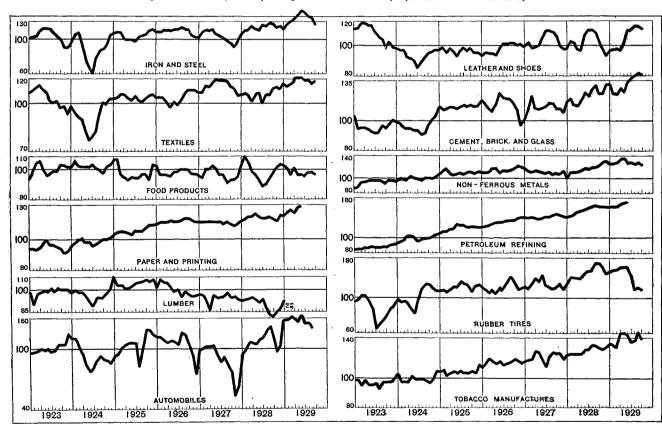
According to the weighted index of the Federal Reserve Board industrial production in October after adjustments for seasonal variations, showed a decline from the previous month but was greater than a year ago. Manufacturing output showed a decrease from September amounting to 4 per cent but was about 3 per cent greater than a year ago. The output of minerals remained the same as the previous month but was more than 6 per cent greater than in October, 1928.

in iron and steel and transportation equipment as contrasted with last year more than offset declines in textiles and lumber.

Wholesale trade in October was greater than in either the previous month or the corresponding period of last year. Declines from September in dry goods, men's clothing, and boots and shoes were more than offset by gains in groceries, meats, hardware, drugs, and furniture. Gains over a year ago were general in all enumerated lines, except men's clothing, which showed a decline.

MANUFACTURING PRODUCTION BY MAJOR GROUPS

[Relative numbers, monthly average 1923-1925 taken as 100, adjusted for seasonal variations]



COMMODITY STOCKS

Stocks of commodities held at the end of October showed gains over both the preceding month and October a year ago, the increases over both periods being due to larger holdings of raw materials. Manufactured goods in the hands of manufacturers were held in smaller quantities than in the preceding month and showed no change from a year ago.

SALES

The general index of unfilled orders for manufactured goods showed a decline from the previous month but was greater than a year ago. Declines from the preceding month in the unfilled orders for textiles and lumber more than offset gains in iron and steel and transportation equipment, principally railroad. Gains

The volume of sales transacted by department stores was substantially greater than in either the previous month or October, 1928. The value of merchandise stocks held by department stores at the end of the month, though showing a gain over the previous month, showed no change from a year ago.

Sales by mail-order houses were considerably larger than in either the preceding month or October of last year. Ten-cent chain stores also registered large gains in sales volume as compared with both periods. The volume of business reported by grocery and drug chains was likewise greater in October than in either the preceding month or the corresponding period of a year ago.

PRICES

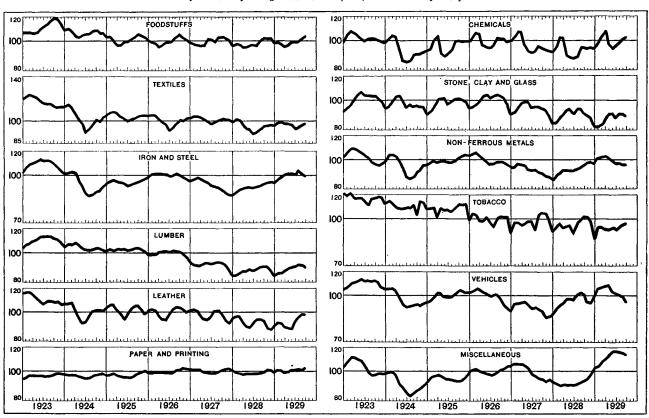
The general level of wholesale prices showed a decline of 2 per cent in October from both the preceding month and the corresponding period of last year. Prices for all major groups of commodities were either lower than in September or showed no change except fuel and lighting, which advanced. Wholesale prices for all groups were lower or unchanged from a year ago, except metals, building materials, and certain miscellaneous items, which advanced.

Classified according to condition wholesale prices for semimanufactures were unchanged from September and showed a gain of 1 per cent over a year ago. Finished manufactures declined 1 per cent from September and 3 per cent from last year. Raw materials showed a decline of 2 per cent from the previous month and no change from a year ago.

than in October, 1928. Increased employment was registered, as compared with September, in factories producing foods, textiles, chemicals, and tobacco products, but the gains were insufficient to offset decreased employment reported by factories producing iron and steel, lumber, stone, clay, and glass, and vehicles. The principal declines from the previous month, amounting to 2 per cent or more, were registered in vehicles and stone, clay, and glass. The gains over a year ago in factory employment were general, increases of 5 per cent or more being registered in factories producing iron and steel, chemicals, and certain miscellaneous products, including automobile tires. Declines in factory employment were reported however, from last year in factories producing stone, clay, and glass products, tobacco products, and vehicles, principally automotive.

FACTORY EMPLOYMENT, BY GROUPS

[1926 monthly average=100. October, 1929, is latest month plotted]



Farm prices, though declining from the previous month, were more than 2 per cent above the level which prevailed a year ago. The cost of living index showed no change from either the preceding month or the corresponding month of last year. As compared with a year ago, gains in food costs were offset by declines in shelter, clothing, light, and sundries.

EMPLOYMENT

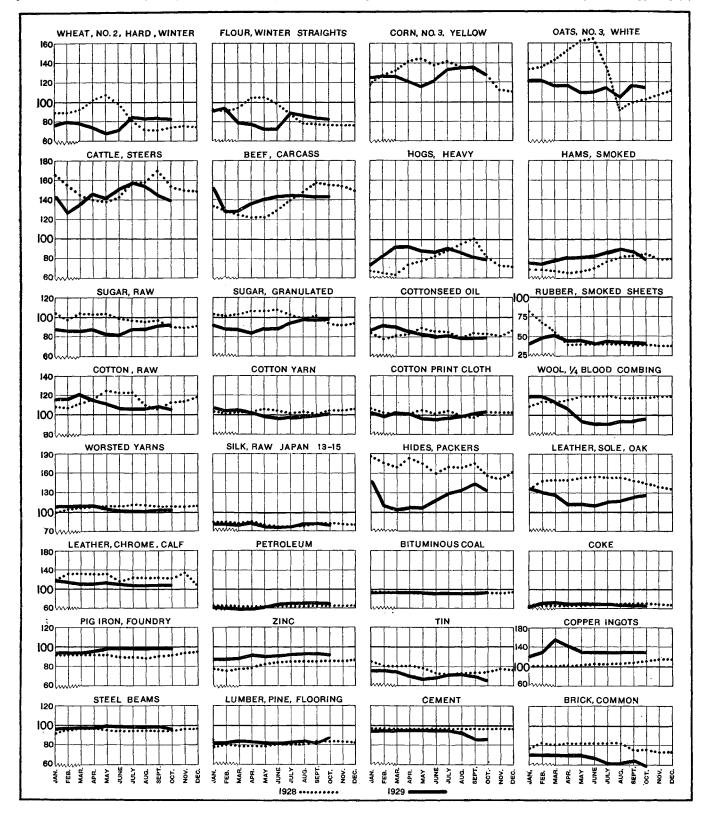
Factory employment, as reflected by the general index, showed a decline from the preceding month Digitized for amounting to 1 per cent, but was 2 per cent greater

Factory pay-roll payments in October were likewise 1 per cent lower than in the preceding month, but showed a gain of 3 per cent over October, 1928. Pay-roll payments were larger than in September in factories producing food products, textiles, paper and printing, chemicals, nonferrous metals, and tobacco products.

Factory pay-roll payments were larger than in October, 1928, in all groups except stone, clay, and glass, nonferrous metals, tobacco products, and vehicles, which declined, and textiles, which showed no change.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. October, 1929, is latest month plotted. Data from which these charts are drawn are given on the opposite page)



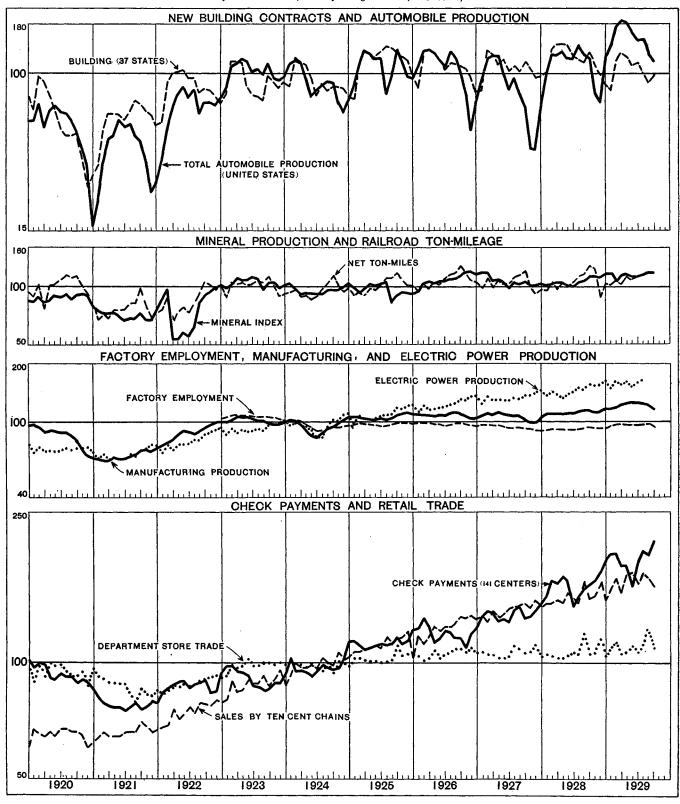
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

Note.—Prices to producer on farm products and market price of wool are from U.S. Department of Agriculture, Bureau of Agriculture 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.

		1	ACTUAL PRIC (dollars)	Е		RE	LATIVE PI	RICE	-
COMMODITIES	Unit			1 .		1926	average=	=100	1
		Septem- ber, 1929	October, 1929	October, 1928	August, 1929	Septem- ber, 1929	Octo- ber, 1929	Septem- ber, 1928	Octob 192
ARM PRODUCTS-AVERAGE PRICE TO PRODUCER									
heat	Bushel	1.121	1.115	. 987	82	83	83	70	12
ornotatoes	Bushel	. 972 1. 355	. 919 1. 382	. 847	137 75	139 73	132 74	136 35	3
otton		.182	. 175	. 181	119	121	116	117	12
ottonseed	Ton	31.03	31. 40	34. 08	120	114	115	114	12
attle, beef	Pound		0892	. 0963	149	143	138 77	154	14
ogsambs	Pound		. 10910	. 0955	87 98	81 96	95	95 103	10
FARM PRODUCTS-MARKET PRICE	Joundanie	11100		1				100] -
Theat, No. 1, northern spring (Minneapolis)	Bushel	1,35	1. 31	1.16	85	85	83	75	Ι,
heat, No. 2, red, winter (St. Louis)	Bushel	1.35	1.32	1.44	85	87	85	94	
heat, No. 2, hard, winter (Kansas City)	Bushel	1.24	1. 22	1. 10	83	83	82	72	
orn, No. 3, vellow (Chicago)	Rushel	1.01	. 95	. 96	135	135	127	133	1:
ats, No. 3, white (Chicago)	Bushel	.48	. 47	. 42	105 95	117 94	115 92	100 98	1 1
ats, No. 3, white (Chicago). arley, No. 2, (Minneapolis). ye, No. 2, (Minneapolis).	Bushel	97	97	.94	107	105	105	102	10
otton, middling upland (New York)	Pound	. 189	. 186	. 196	106	108	106	105	1
ool, ¼ blood combing. Ohio and Pennsylvania fleeces (Boston)	. Pound	. 43	. 44	. 54	93	93	96	117	1
attle, steers, good to choice, corn fed (Chicago)	_ Cwt	13. 800	13.313	14. 625	154	145	140 78	170	1
ogs, heavy (Chicago)	Cwt Cwt	9. 955 4. 675	9. 650 4. 625	10. 030 5. 350	86 78	81 71	70	101 83	
neep, ewes (Chicago) neep, lambs (Chicago)	Cwt.	12. 550	12.094	13. 075	94	92	88	103	1
FOOD				1					Ì
our, standard patents (Minneapolis)	Barrel	7.169	6. 905	6. 410	87	85	82 83 93	78	
our, standard patents (Minneapolis)our, winter straights (Kansas City)	. Barrel	6.100	6.006	5. 588	86	84	83	78	ĺ
igar, 96° centrifugal (New York)	- Pound	.040	. 040	. 039	88	92 97	93 98	97 102	1
gar, granulated, in barrels (New York) otto nseed oil, prime yellow (New York)	Pound	.053	. 093	. 099	98 79	78	79	84	
el. Iresn. carcass. good native steers (Chicago)	Pound	.236	. 236	. 255	145	144	144	158	1
el. Iresh, carcass, steers (New York)	Pound		. 238	. 282	147	147	139	166	1
ork smoked hams (Chicago) utter, creamery, 92 score (New York)	. Pound	. 267	. 242	. 260	89 96	87 102	79 102	83 109	1
leomargarine, standard, uncolored (Chicago)	Pound	. 46	235	. 235	103	102	103	96	i
TEXTILES	- Toundanie	. 200	1.20			100			-
	D	.357	. 359	.372	97	100	100	100	1
otton yarns, carded, white, northern, mule spun, 22-1-cones (Boston otton-print cloth 64 x 60-3814"-5 35—yards to pound) Pound Yard	.076	.078	. 078	100	101	103	98	i
otton-print cloth 64 x 60-38½"-5.35—yards to pound otton sheeting, brown 4/4 Trion (New York)	Yard	. 086	. 087	. 090	90	93	94	96	
orsted yarns, 2/32's cross-bred stock, white, in skein (Boston)	- Pound	1.475	1.475 .975	1. 575	101	103 94	103 94	110 96	1
omen's dress goods, French, 39 inches, at mills, serge nitings, unfinishe d worsted—13 ounce, mill	Yard	. 975 1. 901	1.901	. 975 2. 008	94 95	95	95	100	1
uitings, serge, 11 onnce, 56-58 inch	Yard	1. 959	1. 959	1. 998	90	90	90	92	
llk, Japan, 13–15. osiery, women's pure silk, mill	. Pound	5.122	4.925	5. 145	82	83	80	82	
osiery, women's pure silk, mill	Dozen pair	9, 250	9. 250	9. 500	80	80	80	85	
LEATHER						į			
ides, green salted, packers' heavy native steers (Chicago)	Pound	.196	.186	. 219 . 246	134 114	140 118	132 114	175 159	1 1
eather, chrome calf, dull or bright "B" grades (Boston)eather, sole, oak, scoured backs, heavy (Boston)	Square foot	. 490	. 490	. 550	108	108	108	125	
eather, sole, oak, scoured backs, heavy (Boston)	- Pound	. 535 6. 750	6.750	6.750	119 106	122 106	124 106	148 106	
oots and shoes, men's black calf, blucher (Massachusetts) oots and shoes, men's dress welt tan calf oxford (St. Louis)	Pair		4, 850	5.000	100	100	100	100	
FUEL									
oal, bituminous, mine-run (composite price)	Net ton	3.930	3.961	4. 020	91	91	92	93	
oal, bituminous prepared sizes (composite price)	. Net ton	4. 437	4. 525	4. 639	90	93	94	94	1
oal, anthracite, 'chestnut (composite price)oke, Connellsy lle (range of prompt and future), furnace—at ovens	Long ton Short ton	12.924 2.700	12.999 2.700	13. 040 2. 910	93 67	94 66	94 66	95 70	
ptroleum, crudie, Kansas-Oklahoma—at wells	Barrel		1. 300	1. 210	69	69	69	64	
METALS		Į .							1
ig iron, foundry No. 2, northern (Pittsburgh)			20. 260 18. 500	18. 860 17. 100	98 100	98 100	98 100	90 87	
teel billets, Bessemer (Pittsburgh)			35. 000	32. 800	100	100	100	91	1
opper ingots, electrolytic, early delivery (New York)	Pound	.1778	. 1778	. 1520	129	129	129	107	
rass, sheets, mill	- Pound		. 233	. 199	122	122 82	122 82	102	
ead, pig, desilverized, for early delivery (New York)in, straits (New York)		. 0689	. 4235	. 0650	80 71	69	65	77	1
inc, slab, western (St. Louis)	Pound		. 0674	. 0625	93	93	92	85	
BUILDING MATERIAL AND MISCELLANEOUS									
umber, pine, southern, yellow flooring, millrick, common red, domestic building (New York)	M feet Thousand	36. 760 10. 500	39. 500 9. 500	37. 730 12. 500	83 62	82 64	88 58	84 76	1
ement, Portland, net without bags to trade, f. o. b. plant (Chicago)	1			1)	00			
district) teel beams, mill (Pittsburgh)	Barrel Cwt		1. 493 1. 900	1.650 1.850	100	86 100	86 97	97 95	1
rees neems, mm (+ monargn)	Pound		. 196	. 187	43	42	40	38	
tubber, smoked sheets (New York)	\ round								
ubber, smoked sheets (New York) ulphuric acid, 66°, (New York) Yood pulp, sulphite, domestic, unbleached, news grade (New Yorl	Ton	. 15, 500	15. 500 2, 600	15. 500 2. 525	107 91	107 91	107 91	107 88	

MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

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



REVIEW BY PRINCIPAL BRANCHES OF COMMERCE AND INDUSTRY

TEXTILES

The consumption of wool in October showed gains over both the preceding month and October, 1928. For the first 10 months of the year wool consumption showed a gain of 13 per cent over the same period of last year.

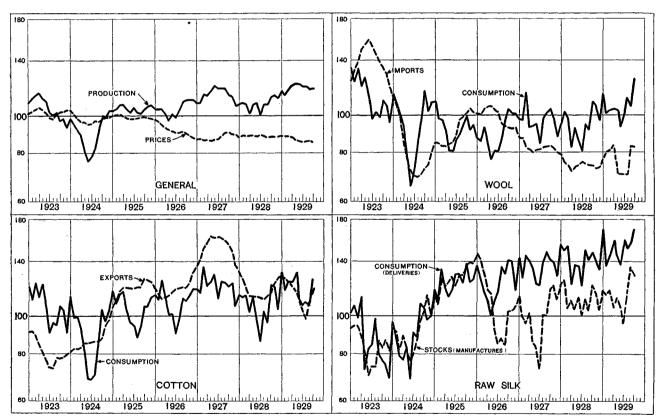
Cotton receipts into sight for the year to date were 9 per cent heavier than in the same period of 1928. Exports of raw cotton in October showed gains over both the previous month and October of last year, but for the year to date cotton exports were almost 10 per cent smaller than in the same period of last year. Consumption of cotton by domestic mills showed substantial gains over both the previous month and October a year ago, while for the first 10 months cotton

Silk machinery showed generally larger activity in the case of broad and narrow looms than in October, 1928, but spinning spindles were less active. Prices for silk averaged lower than in either the preceding month or October a year ago, while the composite price for silk goods, showing no change from the preceding month, was higher than a year ago. Rayon imports in October showed substantial gains over both the preceding month and October of last year. Prices for rayon, showing no change from the previous month, were lower than a year ago.

Imports of burlaps and unmanufactured fibers were larger in October than in either the previous month or the same period of 1928. For the first 10 months of

THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. October, 1929, is latest month plotted. Curves covering imports of wools and exports of cotton are plotted from 12 months' moving monthly average plotted on the end month]



consumption was 12 per cent larger than in the same period of 1928.

Silk imports were substantially larger in October than in either the previous month or the corresponding period of last year. For the calendar year to date imports of silk showed a gain of more than 10 per cent over the corresponding period of a year ago. Deliveries of silk to manufacturing establishments, indicative of silk consumption, were greater in October than in either prior comparative period.

82029--29----2

the year burlap imports showed a gain of about 4 per cent and fiber imports an increase of 10 per cent over the corresponding period of a year ago.

Production of pyroxylin-coated textiles was larger than in September but lower than a year ago. For the first 10 months of the year textiles spread with pyroxylin showed a decline of 2 per cent from the same period last year. Unfilled orders for pyroxylin-coated textiles at the end of October were considerably lower than a year ago.

METALS

Pig-iron production in October was greater than in either the previous month or October of last year. During the calendar year to date the output of pig iron showed an increase of 16 per cent over the same period of last year. Prices for pig iron showed practically no change from the previous month.

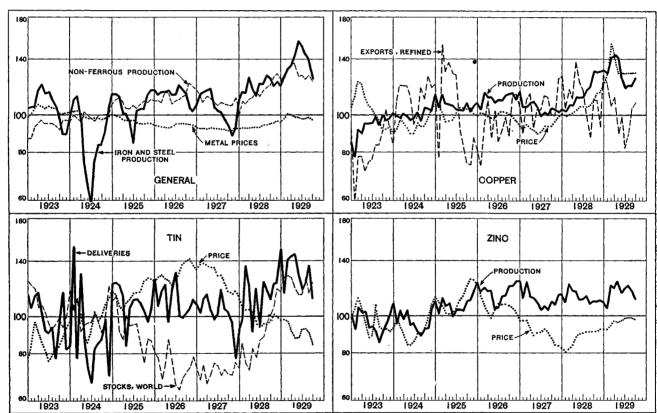
The production of steel ingots showed no change from the previous month but was lower than a year ago, while for the first 10 months of the year steelingot output was 15 per cent greater than in the corresponding period of 1928. Unfilled steel orders at the end of October were greater than at the end of either the preceding month or October, 1928.

first 10 months of the year structural-steel bookings showed a gain of 18 per cent over the same period of last year. New orders for fabricated steel plate, on the other hand, showed declines in October from both the previous month and October of last year, but for the year to date fabricated-steel plate bookings were about 2 per cent greater than in the same period of 1928. The output of malleable castings showed a gain over September but declined from a year ago, with new orders making similar comparisons. New orders for machine tools showed a gain in October as compared with the previous month.

Shipments and new orders of electric overhead cranes and electric hoists were substantially greater

THE METAL INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. October, 1929, is latest month plotted]



The output of steel sheets by independent steel manufacturers showed a gain over the previous month but was lower than a year ago. Steel-sheet production for the first 10 months of the year was 7 per cent greater than in the same period of last year. Prices for steel were generally lower than in the previous month, but showed only slight change from a year ago.

New orders and production of steel castings were larger than in either the previous month or October of last year, while for the year to date similar conditions prevailed, when compared with the corresponding 10 months of 1928.

New bookings for fabricated structural steel also showed gains in October as compared with both the previous month and October of last year. For the than in October, 1928. Shipments of electric industrial trucks and tractors were also larger than a year ago. Shipments of motorized fire-extinguisher equipment showed declines in October from both the previous month and the corresponding month of a year ago. Sales of mechanical stokers were substantially greater in October than in either the previous month or October, 1928.

Production of copper by domestic smelters was greater than in September but smaller than a year ago, while for the first 10 months of the year the smelter output of October showed a gain of almost 17 per cent over the same period of last year. Wholesale prices for copper showed no change from the previous month but were higher than a year ago.

FUELS

The production of bituminous coal showed gains over both the previous month and the same month of 1928. Bituminous-coal prices at the mine averaged higher than in either period.

The output of anthracite coal was larger than in September but somewhat smaller than a year ago. The production of coke, both types, was greater than in either the preceding month or the same period of last year.

AUTOMOBILES AND RUBBER

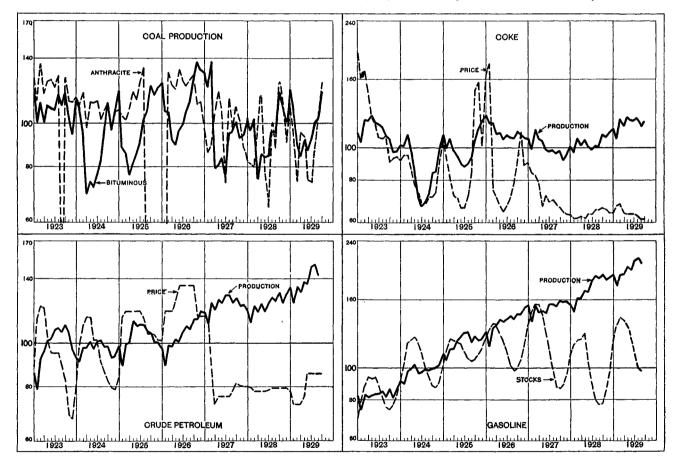
Automobile production in the United States showed declines from both the preceding month and October,

period of 1928. More animals were slaughtered under Federal inspection during October than in the previous month. For the first 10 months of the year declines in slaughtering were registered except for sheep, where an increase of about 5 per cent was shown over the same period of last year.

The output of sole leather in October showed a gain of 10 per cent over the preceding month but was lower by a like percentage than in October, 1928. For the first 10 months of the year sole-leather output showed a decline approximating 12 per cent. Exports of sole and belting leather, although greater than in September, were substantially lower than a year ago,

THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. October, 1929, is latest month plotted where data were available]



1928, but for the year to date the total was 30 per cent greater than in the corresponding 10 months of 1928.

Imports of rubber were larger than in September but smaller than a year ago. For the first 10 months of the year rubber imports showed a gain of 34 per cent over the same period of last year.

HIDES AND LEATHER

Hide and leather imports in October were smaller than in the previous month but showed a gain over last year. Imports were 6 per cent smaller during the first 10 months of the year than in the corresponding but for the first 10 months of the year exports showed a gain of 6 per cent over the same period of 1928.

The output of upper leather in September showed a decline from the preceding month but was greater than a year ago. October exports of upper leather were larger than those reported for September but showed a decline from a year ago, amounting to 19 per cent.

The production of shoes was larger in October than in either the previous month or the corresponding period of last year. For the first 10 months of the year shoe production showed a gain of almost 5 per cent over the same period of 1928.

BUILDING AND CONSTRUCTION

Building costs were generally lower in October than a year ago, as indicated by indexes of construction.

The volume of new building contracts awarded in October, measured in floor space, was greater than in the preceding month but showed a substantial decline from a year ago. Measured in value, new contracts let in October showed declines from both periods. For the first 10 months of the year new awards showed a decline of 12 per cent in value and 16 per cent in floor space from the corresponding period of 1928. The decline in total awards from a year ago was very largely due to a decrease in the 10-month's total for residential construction, amounting to almost \$700,000,000.

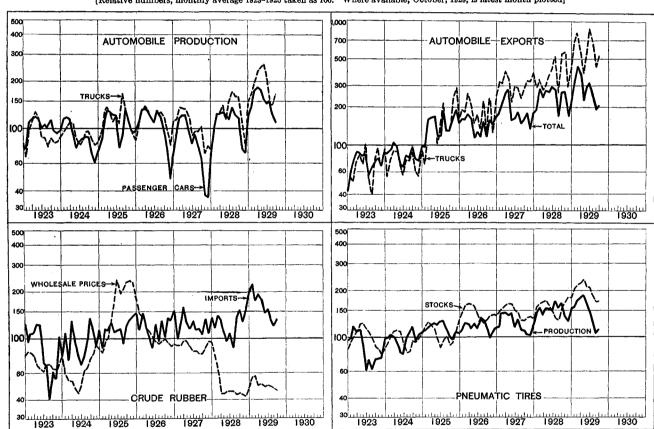
October, 1928, while for the first 10 months of the year a decrease of almost 3 per cent was registered from the same period of last year. Stocks of Portland cement at the mills at the end of October were somewhat more than 5 per cent greater than a year ago.

New contracts let for concrete paving were larger than in either the preceding month or October of last year, but for the calendar year to date a decline fo almost 4 per cent was recorded from the same period of 1928.

Shipments of porcelain plumbing fixtures during October were lower than in either the previous month or the same month of last year, with new orders making similar comparisons. For the first 10 months of

THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. Where available, October, 1929, is latest month plotted]



LUMBER AND LUMBER PRODUCTS

The production of Southern pine lumber showed a decline from the corresponding period of last year. The output of California redwood and California white pine, on the other hand, was greater than a year ago. Northern pine lumber production and the output of Northern hemlock were smaller than in October, 1928. The production of flooring, both oak and maple, showed declines from October of last year.

STONE, CLAY, AND GLASS PRODUCTS

The output of Portland cement during October showed declines from both the previous month and the year shipments showed a decline of 36 per cent from the corresponding period of a year ago. Shipments of vitreous-china plumbing fixtures in October were likewise smaller than in either comparative period, while the total for the calendar year to date showed a decrease of 5 per cent from the same period of last year. New orders for terra cotta were smaller in October than in either the previous month or the same month of a year ago, while the total for the first 10 months, measured in tonnage, was 20 per cent less than in the same period of 1928. The production and shipments of sand-lime brick in October were smaller than in either the preceding month or the same period of 1928.

FOODSTUFFS AND TOBACCO

The estimated domestic crop of wheat was substantially lower than the production of last year. The visible supply at the end of October, both in the United States and Canada, was considerably larger than a year ago. Receipts and shipments of wheat at the principal primary domestic markets were smaller than a year ago. Prices were generally higher than a year ago.

The estimated corn crop for the current year was smaller than a year ago. The visible supply of corn at the end of October was substantially greater than a year ago. Receipts and shipments of primary

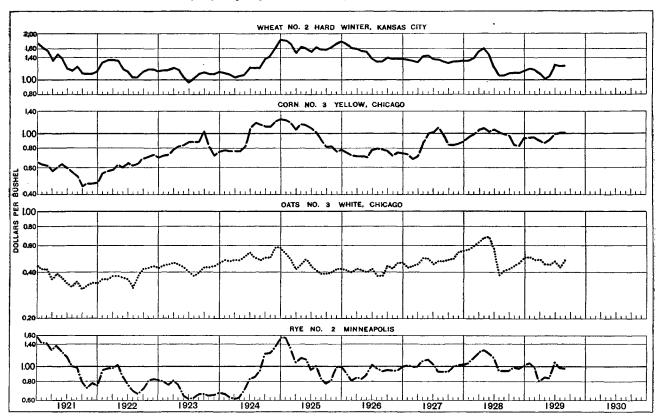
Receipts and shipments of hogs at primary markets were larger than last year, the output of pork products under Federal inspection also showing a gain over last year. Cold-storage holdings were substantially larger than at this time last year. Prices for hogs and pork were generally lower than a year ago.

Receipts of poultry at primary markets were greater than a year ago, while the total catch of fish at the principal fishing ports showed a substantial gain over October of last year. Storage holdings of fish and poultry were larger than a year ago.

The production of creamery butter was greater than a year ago, with storage holdings showing a substan-

MOVEMENT OF GRAIN PRICES

[Weighted price per bushel. October, 1929, is latest month plotted]



markets were larger than in October of last year. Corn prices were generally lower than a year ago.

The visible supply of oats and barley was greater than a year ago. Oat receipts at principal markets were greater than last year, while receipts of barley showed a decline.

Receipts and shipments of cattle at primary markets were lower than a year ago. The output of beef products under Federal inspection in October showed a gain over last year. Storage holdings at the end of October were considerably greater than a year ago. Prices for cattle and beef were generally lower than a year ago.

tial increase. Prices for butter were unchanged from the previous month but showed a decline from last year. The factory production of cheese was smaller than a year ago. Storage holdings of cheese at the end of October were smaller than last year. Wholesale prices for cheese were generally unchanged from the previous month but showed a decline from a year ago. Egg receipts at the principal markets were lower than a year ago, while storage holdings of case eggs showed a substantial decline from October of last year.

Coffee imports were larger than a year ago, while prices for coffee averaged lower. Tea imports were greater than a year ago, but prices for tea showed no change.

TRANSPORTATION

The movement of goods by rail during October, as reflected by freight-car loadings, showed a gain over the previous month but was fractionally lower than a year ago. For the first 10 months of the year freight-car loadings showed a gain of about 4 per cent over the same period of 1928. Net operating income of railroads during September was smaller than a year ago.

DISTRIBUTION MOVEMENT

The volume of trade transacted by mail-order houses and chain stores in October was generally greater than in either the preceding month or October of last year with the totals for the first 10 months of the year likewise showing gains over the corresponding period of dividend payments showed a gain of 14 per cent over the same period of 1928. Prices for stocks showed a drastic decline from the preceding month but the October averages were above those which prevailed in October, 1928.

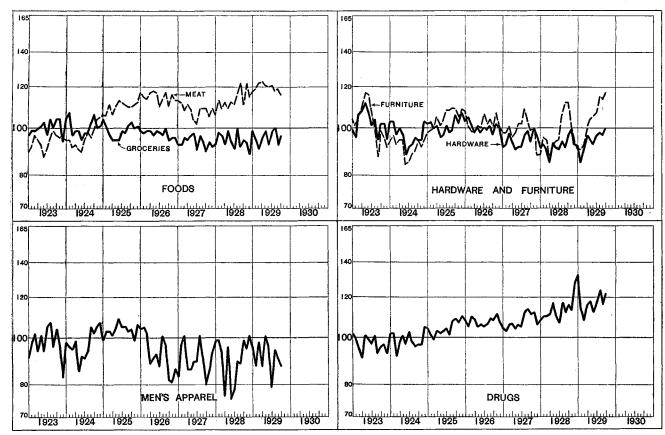
GOLD, SILVER, AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were slightly lower than a year ago but showed a large gain over the previous month. Gold imports continued to exceed those reported for the corresponding period of last year. Gold exports were still substantially smaller than the import movement.

The domestic production of silver was greater than in either the preceding month or October of last year.

WHOLESALE TRADE

[Relative numbers, monthly average 1923-1925 taken as 100. October, 1929, is latest month plotted. Curves are adjusted for seasonal variation]



1928. Advertising in newspapers and magazines in October also showed gains over both prior comparative periods, while expenditures for radio broadcasting by advertisers also showed gains over both periods.

BANKING AND FINANCE

Check payments were greater than in either the previous month or October a year ago. Loans and discounts of Federal reserve member banks reached a new high level during the month.

Dividend and interest payments were substantially greater than in either the preceding month or October Digitized for FRAS of last year. For the first 10 months of the year

Exchange upon the principal foreign currencies showed only slight movement from the rates which prevailed in the previous month. Among the gains reported the English pound, Belgian franc, the Dutch guilder, the Japanese yen, and the Indian rupee were the most prominent; declines were registered in the Canadian dollar and Argentine peso. Contrasted with last year increases were registered in October in the British pound the Belgian franc, the Dutch guilder, the Swedish krone, the Swiss franc, and the Japanese yen, while declines were recorded in the Indian rupee, the Canadian dollar, the Argentine peso and the Brazilian milreis.

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-		1928			1929		PER CENT II OR DECR	NCREASE (+) EASE (-)
Relative to 1923–1925 monthly average as 100	mum since Jan. 1, 1923	inum since Jan. 1, 1923	August	Septem- ber	October	August	Septem- ber	October	October, 1929, from September, 1929	October, 1929, from October, 1928
PRODUCTION										
TOTAL INDUSTRIAL				:						
Unadjusted, except for working daysAdjusted for seasonal variations	125 123	81 83	110 112	115 114	117 114	121 123	123 121	119 117	$-3.3 \\ -3.3$	$^{+ ext{1.7}}_{+ ext{2.6}}$
MANUFACTURING										
Total (adjusted for working days only) Total (adjusted for seasonal variations) Iron and steel Textiles Food products Paper and printing Lumber	127 128 155 121 110 128 110	79 82 59 77 90 91 78	110 113 121 107 90 117 87	115 115 128 107 95 118 82	116 114 126 112 98 116 81	121 124 143 120 99 125 88	123 122 139 116 98 128	118 117 124 118 97	$ \begin{array}{r} -4.1 \\ -4.1 \\ -10.8 \\ +1.7 \\ -1.0 \end{array} $	+1.7 +2.6 -1.6 +5.4 -1.0
Automobiles	166	47	133	139	122	146	136			
Leather and shoes	134 143 137	86 92 87	112 126 117	110 130 117	103 122 121	116 142 122	115 143 126	$113 \\ 141 \\ 122$	$ \begin{array}{r} -1.7 \\ -1.4 \\ -3.2 \end{array} $	$^{+9.7}_{+15.6}_{+0.8}$
Petroleum refining Rubber tires Tobacco manufactures	176 169 143	84 66 93	$160 \\ 151 \\ 129$	162 169 128	160 167 126	176 114 133	174 117 143	114 135	$ \begin{array}{r} -2.6 \\ -5.6 \end{array} $	$ \begin{array}{c} -1.7 \\ +7.1 \end{array} $
MINERALS										
Total (adjusted for working days only) Total (adjusted for seasonal variations) Bituminous coal Anthracite coal Crude petroleum Iron-ore shipments Copper Zinc Lead Silver	128 120 125 133 147 143 139 127 125 123	84 90 77 1 88 0 82 93 75 85	110 105 91 94 123 104 116 120 107 87	115 107 94 95 124 110 123 114 115	122 114 99 119 127 114 128 110 108 79	121 115 97 81 146 121 119 127 107	127 118 101 106 141 121 121 124 119 89	126 118 101 116 140 107 123 112 115 92	$\begin{array}{c} -\textbf{0.8} \\ \textbf{0.0} \\ 0.0 \\ +9.4 \\ +0.7 \\ -11.6 \\ +1.7 \\ -9.7 \\ -9.7 \\ -3.4 \\ +3.4 \end{array}$	$\begin{array}{c} +3.3 \\ +6.8 \\ +2.0 \\ -2.5 \\ +10.2 \\ -6.1 \\ +3.9 \\ +1.8 \\ +6.5 \\ +16.5 \end{array}$
ANIMAL PRODUCTS (Marketings) Total	124	79	97	92	102	100	99	105	+6.1	+2.9
Wool	124 421 131 148 160 302	14 76 67 64 44	195 79 80 117 170	54 92 76 95 137	35 95 86 89 153	268 77 89 116 247	128 96 83 94 283	52 113 86 91 302	$ \begin{array}{c c} +6.1 \\ -59.4 \\ +17.7 \\ +3.6 \\ -3.2 \\ +6.7 \end{array} $	$egin{array}{c} +2.3 \\ +48.6 \\ +18.9 \\ 0.0 \\ +2.2 \\ +97.4 \end{array}$
CROPS (Marketings)										
Total Grains * Vegetables * Fruits * Cotton products * Miscellaneous crops *	252 218 199 266 373 266	45 38 60 43 11 18	115 186 83 165 45 116	178 165 133 206 184 206	252 174 151 266 353 208	135 214 88 130 72 102	180 117 145 173 218 207	246 103 171 245 373 212	$\begin{array}{c} +36.7 \\ -12.0 \\ +17.9 \\ -41.6 \\ +71.1 \\ +2.4 \end{array}$	$\begin{array}{c} -2.4 \\ -40.8 \\ +13.2 \\ -7.9 \\ +5.7 \\ +1.9 \end{array}$

^{*} 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

Relative to 1923-1925 monthly average as 100 PRODUCTION—Continued	mum since Jan. 1, 1923	mum since Jan. 1, 1923		Î						
PRODUCTION—Continued			August	Septem- ber	October	August	Septem- ber	October	October, 1929, from September, 1929	October, 1929, from October, 1928
I ICODOCTION—Commued										
FOREST PRODUCTS			fl 				1			
Total	112	74	89	77	87	92	80	93	+16.3	+6. 9
Lumber	_ 112	71	88	77	84	91	79	89	+12.7	+6.0
PulpwoodGum (rosin and turpentine) *	$\begin{array}{c c} - & 151 \\ \hline - & 204 \end{array}$	54 18	82 161	68 129	$\frac{108}{129}$	77	74	118	+59.5	+9.
Distilled wood		65	78	70	93	189 100	157 90	$\frac{130}{104}$	-17.2 + 15.6	+0.4 + 11.4
						-00		101	1 10. 0	, 11.
NEW ORDERS	100	7.0	98		0	00	00			
TotalTotal	- 138 - 179	73 70	92	95 99	95 116	92 91	90 91			
Iron and steel		71	118	125	116	127	110			
Lumber		67	100	92	87	83	1			
Paper and printing	_ 118	85	108	109	113	115	116			
Stone and clay products	_ 129	75	97	93	119	85	89			
STOCKS			İ							
Grand total	- 153	82	107	116	133	127	139	153	+10.1	+15.
Total manufactured goods	_ 125	88	115	111	111	115	113	111	-1.8	0.
Foodstuffs	_ 136	79	117	105	93	136	129	106	-16.3	+14.
Textiles		78 78	125 131	118	113	122	115	116	+0.9	+2.
Iron and steel	_ 157 _ 140	74	121	$130 \\ 125$	135 123	$\frac{128}{125}$	135 135	$\begin{array}{c} 135 \\ 140 \end{array}$	$\begin{array}{c} 0.0 \\ +3.7 \end{array}$	0. +11.
Lumber		78	105	104	103	103	104	106	+3.7 + 1.9	$+11. \\ +2.$
Stone, clay, etc		64	140	130	116	132	116	106	-8.6	-8.
Leather	_ 123	66	72	73	74	70	69	69	0. 0	-6.
Rubber	- 199	77	134 156	130	149	155	143	146	+2.1	-2.
PaperChemicals and oils	- 156 - 125	46 84	91	137 97	139 103	98 101	101 107	$\begin{array}{c} 102 \\ 111 \end{array}$	$\begin{array}{c c} +1.0 \\ +3.7 \end{array}$	-26.6 + 7.8
Total raw materials		69	101	119	149	136	157	184	+17. 2	+23.
Foodstuffs		68	136	145	157	212	222	229	$+3.\bar{2}$	+45.
Textiles	_ 202	43	65	95	149	71	111	173	+55.9	+16.
Metals	_ 136	54	92 93	116	133	105	111	119	+7.2	-10.
Chemicals and oils	_ 153	73	33	108	139	97	115	135	+17. 4	-2.
UNFILLED ORDERS										
Total		67	75 66	75	72	76	77	74	-3.9	+2.
Textiles Iron and steel	- 154 - 157	59 66	75	69 75	73 75	67 76	64 79	59 80	$-7.8 \\ +1.3$	$-19. \\ +6.$
Transportation equipment	204	49	60	60	62	79	86	94	+9.3	+51.
Lumber		56	88	84	69	86	84	66	-21.4	-4.
WHOLESALE TRADE					1					
Grand total, all classes	124	82	110	111	112	113	114	115	+0.9	+2.
Groceries	_ 119	83	101	100	108	101	101	110	+8.9	+1.
Meats	130 128	87	118 110	130	125	120	127	129	+1.6	+3.
Dry goods	128	43	148	105 137	$\begin{array}{c} 99 \\ 123 \end{array}$	111 156	110 139	102 110	$\begin{bmatrix} -7.3 \\ -20.9 \end{bmatrix}$	+3. $-10.$
Men's clothing Boots and shoes	130	68	119	110	108	130	129	114	-20.9 -11.6	+5.
Hardware	_ 118	76	95	100	108	99	105	112	+6.7	+3.
DrugsFurniture		88 72	115 108	119 126	134 133	121 117	124 129	141 140	$+13.7 \\ +8.5$	+5. $+5.$
RETAIL TRADE				120	100		123	120	10.0	1 9.
	100	00	141		104	104	100	0.0		
Mail order houses (2 houses)	- 193	68	141	155	194	184	193	242	+25.4	+24.
Ten-cent.	_ 305	62	136	144	164	161	147	176	+19.7	+7.
Grocery	_ 257	77	204	202	230	233	216	257	+19.0	+11.
Drug	_ 224	82	169	164	169	214	200	209	+4.5	+23.
Department Stores: Sales	187	71	85	107	124	90	109	128		19
Stocks	117	83	97	107	1124	96	109	1128	+17.4 +8.7	+3.

[•] Fluctuations between maximum and minimum due largely to seasonal conditions.

17

INDEXES OF BUSINESS—Continued

	Maxi-	Mini-		1928			1929		PER CENT IN OR DECR	CREASE (+) EASE (-)
Relative to monthly average indicated	mum since Jan. 1, 1923	mum since Jan. 1, 1923	August	Septem- ber	October	August	Septem- ber	October	October, 1929, from September, 1929	October, 1929, from October, 1928
EMPLOYMENT										·
(Relative to 1926 monthly average as 100)								}		
		!								
Number employed, by industries:	***	00	94	95	96	99	99	98	-1.0	+2.1
Total, all classesFood products	111 119	92 95	97	100	102	99	102	104	$\begin{array}{c c} -1.0 \\ +2.0 \end{array}$	+2.1 + 2.0
Textiles	122	91	92	94	97	95	97	98	+1.0	+1.0
Iron and steel	113	86	92	93	94	100	101	100	-1.0	+6.4
Lumber	113	85	89	90	90	92	91	90	$ \begin{array}{c c} -1.1 \\ 0.0 \end{array} $	0.0 + 4.3
LeatherPaper and printing	$\begin{array}{c} 117 \\ 103 \end{array}$	88 94	95 98	95 98	94 100	97 101	98	98	0. 0	+3.0
Chemicals.	108	85	88	95	95	98	102	103	+1.0	+8.4
Stone, clay, and glass	106	82	94	93	92	91	91	89	-2.2	-3.3
Metal products other than iron and steel.	109	86	93	94	96	97	96	96	0.0	0. 0
Tobacco products	120	86	97	$\begin{array}{c c} 99 \\ 102 \end{array}$	101 100	95 101	96	97	$\begin{array}{c c} +1.0 \\ -5.0 \end{array}$	-4.0 -5.0
Vehicles Miscellaneous	113 116	84	100 90	92	93	1115	115	113	-3.0 -1.7	-3.6 + 21.5
Amount of pay roll, by industries:	110	30	"					1.10		•
Total, all classes	109	84	94	95	99	102	103	102	-1.0	+3.6
Food products	114	93	98	101	103	102	105	106	+1.0	+2.9
Textiles	124	87	90 93	93 93	100 98	95 105	98 104	$100 \\ 104$	$\begin{array}{c c} +2.0 \\ 0.0 \end{array}$	0.0 + 6.1
Iron and steel Lumber	111 108	75 82	90	92	94	93	95	95	0. 0	+1.1
Leather	123	79	97	96	93	101	101	97	-4.0	+4.3
Paper and printing	109	86	99	101	103	104	108	109	+0.9	+5.8
Chemicals.	108	86	93	97	99	102	105	107	+1.9	+8.1
Stone, clay, and glass	106	78	94 97	92 98	$\begin{array}{c c} 94 \\ 105 \end{array}$	89 102	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	89 102	$\begin{bmatrix} -1.1 \\ +1.0 \end{bmatrix}$	-5.8 -2.9
Metal products other than iron and steel. Tobacco products	$\frac{112}{119}$	81 81	94	98	103	96	99	100	$\begin{array}{c c} +1.0 \\ +1.0 \end{array}$	-2.3
Vehicles	120	84	102	101	106	109	105	101	-3.8	-4.7
Miscellaneous	119	81	89	92	93	113	115	114	-0.9	+22.6
PRICE INDEX NUMBERS										
FARM PRICES										
(Relative to 1909–1914 average as 100)									ļ	
All groups	152	125	139	141	137	143	141	140	-0.7	+2.2
Grains	178	108	120	117	116	129	131	128	-2.3	+10.3
Fruits and vegetables	253	108	137	127	114	160	160	168	+5.0	+47.4
Meat animals	167	98	$\begin{array}{c} 162 \\ 136 \end{array}$	174 145	160 150	165 141	$\begin{array}{c c} 156 \\ 146 \end{array}$	151 151	$\begin{bmatrix} -3.2 \\ +3.4 \end{bmatrix}$	-5.6 + 0.7
Dairy and poultryCotton and cottonseed	$\begin{array}{c} 166 \\ 252 \end{array}$	122 81	153	142	147	146	146	141	-3.4	-4. 1
Unclassified	108	79	87	85	83	86	85	89	+4.7	+7.2
WHOLESALE PRICES									:	
Department of Labor Indexes										
(Relative to 1928 monthly average as 100)	4.A.=									
All commodities Farm products	105 114	94 94	99 107	100 109	98 104	98 107	98 107	96 104	$ \begin{array}{c c} -2.0 \\ -2.8 \end{array} $	-2. 6
Food, etc	107	85	107	109	$\begin{array}{c} 104 \\ 102 \end{array}$	107	107	104	$-2.8 \\ -1.9$	-1. (
Hides and leather products	127	98	121	121	118	110	111	111	0. 0	-5. 9
Textile products	114	93	96	96	96	93	93	93	0.0	-3. 1
Fuel and lighting	$\frac{112}{113}$	81 97	85 100	85 101	85 101	81 104	81 104	$\begin{array}{c c} 82 \\ 104 \end{array}$	+1.2 0.0	-3.5 + 3.0
Building materials	116	90	95	95	95	97	98	98	0. 0 0. 0	+3.2
Chemicals.	104	93	95	95	96	94	94	94	0. ŏ	-2. 1
House-furnishing goods	111	97	97	97	97	97	97	97	0. 0	0. (
Miscellaneous	127	79	79	80	80	81	82	81	-1.2	+1.8
Semimanufactured articles	128	94	97	97	97	96	98	98	0.0	+1.0
Finished products	103	93	99	101	99	97	97	96	-1.0	-3.0
Raw materials Nonagricultural commodities	$\frac{109}{106}$	93 93	99 97	101 98	97 96	99 94	99 95	97 94	$ \begin{array}{c c} -2.0 \\ -1.1 \end{array} $	0.0
Commercial Indexes	100	30	31	30	90	94	35	94	1. 1	— 2. 1
(Relative to 1926 monthly average as 100)										
		l	ll	1		l	1	1		
Dun'sBradstreet's	106	85	103	103	102	102	102	101	-1.0	-1.0

INDEXES OF BUSINESS—Continued

	Maxi-	Mini-		1928			1929		PER CENT IN OR DECR	CREASE (+) EASE (-)
Relative to monthly average indicated	mum since Jan. 1, 1923	mum since Jan. 1, 1923	August	Septem- ber	October	August	Septem- ber	October	October, 1929, from September, 1929	October, 1929, from October, 1928
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 Light Sundries	172 167 186 177 179 208 123 176	158 141 159 160 156 174 118 168	161 154 161 173 159 178 121 171	163 158 161 174 160 180 121 171	163 157 161 173 161 182 121 171	163 160 159 169 158 177 120 169	163 161 160 168 159 180 120 169	163 161 160 168 161 182 120 170	0. 0 0. 0 0. 0 0. 0 +1. 3 +1. 1 0. 0 +0. 6	0. 0 +2. 5 -0. 6 -2. 9 0. 0 0. 0 -0. 8 -0. 6

PAINT, VARNISH, AND LACQUER PRODUCTS¹

		192	28			192	9	
Монтн	Total sales	Trade sales	Industrial sales	Not specified	Total sales	Trade sales	Industrial sales	Not specificd
January. February. March. April. May. June. July. August. September.	\$23, 211, 240 24, 565, 971 29, 765, 549 30, 537, 081 36, 498, 142 33, 585, 807 26, 684, 736 30, 901, 278 27, 967, 064	9, 700, 662 11, 717, 124 12, 539, 099 15, 887, 801 14, 020, 418	\$8, 419, 843 8, 756, 602 10, 307, 140 9, 965, 905 11, 007, 815 10, 799, 480 9, 365, 880 11, 411, 735 10, 330, 227	6, 108, 707 7, 741, 285 8, 032, 077 9, 602, 526 8, 765, 909 7, 840, 406	\$24, 935, 873 25, 133, 727 32, 260, 827 34, 840, 099 37, 619, 643 33, 569, 795 28, 456, 902 34, 428, 941 29, 694, 051	\$8, 973, 955 9, 283, 254 12, 163, 386 13, 910, 259 15, 909, 955 13, 644, 988 9, 613, 489 13, 501, 266 10, 804, 088	\$9, 743, 238 9, 787, 126 11, 514, 538 12, 067, 469 12, 446, 351 11, 114, 415 10, 386, 267 11, 982, 991 10, 710, 541	6, 063, 347 8, 582, 903 8, 862, 371 9, 263, 337 8, 810, 392 8, 457, 146 8, 944, 684

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census and represents the total sales of paint, varnish, and lacquer products as reported by 388 firms. Trade sales include shipments to dealers, jobbers, painters, and consumers, Industrial sales are those to manufacturers, railroads, the Government, marine, and all other similar users.

AUTOMOBILE FINANCING 1

	т	DTAL	NEW CARS	FINANCED	USED CARS	S FINANCED	UNCLA	ASSIFIED
Monte	Number of cars	Volume in dollars	Number of cars	Volume in dollars	Number of cars	Volume in dollars	Number of cars	Volume in dollars
January February	147, 008 177, 960	\$71, 939, 872 85, 263, 846	76, 157 101, 712	\$47, 188, 573 60, 485, 230	66, 400 71, 520	\$22, 702, 351 22, 597, 517	4, 451 4, 728	\$2, 048, 948 2, 181, 099
March April	290, 422 363, 339	136, 287, 410 168, 844, 566	164, 648 203, 224	96, 505, 505 119, 630, 526	118, 281 151, 498	36, 526, 060 45, 381, 285	7, 493 8, 617 8, 007	3, 255, 845 3, 832, 755
May	369,968	176, 227, 801 171, 883, 530	210, 303 202, 457 205, 369	123, 691, 554 120, 771, 728 117, 936, 478	163, 500 160, 736 151, 555	49, 048, 413 48, 116, 003 44, 704, 872	8, 007 6, 775 6, 302	3, 487, 834 2, 995, 799 2, 669, 322
July		165, 310, 672 151, 595, 703 131, 72 3, 060	177, 204 155, 075	107, 052, 134 92, 008, 795	141, 598 123, 445	42, 499, 925 37, 853, 924	4, 627 4, 298	2, 009, 322 2, 043, 644 1, 860, 341
Total (9 months)	2, 699, 981	1, 259, 076, 460	1, 496, 149	885, 270, 523	1, 148, 533	349, 430, 350	55 , 2 98	24, 375, 587

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, from reports of 369 automobile-financing organizations. Forty-six of the smaller firms found it impossible to segregate their operations, their totals being shown in the unclassified group. This summary is subject to revision in subsequent issues as reports are received from additional firms.

FACTORY EMPLOYMENT: INDEXES BY GROUPS 1

[Monthly average, 1923-1925=100. Without seasonal adjustment]

		Iron	Ma-	_	Food	Paper	Lum-	Tran tati equip	ion	Leath-	Ce- ment,	Non-	Chei	nicals	Rub-	To-
YEAR AND MONTH	Total	and steel	chin- ery	Tex- tiles	prod- ucts	and print- ing	and prod- ucts	Group	Auto- mo- biles	er and prod- ucts	clay, and glass	fer- rous metals	Group	Petro- leum refin- ing	ber prod- ucts	prod- ucts
1919																
January February March April May June July August September October November December	105. 4 101. 9 102. 3 102. 6 103. 1 104. 2 106. 6 109. 2 111. 5 109. 1 110. 4 112. 9	112. 1 106. 0 103. 4 100. 1 96. 4 95. 5 99. 8 104. 2 104. 8 79. 3 90. 1 101. 8	121. 0 118. 2 114. 5 113. 2 110. 2 107. 9 108. 7 114. 2 117. 9 122. 4 126. 8 131. 2	90. 7 84. 7 87. 4 91. 1 94. 9 97. 9 102. 2 102. 3 103. 7 105. 0 105. 3 107. 8	113. 1 110. 2 109. 3 105. 4 103. 5 104. 4 106. 4 108. 0 110. 3 110. 8 112. 4 114. 0	96. 1 95. 4 95. 5 94. 3 92. 7 95. 0 96. 3 97. 2 98. 0 98. 2 100. 2 103. 1	83. 3 83. 6 86. 2 86. 2 88. 4 88. 9 92. 0 96. 4 100. 1 103. 5 104. 3 105. 2	92. 9 91. 5 91. 0 91. 1 91. 9 93. 3 96. 3 97. 2 100. 7 102. 6 103. 5 103. 5	74. 3 75. 1 76. 6 79. 7 81. 2 84. 9 88. 7 91. 0 95. 3 98. 1 95. 9	104. 3 104. 5 103. 9 102. 4 104. 0 105. 0 105. 7 108. 9 110. 4 111. 4 113. 7 115. 6	68. 6 66. 1 70. 8 81. 8 91. 3 94. 2 87. 1 94. 0 93. I 90. 5 88. 9	108. 1 107. 9 107. 6 107. 5 110. 0 112. 0 117. 5 120. 8 119. 6 120. 3 121. 7	129. 8 127. 4 118. 8 111. 6 105. 8 104. 0 100. 2 99. 2 100. 3 100. 0 101. 0 102. 1			126. 1 124. 6 124. 8 122. 4 120. 6 111. 2 97. 6 87. 9 97. 3 103. 4 119. 7
Monthly average	106. 6	99. 5	117. 2	97. 8	109. 0	96. 8	93. 2	96. 3	86. 6	107. 5	84. 7	114. 6	108. 3			112. 9
January February March April May June July August September October November Docember	114. 0 113. 1 115. 2 113. 9 111. 7 110. 9 108. 4 108. 6 107. 1 103. 5 97. 5 90. 3	110. 3 111. 3 113. 4 112. 0 106. 4 109. 3 109. 0 107. 0 107. 6 106. 4 101. 2 89. 7	134. 8 133. 0 135. 6 134. 2 132. 0 133. 0 133. 7 131. 0 128. 2 117. 8 110. 4	109. 5 108. 5 110. 8 109. 9 107. 7 104. 1 96. 2 94. 0 90. 7 81. 3 73. 1	109. 0 105. 1 105. 6 103. 1 103. 2 104. 3 104. 9 104. 9 104. 3 102. 9	104. 4 102. 9 104. 6 104. 1 103. 8 103. 7 105. 5 105. 5 105. 8 105. 9 104. 8 101. 6	102. 4 102. 6 103. 2 97. 3 91. 1 95. 2 78. 4 86. 9 83. 5 81. 3 75. 3 69. 7	106. 4 105. 7 107. 3 106. 5 107. 0 107. 7 107. 4 107. 4 105. 4 101. 4 96. 9 91. 7	100. 2 101. 7 102. 2 100. 5 97. 4 94. 7 95. 1 88. 9 83. 2 73. 4 65. 4 61. 6	117. 0 114. 7 115. 3 112. 4 109. 2 104. 2 96. 1 93. 8 84. 4 81. 7 77. 5 75. 5	85. 0 81. 8 85. 1 88. 7 94. 7 94. 8 93. 2 90. 1 89. 0 87. 8 90. 9 87. 5	124. 8 122. 9 131. 2 129. 3 124. 4 128. 8 127. 0 125. 8 125. 5 122. 8 107. 7 85. 7	99. 8 98. 8 96. 4 96. 1 97. 8 98. 3 95. 8 98. 3			115. 7 110. 1 112. 3 113. 0 109. 2 109. 8 107. 2 106. 9 111. 8 115. 8 116. 4
Monthly average	107. 9	107. 0	128. 9	98. 3	103. 8	104. 4	88. 1	104. 2	88. 7	98. 5	89. 1	121. 3	97. 1			111.7
1921 January February March April May June July August September October November December	81. 3 82. 7 83. 1 82. 1 82. 2 81. 3 79. 9 81. 4 83. 3 84. 0 84. 2 83. 3	72. 7 75. 4 72. 7 65. 8 65. 6 61. 1 53. 8 57. 5 59. 8 63. 9 67. 7 68. 3	103. 0 94. 8 89. 7 84. 0 78. 6 74. 3 68. 6 67. 0 65. 0 65. 4 67. 3	71. 4 84. 1 89. 3 92. 7 93. 7 94. 3 94. 6 96. 0 100. 4 101. 5 99. 3 98. 9	90. 1 91. 8 93. 3 89. 7 90. 8 91. 4 93. 5 94. 5 98. 5 102. 1 103. 1 98. 3	96. 5 95. 2 93. 9 88. 7 83. 2 83. 6 84. 1 85. 5 87. 0 88. 8 91. 0 91. 5	69. 3 71. 9 73. 6 74. 4 75. 0 75. 2 73. 2 73. 5 74. 6 76. 0 78. 6	72. 0 69. 0 67. 5 67. 8 70. 3 68. 4 70. 1 72. 8 74. 5 76. 5 77. 1 74. 4	31. 9 38. 8 47. 2 58. 5 61. 9 59. 1 59. 2 59. 6 59. 3 59. 0 57. 0 53. 6	74. 0 80. 4 83. 2 82. 5 85. 8 89. 0 90. 8 94. 2 94. 3 93. 0 91. 9 94. 0	72. 2 62. 6 67. 1 73. 1 78. 0 76. 8 74. 9 76. 9 75. 0 74. 7	76. 8 69. 9 70. 7 72. 1 73. 4 72. 6 68. 7 74. 7 75. 5 79. 9 80. 6 78. 9				109. 0 105. 0 101. 7 108. 0 110. 5 112. 7 109. 3 109. 9 114. 6 116. 3 114. 7
Monthly average	82. 4	65. 4	77. 0	93. 0	94. 8	89. 1	74. 5	71. 7	53 . 8	87. 8	73. 6	74. 5	70.8			110. 5
January February March April May June July August September October November December	82. 6 84. 4 85. 4 87. 6 89. 5 87. 0 90. 3 93. 6 96. 5 98. 5 100. 0	65. 2 70. 5 73. 2 78. 5 81. 7 85. 9 86. 9 88. 1 88. 5 92. 9 96. 2 99. 0	70. 0 71. 0 74. 5 76. 9 79. 8 80. 6 80. 8 82. 0 87. 1 90. 3 94. 1 99. 0	98. 7 100. 7 97. 2 93. 9 92. 6 92. 0 91. 7 94. 2 97. 9 100. 3 102. 8 105. 6	92. 3 93. 0 94. 1 89. 1 90. 0 91. 4 94. 4 97. 7 97. 3 100. 3 103. 7 102. 3	93. 4 92. 7 91. 4 88. 7 90. 8 90. 6 92. 5 93. 8 94. 9 95. 7 97. 4	84. 7 89. 1 93. 1 92. 4 97. 2 100. 3 99. 2 99. 5 97. 7 98. 5 98. 5	70. 3 71. 5 74. 2 75. 5 79. 7 83. 6 58. 3 66. 4 77. 6 90. 1 94. 9 97. 9	52. 8 56. 5 60. 6 65. 6 77. 5 79. 2 78. 4 80. 2 78. 8 80. 0 81. 9	96. 0 96. 9 94. 6 90. 3 90. 0 91. 6 95. 3 99. 8 102. 7 105. 0 107. 2	70. 0 69. 0 77. 0 84. 8 93. 4 94. 0 93. 6 94. 3 94. 9 95. 0 96. 1 95. 1	76. 7 78. 6 81. 3 81. 7 86. 1 88. 7 92. 1 95. 5 95. 9 98. 7 102. 5 103. 2	69. 5 70. 5 73. 5 74. 5 76. 6 80. 6 83. 6 86. 7 90. 2 94. 0 95. 8			99. 4 104. 2 106. 0 100. 0 103. 4 104. 1 109. 8 109. 0 111. 8 113. 2 112. 7 112. 8
Monthly average	90. 1	83. 9	82. 2	97. 3	95. 5	92. 7	95. 5	78. 3	72. 0	97. 6	88. 1	90. 1	81.0			107. 2
1923 January February March April May June July August September October November December Monthly average	100. 6 102. 4 104. 9 105. 2 105. 3 105. 9 104. 8 103. 4 101. 3	99. 2 101. 7 103. 8 104. 3 105. 5 107. 8 105. 1 107. 3 106. 6 106. 3 104. 2 100. 8	100. 7 104. 6 108. 2 110. 1 110. 5 110. 8 111. 2 110. 6 109. 6 107. 2 105. 6 103. 4	106. 9 108. 1 110. 5 109. 7 108. 1 105. 9 101. 8 101. 6 103. 1 103. 0 102. 0 102. 3	96. 4 97. 4 98. 7 97. 3 98. 2 101. 5 103. 2 104. 3 106. 4 109. 1 107. 3 103. 7	96. 8 97. 3 99. 6 99. 7 99. 0 99. 0 98. 9 99. 1 100. 1 100. 8 101. 4	95. 6 97. 6 98. 6 100. 2 101. 5 103. 4 103. 9 103. 1 102. 4 101. 6 99. 4	101. 8 103. 5 106. 6 107. 5 108. 3 109. 8 107. 9 108. 3 107. 8 108. 7 107. 9 104. 1	87. 4 95. 4 99. 5 103. 8 105. 1 104. 6 101. 1 100. 2 101. 3 102. 9 103. 3 102. 7	110. 5 111. 6 111. 4 109. 1 106. 5 103. 6 101. 7 105. 2 104. 7 103. 9 103. 7 102. 1	91. 7 92. 7 96. 3 101. 5 105. 1 106. 2 104. 4 104. 2 103. 6 102. 9 101. 3 99. 4	104. 7 108. 1 111. 3 112. 5 111. 9 111. 1 108. 9 107. 3 103. 4 102. 4 101. 5	99. 7 104. 4 108. 5 104. 8 103. 9 101. 4 99. 9 100. 0 98. 7 98 8 98. 1	97. 5 98. 8 100. 7 105. 5 109. 3 108. 3 107. 8 106. 6 104. 0 101. 0 98. 6 96. 5	110. 4 115. 1 116. 3 116. 9 116. 4 111. 2 102. 1 90. 6 86. 0 85. 3 87. 9 91. 6	108. 0 107. 4 108. 6 105. 4 105. 5 103. 2 100. 0 105. 1 106. 4 107. 7 108. 7

¹ Compiled by the Federal Reserve Board from data collected by the U. S. Department of Labor, Bureau of Labor, Bureau of Labor, Statistics, U. S. Department of Commerce, Bureau of the Census and several other Federal and State governmental agencies. The indexes represent in their long-time fluctuations employment and pay rolls in all manufacturing industries, as shown by the Census of Manufactures from 1919 to 1927. Necessary adjustments will be made to succeeding censuses. In their current monthly fluctuations they represent 50 industries employing in the aggregate in 1927, 6,600,000 wage earners or about 78 per cent of the total engaged in manufacturing and accounted for about 80 per cent of the factory pay rolls of wage earners for that year. The industries are classified into 14 industrial groups, of which 13 are shown here. Each of the individual industry series, of which the indexes are composed, is adjusted to fluctuations shown by the census. For full description of these indexessee the Federal Reserve Butetin for November, 1929, pp. 706-716.

FACTORY EMPLOYMENT: INDEXES BY GROUPS 1—Continued

[Monthly average, 1923-1925=100. Without seasonal adjustment]

		Iron	Ma-		Food	Paper	Lum- ber	Tran tat equip	lôn	Leath-	Cc- ment,	Non-	Cheu	nicals	Rub-	_То-
YEAR AND MONTH	Total	and steel	chin- ery	Tex- tiles	prod- ucts	and print- ing	and prod- ucts	Group	Auto- mo- biles	er and prod- ucts	clay, and glass	fer- rous metals	Group	Petro- leum refin- ing	ber prod- ucts	bacco prod- ucts
1924	99.9	101.8	100.3	102, 4	100. 4	100.9	96. 5	102. 8	107.5	102. 4	94. 9	102. 0	99, 2	95. 9	92. 4	101.
anuaryebruary	101.1	106.3	99.6	103.6	101. 7	100.6	98.9	102.5	109.8	102.9	95. 5	106. 4	100.8	96.7	93, 7	102.
farch pril		108. 0 107. 4	100. 0 99. 2	102. 9 98. 3	100. 5 97. 3	100.7 100.1	99. 0 100. 0	102. 9 101. 3	111.8 107.1	103. 1 97. 6	100.3 103.9	106. 4 103. 7	103. 1 102. 1	96. 8 97. 7	93. 3 92. 1	101. 97.
ſау	_ 96.3	100. 2 94. 7	95. 1 92. 2	94.1	96.8	99. 6	99.9	96. 4 91. 6	96. 8 86. 4	93. 2 88. 2	104.3 102.1	98. 0 91. 8	96. 0 89. 7	98. 0 98. 1	91. 1 88. 2	97.
uneuly	90.5	89.0	88.3	91. 1 84. 1	98. 9 99. 5	98. 9 97. 2	97. 4 96. 1	89. 5	82. 2	88.4	98. 2	87.0	89.6	98.2	84.0	96. 97.
.ugusteptember	91.8 94.3	87. 8 90. 1	88. 0 88. 1	86.9 91.8	99. 7 102. 1	97. 2 99. 6	96. 4 97. 5	89. 3 89. 7	83. 3 83. 9	92. 9 96. 4	99. 1 97. 9	85.3 87.3	90. 2 93. 0	97. 2 95. 6	84. 6 93. 7	97. 99.
october	95. 1	92.8	89. 2	95.1	102. 2	100.3	98.7	91.0	85.0	97.6	97.9	88,7	94.4	94.5	93.0	92,
Jovember December		92.8 96.0	90.1 92.8	94.6 97.5	100.4 100.8	100.9 101.5	98. 2 98. 2	89. 9 91. 4	83. 1 85. 5	97. 1 96. 2	97.3 96.5	91. 0 93. 4	95. 2 96. 9	94.6 94.5	97. 2 98. 5	101. 100.
Monthly average	` 	97. 2	93. 6	95. 2	100.0	99.8	98. 1	94. 9	93.5	96.3	99. 0	95. 1	95. 9	96. 5	91.8	98,
1925									1						_	
anuary February		98. 9 101. 3	93. 9 95. 8	98. 8 101. 4	98. 1 98. 4	100.8 100.8	97. 8 99. 6	93. 2 94. 2	89. 4 90. 6	99. 5 101. 3	91. 8 93. 2	95.3 98.1	97. 3 101. 2	94. 1 95. 2	99. 6 102. 9	95. 96.
Aarch	99.5	101.9	96.8	102.8	96. 2	101.5	99, 3	97.0	97.1	101. 2	97.5	98.5	107. 2	95, 2	103.7	97.
April May	99. 3 98. 4	99. 8 98. 4	97. 7 97. 3	101.6 99.0	93. 2 93. 7	100.6 99.7	100.7	99. 8 100. 0	104. 9 110. 9	97. 2 95. 6	102. 2 103. 4	97.3 98.7	107. 2 98. 3	96. 6 97. 2	104. 9 108. 2	89. 95.
une	98. 2	96.6	97.4	97.6	97.1	99.5	101. 2	97. 7	105.8	90.8	103. 7	98.5	98. 1 99. 5	100. 1 103. 0	109.1	93.
uly \ugust	98. 1 99. 8	94. 5 95. 6	97. 0 97. 7	94. 8 96. 2	97. 2 97. 6	99. 5 99. 3	100.7	97.3 97.9	105. 1 106. 9	93. 8 98. 7	102. 8 101. 8	96. 6 96. 5	100.5	104.1	109. 7 110. 1	94. 93.
August	102. 0 102. 4	96.3	99.3	97. 9	100.1	100.4	103.0	99. 2 101. 7	111.5	100.6 100.3	102. 4 102. 6	97. 1 97. 5	105. 2 105. 3	105. 7 105. 2	109. 0 102. 6	95.
October November	101. 9	97. 9 98. 8	101. 8 104. 0	101. 2 101. 7	102. 7 101. 5	102. 2 103. 3	103. 5 102. 9	101. 2	118. 6 117. 4	97.3	101.5	99.6	105.7	105.4	102. 2	98. 97.
December	101.6	100. 4	105. 9	101. 6	100. 4	103, 9	101.7	100. 4	111.7	94. 2	99. 8	100.6	106. 1	105. 9	106. 4	98.
Monthly average	99.7	98.4	98.7	99. 6	98.0	101. 0	101.0	98.3	105. 8	97. 5	100. 2	97.9	102. 6	100.6	105.7	95.
1926 anuary	100.8	100.0	107. 0	101. 6	97.9	103. 5	99. 0	100.6	111.8	96.4	94.8	99.8	107. 5	104. 7	108. 1	88.
February March		102. 0 102. 0	108, 8 109, 5	102. 0 102. 4	97. 2 96. 4	102. 7 103. 3	99. 4 99. 6	102. 3 104. 2	114.0 116.4	98. 4 97. 2	95. 4 97. 3	102. 7 104. 4	109. 2 112. 2	105. 7 105. 5	108.6 108.0	92. 92.
April	101.9	102.8	108.7	100.4	93, 8	102. 7	101.4	102.9	112. 5	92, 7	100.8	103.2	111.6	107. 5	107. 5	88.
May une	100.9 100.7	101. 7 100. 6	107. 9 108. 9	97. 9 95. 1	95. 3 97. 7	102. 7 102. 6	101. 5 101. 6	100. 8 99. 3	107. 9 105. 8	91. 4 91. 4	104. 6 106. 5	100.8 98.4	106. 1 105. 7	107. 9 110. 7	104. 2 102. 6	88. 91.
uly	99.3	99.4	107.7	89.0	98.1	102. 2	101.0	97. 5	102.8	95.0	104.8	96. 9 97. 4	105.0	112. 1 112. 4	97.3 104.1	89,
August September	101.1	100. 9 102. 6	107. 9 108. 1	90.7 96.3	98.7 101.6	102. 4 104. 0	102. 0 101. 6	97.8 97.8	105. 0 104. 4	99. 6 101. 3	106. 0 106. 4	98.5	106.3 110.9	113.9	107.8	86. 91,
October	103. 2	102. 7 101. 6	108, 5 106, 1	99.3 99.2	103.7	105. 2	101.4	95. 4 91. 8	100. 0 91. 4	101. 1 99. 7	104.8 103.1	97. 5 98. 0	111.3 110.7	114. 4 113. 9	106. 5 100. 8	93. 93.
December		99.1	106. 1	100.9	101. 6 99. 4	106. 3 105. 9	100. 0 97. 8	89.5	85. 7	97. 5	98. 5	96.6	109. 2	113. 7	100.1	93.
Monthly average	101.4	101.3	107.9	97. 9	98. 5	103. 6	100. 5	98.3	104.8	96.8	101. 9	99. 5	108.8	110, 2	104.6	90,
1927	98. 1	97. 0	104. 2	101.1	97.4	104.0	93.1	88. 1	85. 5	99. 5	91. 7	96. 5	110, 2	115.0	100.8	85.
February	99.7	98. 9	105.3	103.0	97. 2	104.1	92. 2	92.4	96.5	100. 2	92.8	97.4	111.5	116.1	102. 2	91.
March April		100. 1 99. 9	104. 8 103. 3	103.8 102.1	96. 4 95. 4	104. 0 103. 2	91. 9 91. 7	93. 5 93. 7	100. 6 101. 1	100. 0 95. 4	97. 1 100. 7	100. 5 100. 4	115, 1 115, 0	117. 1 114. 7	102. 8 106. 9	91, 90.
May	99.1	99.4	101.4	100.1	96, 2	102. 2	92.6	93, 4	101. 1	93.8	102, 2	101.7	106.7	112.3	110.1	91.
une uly August September	99. 0	98. 2 95. 7	101. 1 99. 0	98. 8 96. 4	100.7 99.8	101. 9 101. 2	92. 7 92. 5	91.0 87.6	95. 1 88. 5	93. 7 97. 2	102.6 100.6	99. 0 98. 0	104. 5 103. 6	111.3 111.3	108, 4 105, 0	94
August	99. 2 100. 6	95. 7 96. 1	98. 7 97. 5	98. 4 101. 4	99. 1 102, 5	101.8	93. 4 94. 1	88. 0 86. 1	92. 1 88. 8	100.6 101.1	98. 8 98. 6	97. 7 96. 0	104. 0 106. 9	109. 4 107. 3	104.3 104.3	88 98
)ctoper	99.3	95. 2	96. 7	102.1	103. 1	102. 8 103. 4	93. 5	85.1	87, 5	99. 2	96.8	95. 1	106.3	104. 3	101.9	101.
November December	96. 9 95. 5	93. 6 92. 2	94. 4 93. 6	101.5	101.3 100.2	104.3 104.5	91. 9 88. 5	80.5 81.2	79. 2 82. 7	94. 0 92. 3	96. 1 91. 7	93. 9 92. 8	105. 9 104. 5	102. 0 101. 2	99. 2 102. 2	100 96
Monthly average		96. 8	100. 0	100. 8	99. 1	103. 1	92. 3	88. 4	91.6	97.3	97. 5	97.4	107. 9	110. 2	104. 0	93.
1928	}	li														
anuary February	94. 2 95. 7	91.0 94.0	92.8 94.1	99. 7 100. 7	96. 8 97. 8	103. 0 102. 4	85. 3 85. 4	83. 0 86. 1	89. 7 98. 3	96. 2 97. 9	85. 9 86. 5	89. 8 93. 6	103. 3 106. 5	101. 1 100. 8	105. 1 107. 6	88 92
March	i 96.6	95.4	95. 5	100.3	97.4	101.4	86. 7	88. 2	102.6	97.3	89.4	94.6	110.4	101.0	106.0	93
April May	96. 0 95. 7	95.3 95.7	95. 9 97. 4	97. 0 93. 4	95. 6 96. 1	100.3 100.6	87. 5 87. 4	89. 7 92. 4	105. 2 111. 3	92. 4 89. 8	91. 8 95. 3	95. 9 95. 9	109. 9 101. 5	99. 4 99. 2	105. 7 105. 4	91 92
une	96. 2	95. 5	98. 2	91.8	97.6	100.5	88.3	92.4	111.3	89.7	96. 2	96.0	101.0	101. 5	105.4	93
uly August	98.3	93. 6 95. 9	97. 9 99. 5	87. 8 89. 4	97. 9 97. 4	100.5	87. 5 89. 5	91. 6 94. 2	111. 2 118. 1	95.9	94. 6 96. 6	95. 3 96. 0	100.4	102. 6 103. 9	110.7 111.6	88 94
September October	100.3	96.4	101. 4 102. 8	92.6	100.5	101. 1	90.4	95. 4 94. 4	121. 5 119. 8	96. 1 94. 6	96.0	97. 6 100. 0	106.8 107.4	105. 8 104. 3	113. 4 113. 2	96 99
November	98.8	96. 9 97. 7	103.8		102. 6 101. 9	102. 4 103. 7	90. 6 90. 5	90. 2	. 109. 1	89.3	94. 1 91. 8	102, 2	107.3	104.0	109.8	98.
December		97.1	105, 2	97.0		103.6	88. 2		107.7	88.6	89. 5	102.4	107.8	104.7	109.6	95.
Monthly average	97. 2	95.4	98.7	95. 1	98.6	101.7	88.1	90, 6	108.8	93.5	92.3	96.6	105. 3	102. 4	108.6	93.
anuary	97. 4	97. 1	106.7	95.9	98.6	102. 5	85. 5		118.3	91. 9	84.3	102, 4	107. 6		112. 2	
ebruary	99.7	98.3	110.4	98.0	98. 8 97. 6	103.4	85.8	99.0	129. 5	94.1	84.5	106.1	110.9	106.7	112.3	92
March April	101.3	99.3 99.7	116.7	99.3	96.2		88. 2	101.7	131.4	90.6		107.9 107.7	119.0	111.9	113.3 1 14. 3	91
April May June	101. 6 101. 2	100.7 100.8	119.1	97.3	97. 3 99. 2	102. 8 103. 2	89. 2	101.5	130.0	90.3	93. 1	105.3	110.3	114. 4	115.3	90
fuly	100.7	99.8	121.5	91.5	99.8	103. 2	90. 5	96.4	117.8	94.6			108.9	120.0		90
August	102.0	101.0	119.4	94.2	99.7	104, 1		95. 5	115.0	98.1	93.8	99.8				

¹ See footnote, on p. 19.

FACTORY PAY ROLLS: INDEXES BY GROUPS 1

[Monthly average, 1923-1925=100. Without seasonal adjustment]

		Iron	Ma-	_	Food	Paper	Lum- ber	Tran tati equip	lon	Leath-	Ce- ment.	Non-	Cher	nicals	Rub-	To-
YEAR AND MONTH	Total	and steel	chin- ery	Tex- tiles	prod- ucts	and print- ing	and prod- ucts	Group	Auto- mo- biles	er and prod- ucts	clay, and glass	fer- rous metals	Group	Petro- leum refin- ing	ber prod- ucts	bacco prod- uets
1919																
January February	97. 2 91. 0	115. 5 108. 0	103. 7 99. 9	73. 5 64. 8	96. 5 95. 8	70.0 69.3	74.2	95. 9 85. 1	59. 8 64. 1	93. 4 90. 2	59. 1 56. 2	107. 5 99. 8	112. 1 105. 5			110. (105. (
MarchApril	91.6 90.9	102, 3 94, 6	98. 6 95. 8	69. 9 74. 9	96. 5 92. 4	69. 8 69. 3	74. 4 77. 8	85. 8 85. 0	65. 3 67. 7	89. 0 86. 1	61. 3 66. 6	91. 6 89. 2	97. 9 93. 6			109. 4 102. 3
May	91, 4	87.5	92.7	80.3	92.9	68, 2	83.4	86.1	71.3	90.0	69. 6	89. 7	90.7			107. 4
June July	93. 0 95. 8	88. 4 91. 0	88.7 90.2	89. 1 97. 1	95. 2 95. 1	72.9 74.5	87. 7 92. 1	82, 2 83, 8	69. 2 73. 0	93. 6 97. 5	79. 5 73. 8	77. 6 81. 9	91. 4 92. 3			97. 1
August	100.9	106.7	100.4	101.7	97.0	77.3	94.8	81.9	74.9	104.1	78.0	88.4	90.9			84.6
September October	105, 9 100, 8	106.3 78.8	110.0 113.7	105. 0 102. 3	100. 5 99. 9	81. 6 71. 0	98. 9 99. 1	90. 1 93. 9	83. 7 92. 5	105. 8 108. 1	81. 2 81. 6	109. 7 115. 2	98, 9 104, 6			101. 9 106. 1
November December	105. 4 113. 4	90. 7 106. 9	123. 7 131. 5	103. 7 117. 9	104, 8	74. 0 91. 9	105. 4 109. 4	97. 7 97. 6	90. 5 86. 6	110.7 119.8	83. 5 80. 6	118. 1 122. 5	110.7 112.8			134. 8 138. 3
					109. 1											
Monthly average	98, 1	98. 1	104.1	90. 0	98.0	74. 2	89. 2	88.8	74. 9	99.0	72.6	99.3	100. 1			107. 2
1920 January	117.3	117. 5	134. 9	122. 9	107, 2	94.3	115. 9	100.5	96. 6	122, 9	79.4	124.5	114.5			126. 8
February	115.9 124.2	122, 9 132, 0	128. 5 141. 3	121.4 127.8	103.0	93.0	114. 4 121, 3	99. 4 107. 3	94.7	116. 4 122. 4	74.6	125. 1	110. 5			115. 8 129. 2
MarchApril	121.6	125. 7	139. 1	124.4	108, 6 100, 8	98. 8 96. 7	114.6	106.5	101. 1 97. 3	120.7	80. 7 88. 7	138. 9 137. 9	115. 5			126. 8
May June	123.3 125.2	122. 4 128. 8	139. 7 144. 0	121. 3 119. 2	111. 7 115. 2	100. 3 100. 9	113.6 113.2	116. 2 116. 9	102. 8 97. 7	118.3 118.7	98. 6 101. 7	133. 5 140. 6				128. 9 130. 0
July	120.3	121.6	145.6	107. 1	114.1	101.0	108.3	111.2	97. 2	110.0	99.5	140.8	116.3	l	l _	118, 3
August September	$123.0 \\ 121.1$	124. 0 129. 7	143. 4 139. 1	105. 4 102. 7	112.8 111.9	103.6 104.3	113. 6 109. 1	124.6 121.1	96. 9 92. 6	106. 7 92. 0	99. 2 99. 0	138. 1 143. 7	118. 9 113. 4			117. 3 123. 7
October	117. 2	132, 2	130, 2	93.0	111.0	106.5	105.1	120.6	88. 1	84.8	100.9	134, 2	119.0			125. 2
November December	108.4 99.6	123.6 105.4	124. 1 117. 6	79. 0 69. 6	109.6 104.2	104, 8 99, 3	94. 4 87. 3	108.6 104.7	62. 5 56. 9	79. 9 78. 1	103.3 97.7	118. 2 88. 7	113.3 97.1			128. 6 125. 2
Monthly average	118. 1	123. 8	135. 6	107.8	109. 2	100.3	109. 2	111.5	90, 4	105. 9	93. 6	130. 4	113. 7			124, 6
1921																
JanuaryFebruary	84. 0 82. 3	81. 0 79. 1	105. 7 88. 2	66. 1 82. 2	96.3	93. 3 89. 2	68. 6 71. 1	78. 9 71. 9	25. 2 28. 4	72, 0 85. 9	74. 6 60. 6	74. 7 67. 2	86. 6 73. 9			108. 4 101. (
March	82.4	72.5	84.5	90.4	96. 6 96. 9	88.4	72.6	72.1	38. 7	85.1	64.0	64.8	73.2		1	101. (
April May	79. 6 78. 0	59. 4 57. 1	79. 3 73. 3	92. 1 90. 4	89. 8 92. 5	83. 1 76. 4	70.9 69.0	74. 4 74. 6	57. 7 61. 9	81.7 83.2	69. 3 73. 0	66. 0 67. 0	68. 0 66. 2			102. 6 110. 6
June	76.1	47.9	66.1	91.8	90.8	78.3	71. 9	72.8	60. 4	89. 2	72.0	66.8	64.5			112, 6
July August	72. 2 74. 4	37. 4 42. 6	60. 0 57. 6	91. 4 94. 4	91. 9 91. 0	78. 7 79. 7	63. 9 69. 9	71. 0 73. 3	60. 4 58. 0	89.5 94.8	65. 0 68. 1	60. 0 65. 9	63. 4 58. 7			105, (104, (
SeptemberOctober	73.9	42.1	56.1	97.4	93.6	80.8	65.8	71.4	55. 3	92.9	66.0	64.0	58. 2			108.
November	73. 1 72. 0	47.3 50.1	53. 5 54. 1	91, 8 88, 4	97. 1 93. 6	82. 2 83. 2	63. 5 64. 6	72. 7 70. 8	50, 0 46, 0	88. 8 85. 7	65. 3 65. 2	67. 5 69. 1	63. 5 64. 8			104, 0 95, 9
December	73.6	52. 5	56.6	94. 0	89. 5	85. 9	65. 9	68. 8	42.6	95. 5	66. 4	67.7	62.3			100, 8
Monthly average	76.8	55.8	69. 6	89. 2	93.3	83.3	68. 0	72. 7	48.7	87. 0	67.4	66.7	66. 9			104. (
1922 January	69. 7	47.6	57.3	90.4	85. 4	83. 5	68.9	57. 2	31.0	97.2	58.3	66. 2	62.3			87.
February March.	72.7 74.8	53, 2 56, 5	59. 4 62. 9	95. 0 91. 0	84. 4 86. 1	80. 9 84. 6	73. 9 78. 5	64. 2 69. 2	46. 6 50. 0	98. 1 92. 7	54.0 58.5	65. 7 71. 7	62.3 64.8			85. 9 92. 6
April	73.8	60.1	64.6	83.8	80.4	82.5	77.6	71.0	60.0	86.8	64.1	72.5	66.1			80.7
May June	77. 2 80. 4	64. 9 69. 6	68. 2 71. 0	83. 1 84. 4	85, 7 88. 9	84. 4 84. 5	81, 1 84, 4	76. 9 82. 3	68, 1 73, 3	86. 2 89. 5	74.0 77.4	77. 2 81. 0	68.3			93. 6 98. 9
July	77. 6 82, 4	65. 9	71.9	87.3	90.4	83.7	82.3	62. 5 72. 9	73. 2	92.5	79.1	81.6	73.3		l	104, 4 104, 1
August September	86.5	72.6 77.9	74. 8 78. 3	90, 1 94, 1	90.1 94.3	85. 6 88. 5	86. 4 86. 3	81. 0	78, 7 76, 1	98. 5 100. 2	79. 9 81. 6	86. 5 91. 2	79.6			107, 9
October November	89. 4 93. 1	85, 2 91, 1	83. 0 87. 5	93, 9 97, 9	96. 2 101. 2	90. 0 91. 2	87. 5 89. 4	88. 9 93. 9	77. 1 79. 0	99. 3 103. 2	81.7 84.2	92. 8 98. 9	84. 2 87. 8			108. (113. (
December	95. 6	93. 9	94.8	100. 5	99.0	93. 8	89.3	96. 3	80. 9	108. 4	85. 1	101.8	91. 2			113.
Monthly average	81.1	69. 9	72.8	91.0	90. 2	86.1	82. 1	76. 4	66. 2	96. 0	73. 2	82. 3	73.7			99. 2
1923 January	94.1	93. 3	91.8	103. 2	93. 5	92. 1	87.4	92. 7	77. 0	110.9	83, 1	96. 5	93. 1	96.5	106.0	108. 8
February	97.8	98.8	97.1	106.0	94.0	93.0	89.9	99.0	92.6	113. 1	84. 4	101. 2	95.6	96.6	112.9	104. 3
March April	102.8 103.9	101. 9 100. 0	103. 5 108. 5	111. 2 108. 9	96. 5 95. 3	96. 0 96. 7	93. 9 98. 1	106. 6 108. 8	101. 0 106. 1	115. 7 112. 2	90. 5 98. 5	108.5 114.7	101. 2 102. 2	101. 5 105. 4	118.0 121.3	107. 9 103. 1
May	107.3 107.5	109, 7	112.3	111.0	97.5	97.5	102. 1 104. 8	112. 0 111. 4	108.0	110. 4 105. 8	104. 2	116. 1	103. 3 101. 6	107. 6 108. 3	119. 4 114. 2	101, 9 104, 7
Maren April May Unne July August September October November December	107. 5	111. 5 98. 8	113. 8 111. 3	108. 0 102. 2	101. 0 101. 8	97. 2 96. 2	103.7	107.4	102. 2 99. 4	99.4	105. 2 99. 9	113. 0 109. 2	102.0	110.3	94.5	100.7
August	104. 2 104. 8	106.6 105.4	110. 2 109. 6	102. 6 104. 2	100.3 105.0	92. 8 95. 6	103. 0 103. 5	109. 1 106. 7	101. 9 98. 9	104.0 103.8	104.0 104.2	102. 9 101. 2	98. 7 100. 4	103. 7 104. 4	85. 1 84. 7	90. 9 101. (
October	107. 2	110, 2	110. 1	106. 2 101. 7	106.3	98.0	105. 2	114, 2	110. 1	103.1	106.6	98.8	102.4	102. 5 94. 5	84.1	108. 4
November December	104.9 103.1	107. 0 102. 9	107. 7 107. 9	101. 7 104. 1	106.3 103.9	98. 1 100. 3	105. 2 103. 0	112. 9 104. 7	109. 9 102. 6	99.9 · 102.7	105. 0 101. 8	99. 3 102. 1	98. 9 98. 7	94. 5 94. 1	86.7 90.8	108. 3 110. 9
														1 244 2	1 20.0	

¹ See footnote on p. 19.

FACTORY PAY ROLLS: INDEXES BY GROUPS 1—Continued

[Monthly average 1923-1925=100. Without seasonal adjustment]

Table Steel Property Steel Property Steel Property Steel Property Steel Property Steel Property Steel Steel Property Steel Steel Property Steel Steel Property Steel S			- Live	tontary	average	1929-10	~ 100.	***************************************	ut seasu		ustinei	· • j					
Techal and Company Techal and Company Techal and Company Techal and Company Techal and Company Techal and Techa			Iron	Ma-		Food			tati	ion				Сћеп	nicals		To-
January	YEAR AND MONTH	Total	and	chin-		prod-	print-	and prod-	Group	mo-	prod-	clay, and	rous	Group	leum refin-	prod-	bacco prod- ucts
Pebruity																	
March. 183.5 114.1 101.2 180.5 180.3 101.0 101.5 104.1 113.0 180.3 160.8 161.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 101.0 102.1 62.9 8.8 107.7 102.1 62.9 8.8 107.7 102.1 62.9 102.7 102.1	February																103. 7 102. 7
May	March	103.8	114.1	101. 2	105. 5	100.3	101. 0	101. 5	104. 1	113. 0	103. 3	103.8	110. 1	102. 1	95. 9	93.8	102.1
June 917 88.5 918 85.5 10.8 85.5 10.8 85.5 10.8 88.6 94.4 10.4 70.4 86.1 10.7 81.1 10.7 7 90.1 92.7 90.3 88.4 92.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10	May					97. 1									95.8		93. 6 96. 0
Monthly average	June	91.7	88.5	91.8	85. 5	100.8	98.5	99.4	89. 4	79.4	85. 1	105. 7	89. 1	92. 7	99. 3	86.4	99.3
Monthly average	August	85. 1 88. 9								72. 3 77. 8						82. 4 84. 2	96. 6 96. 4
Monthly average	September	92. 3	86. 5	84.2	92. 2	103. 5	99. 1	97. 0	86.3	80.8	99. 7	97. 4	86. 9	93. 3	94.0	95. 9	100. 5
Monthly average	November	93. 2 93. 5															91. 5 104. 3
Annary 1025 95.4 101.7 94.0 100.9 99.0 103.0 99.2 83.5 77.5 99.6 88.8 98.0 97.7 02.9 99.4 9	December																106. 6
Panuary	· -	95. 7	96. 7	92. 6	94. 4	100. 5	99. 7	98. 4	93. 2	90. 2	95. 5	100. 7	94.8	96. 3	95. 2	92. 7	99. 4
Pebruiky		95.4	101. 7	94. 0	100.9	99.0	103. 0	93. 2	83. 5	71. 5	99.6	88.8	98.9	97. 7	92.9	99.4	99.6
April	February	100.9	104. 9	98. 2	105. 3		102.8	99. 6	98. 1	95. 2	104. 2	94. 5	101.6	102. 5	97. 4	104. 9	92. 9
May	April												97. 1				94. 0 79. 1
July 97. 1 89.7 97.2 83.1 99.3 100.7 99.4 96.4 107.9 103.7 99.6 97.3 100.6 10.8 108.7 110.2 9 94.4 107.9 103.7 103.5 104.8 107.7 103.6 108.5 108.8 107.7 103.6 108.5 108.8 107.5 108.8 108.5 108.5 108.8 108.5 108.8 108.5 108.8 108.5 108.5 108.8 108.5 108	May	100.7	101. 1	100. 2	97. 5	96. 3	102. 5	101. 2	104. 2	118.7	95. 0	104.4	101. 6	102. 2	102. 5	112.0	96.5
September 99.4 92.8 97.0 94.1 99.9 102.3 103.2 96.8 111.5 99.8 100.1 94.6 102.8 104.4 105.8 90.0	July		89.7	99. 1													95. 9 94. 4
September 105.2 101.0 104.3 102.5 104.1 107.5 108.8 106.3 122.1 101.1 104.7 98.2 107.5 108.2 99.8 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 107.5 108.6 108.7 108.6 108.7 108.6 10	August		94.8	97. 7		99. 1		100. 7	95.8	104.7	103. 9	102. 7	99. 6		108.0		95. 5
November 108.1 100.1 107.6 107.7 108.3 109.9 107.6 122.7 107.6 122.7 108.1 109.1 108.6 90.0 10	October						102. 3										95. 5 102. 9
Monthly average	November	105. 1	100. 1	107. 6	101. 7	103. 3	109. 9	105. 7	107. 6	128.7	93. 4	103.7	101. 7	109. 1	108.6		104.5
Tanuary 1926 101.2 101.4 100.5 102.9 100.2 100.7 95.8 20.0 97.4 98.7 92.2 103.2 100.6 107.0 108.1 97.0 108.1 107.0 107.0 108.1 107.0 107.0 108.1 107.0 107.0 107.0 107.0 108.1 107.0 1				====					====								96. 3
January	- 1		Ì				ļ										
March. 107.4 107.4 115.6 106.3 98.9 111.0 101.4 107.0 121.9 99.8 97.6 100.0 113.2 107.4 109.2 5 5 5 5 5 5 5 5 5	January																91. 2
April	March					99. 4 98. 9				118. 9 121. 9							89. 5 94. 0
August	April	105. 3	106. 5	113.8	100. 5	95. 6	110. 2	101. 4	106. 2	118.0	90.7	99. 4	106.6	112. 9	108.8	109. 5	87. 7
August	June																87. 2 92. 9
November 104.6 105.6 109.6 99.6 108.4 113.2 104.8 94.0 92.7 98.8 103.5 102.0 113.2 114.6 106.6 99.6 103.8 103.7 112.0 103.7 102.8 114.6 101.3 88.6 78.3 97.1 99.3 102.3 113.2 115.7 103.0 99.6 99.6 103.8 103.7 112.0 103.7 102.8 114.6 101.3 88.6 78.3 97.1 99.3 102.3 113.2 115.7 103.0 99.6 109.7 109.7 109.7 109.8 109.7 109.8 109.7 109.8 109.7 109.8 109	July		97. 9	108. 6	85.4	101.6	107. 3	98.6	94. 0	97. 1	97. 6	101. 6	99. 2	106. 9	110.0	100.0	89, 5
November 104.6 105.6 109.6 96.6 108.4 113.2 104.8 94.0 92.7 98.8 103.5 102.0 113.2 114.6 106.6 99.6 103.8 103.7 112.0 103.7 102.8 114.6 101.3 88.6 78.3 97.1 99.3 102.3 113.2 115.7 103.0 99.6 99.6 103.8 103.7 112.0 103.7 102.8 114.6 101.3 88.6 78.3 97.1 99.3 102.3 113.2 115.7 103.0 99.6 99.6 104.3 104.2 111.9 98.4 101.2 110.4 102.0 99.1 105.2 98.1 101.5 103.0 111.0 111.4 106.2 99.6 109.7 109.7 109.8 109.8	September																88. 7 93. 9
Monthly average	October	108. 3	108.9	113. 3	102. 6	106. 0	112.5	106.6	100. 7	107. 1	105.8	106. 0	102. 4	114.0	114. 9	109. 2	98.0
January Janu	December																97. 1 95. 0
January	Monthly average	104. 3	104. 2	111. 9	98. 4	101. 2	110. 4	102. 0	99. 1	105. 2	98. 1	101. 5	103. 0	111. 0	111. 4	106. 2	92. 1
March 103.3 111.5 109.7 100.0 111.2 93.9 95.9 98.8 105.1 92.8 103.2 114.8 120.0 108.2 58.4		00.4		-07.1	100.0			01.4								100.4	
March 106.5 106.6 111.5 110.9 99.3 112.0 95.1 99.0 108.0 102.9 97.6 99.4 118.1 121.2 109.2 84.2 104.3 102.6 107.3 101.2 101.1 110.1 96.4 101.6 111.6 93.9 104.1 106.8 109.3 113.2 118.1 191.2 106.0 100.4 105.2 108.4 96.3 92.1 91.9 95.0 101.9 103.5 110.3 116.6 114.3 101.2 101.1 110.1 96.4 101.6 111.6 114.3 102.6 107.2 1	February																82. 5 85. 7
May	March											97. 6		118. 1) 87 .4
July 102.5 101.2 106.0 100.4 105.2 108.4 96.3 92.1 91.9 95.0 101.9 103.5 110.3 116.6 114.3 101.9 101.9 103.5 110.8 108.5 93.4 101.9 103.5 102.8 103.5 10	May		100. 3														84. 4 90. 4
August 102 2 96.5 101.8 101.6 102.6 107.7 96.4 91.6 95.3 108.6 97.7 99.4 105.6 110.5 108.2 98.6 101.1 94.9 97.5 106.7 105.1 108.7 97.5 86.9 89.6 106.1 95.9 97.7 106.3 107.6 108.2 99.0 99.5 96.3 98.4 107.3 105.6 107.6 108.2 99.0 99.5 96.3 98.4 107.3 105.9 105.0 99.0 99.5 96.3 98.4 107.3 105.9 105.0 99.0 99.5 96.3 98.4 107.3 105.9 105.0 99.0 99.5 99.5 105.0 105.0 105.0 109.0 99.5 99.5 99.5 103.5 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.9 105.0 109.0 109.1 109.1 100.3	June		101. 2						92. 1				103. 5				93. 8 92. 8
October. 102.5 95.7 98.8 107.3 105.4 110.4 98.8 89.8 99.0 99.5 96.3 98.4 107.3 105.0 102.4 103.8 111.4 96.3 84.1 18.5 87.5 94.0 95.6 105.8 103.7 98.4 98.4 99.4 93.4 97.6 104.1 103.3 113.6 92.3 86.8 88.7 88.8 89.9 98.9 107.3 103.5 106.2 99.0 Monthly average 102.0 98.5 103.5 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 9 Honthly average 102.0 98.5 103.5 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.9 January 95.7 89.9 94.5 101.0 100.3 110.6 83.2 <td>August</td> <td>102. 2</td> <td>96.5</td> <td>101.8</td> <td>101.6</td> <td>102. 6</td> <td>107. 7</td> <td>96.4</td> <td>91. 6</td> <td>95. 3</td> <td>108. 6</td> <td>97. 7</td> <td>99. 4</td> <td>105. 6</td> <td>110. 5</td> <td>108.7</td> <td>86.9</td>	August	102. 2	96.5	101.8	101.6	102. 6	107. 7	96.4	91. 6	95. 3	108. 6	97. 7	99. 4	105. 6	110. 5	108.7	86.9
November 98.5 92.6 95.0 102.4 103.8 111.4 96.3 84.1 81.5 87.5 94.0 95.6 105.8 103.7 98.4 93.4 97.6 104.1 103.3 113.6 92.3 86.8 88.7 88.8 89.9 98.9 107.3 103.5 106.2 99.4 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.4 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.4 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.4 104.1 102.4 110.1 95.1 91.3 93.5 98.6 96.2 100.3 109.7 112.2 108.5 99.4 104.1 110.1 100.3 99.0 105.0 102.0 109.7 87.2 94.1 111.0 101.4 84.3 101.5 106.4 103.5 115.7 88.4 101.1 100.3 99.7 101.8 101.9 104.0 101.3 109.8 89.5 97.9 117.2 99.9 87.3 102.5 108.8 103.4 114.6 89.4 114.1 100.3 99.7 101.8 95.3 97.5 109.0 89.6 99.4 119.3 86.0 90.5 102.4 108.7 104.2 113.0 89.4 100.8 102.1 104.2 92.0 100.2 108.9 90.5 100.9 124.2 82.9 94.0 105.3 103.4 104.6 109.3 109.8 103.4 104.6 109.9 96.6 106.1 90.9 102.8 109.9 91.3 98.5 117.6 87.1 94.0 104.8 102.9 104.2 112.5 88.4 114.1 102.8 102.9 104.2 102.5 80.2 102.5 103.4 104.2 104.2 92.0 100.2 109.8 109.9 109.1 117.6 87.1 94.0 104.8 102.9 104.2 112.5 89.4 104.2 102.5 99.8 105.3 90.2 101.5 107.5 91.5 100.4 128.3 100.4 95.1 106.7 103.6 108.6 117.9 88.9 100.8 104.2 99.1 106.0 94.9 104.3 100.2 93.4 100.1 128.0 99.6 92.8 109.4 106.3 109.3 109.3 123.8 90.0 100.2 102.5 107.1 114.8 89.5 100.4 103.5 114.1 100.1 11.3 101.0 106.0 111.5 98.8 104.7 134.1 95.9 94.1 116.6 109.2 107.8 112.4 90.0 100.9 111.5 98.8 104.7 134.1 95.9 94.1 116.6 109.2 107.8 112.4 99.0 100.9 111.5 96.8 104.9 111.5 94.4 96.1 114.5 80.1 90.7 118.5 108.2 107.1 112.4 99.0 107.1 112.	October																98.0 99.0
Monthly average	November	98. 5	92.6	95.0	102. 4	103.8	111. 4	96.3	84. 1	81. 5	87. 5	94. 0	95. 6	105.8	103. 7	98. 4	98.1
1928 95.7 89.9 94.5 101.0 100.3 110.6 83.2 83.4 88.2 95.3 82.5 95.7 104.2 104.0 109.4 88.7 89.5 89.5 101.1 100.3 99.0 105.0 102.0 109.7 88.7 94.1 111.0 101.4 84.3 101.5 106.4 103.5 115.7 88.4 88.2 88.2 88.2 88.2 88.2 95.3 82.5 95.7 104.2 104.0 109.4 88.7 109.5	1	99. 4	93. 4	97. 6	104. 1	103. 3	113. 6	92. 3	86.8	88. 7	88. 8	89. 9	98. 9	107. 3	103. 5	106. 2	94.8
February	_	102. 0	98. 5	103. 5	104. 1	102. 4	110. 1	95. 1	91. 3	93. 5	98. 6	96. 2	100. 3	109. 7	112. 2	108. 5	91, 1
Heat Name Heat	January	95, 7	89. 9	94. 5	101. 0	100. 3	110.6	8 3 . 2	83. 4	88, 2	95. 3	82.5	95, 7	104.2	104. 0	109. 4	85. 0
July 99.8 106.1 90.9 102.8 103.1 107.5 91.3 98.5 117.6 87.1 94.0 104.8 102.9 104.2 112.5 103.1 107.3 88.3 94.8 117.6 87.1 94.0 104.8 102.2 91.0 102.8 103.1 107.3 88.3 94.8 117.6 87.1 94.3 91.0 104.3 102.1 112.5 88.3 August 102.5 99.8 105.3 90.2 101.5 107.5 91.5 100.4 128.3 100.4 95.1 106.7 103.6 108.6 117.9 88 September 104.2 99.1 106.0 94.9 104.3 100.2 93.4 100.1 129.0 99.6 92.8 109.4 106.3 109.3 123.8 99 October 107.5 105.1 111.3 101.0 106.0 111.5 95.8 104.7 134.1 95.9 94.1 116.6 109.2 107.1 112.4 9 November 103.6 105.1 110.3 96.7 104.9 111.7 94.4 96.1 114.5 80.1 90.7 118.5 108.2 107.1 112.4 <td>ranniary</td> <td>101. 1</td> <td>100. 3</td> <td>99. 0</td> <td>105. 0</td> <td>102. 0</td> <td>109. 7</td> <td>87. 2</td> <td>94. 1</td> <td>111.0</td> <td>101. 4</td> <td>84.3</td> <td>101. 5</td> <td>106. 4</td> <td>103. 5</td> <td>115.7</td> <td>85.1</td>	ranniary	101. 1	100. 3	99. 0	105. 0	102. 0	109. 7	87. 2	94. 1	111.0	101. 4	84.3	101. 5	106. 4	103. 5	115.7	85.1
July 99.6 106.1 90.9 102.8 109.0 91.3 98.5 117.6 87.1 94.0 104.8 102.9 104.2 112.5 121y 98.3 93.8 102.5 85.8 103.1 107.3 88.3 94.8 115.2 94.3 91.0 101.2 102.5 107.1 114.8 8 August 102.5 99.8 105.3 90.2 101.5 107.5 91.5 100.4 128.3 100.4 95.1 106.7 103.6 108.6 117.9 88 September 104.2 99.1 106.0 94.9 104.3 100.2 93.4 100.1 129.0 99.6 92.8 109.4 106.3 109.3 123.8 99.0 107.1 111.3 101.0 106.0 111.5 95.8 104.7 134.1 95.9 94.1 116.6 109.2 107.8 120.4 90.1 106.0 111.5 95.8 104.7 134.1 95.9 94.1 116.6 109.2 107.8 120.4 90.1 103.6 105.1 110.3 96.7 104.9 111.7 94.4 96.1 114.5 80.1 90.7 118.5 108.2 107.1 112.4 99.1	April						109. 8 109. 0	89. 5 89. 6	97. 9 99. 4			90. 5	102.5	108.8	103. 4 104. 2		86. 3 80. 3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	May	100.8	102. 1	104. 2	92.0	100. 2	108.9	90.5	100. 9	124. 2	82. 9	94. 0	105. 3	103. 4	101. 6	109. 3	84.1
August 102.5 99.8 105.3 90.2 101.5 107.5 91.5 100.4 128.3 100.4 95.1 106.7 103.6 108.6 117.9 8 September 104.2 99.1 106.0 94.9 104.3 100.2 93.4 100.1 129.0 99.6 92.8 109.4 106.3 109.3 123.8 90.0 October 107.5 105.1 111.3 101.0 106.0 111.5 95.8 104.7 134.1 95.9 94.1 116.6 109.2 107.8 120.4 90.0 November 103.6 105.1 110.3 96.7 104.9 111.7 94.4 96.1 114.5 80.1 90.7 118.5 108.2 107.1 112.4 90.0	June						109. 0 107. 3										89.7 84.9
October	August	102. 5	99.8	105. 3	90. 2	101. 5	107. 5	91. 5	100. 4	128. 3	100. 4	95. 1	106. 7	103. 6	108.6	117. 9	88.7
November 103.6 105.1 110.3 96.7 104.9 111.7 94.4 96.1 114.5 80.1 90.7 118.5 108.2 107.1 112.4 9	October																92. 9 95. 2
December	November December	103. 6	105. 1	110. 3	96. 7	104. 9	111.7		96. 1	114. 5	80. 1	90. 7	118. 5	108. 2		112. 4	94. 1 94. 3
									====		===		======				88. 4
1929		·															
January 100.9 101.3 112.3 97.0 102.2 111.4 83.4 93.6 114.5 90.2 79.0 117.4 106.3 105.3 118.8 70	January																76.3
February 108. 4 107. 2 120. 7 103. 6 102. 5 113. 0 86. 5 111. 4 147. 4 94. 5 81. 0 124. 1 111. 3 110. 2 145. 8 8 March 111. 1 108. 5 126. 5 108. 8 101. 2 114. 9 88. 4 113. 9 148. 2 91. 4 84. 8 127. 6 113. 6 112. 1 146. 7 8	March.					102. 5 101. 9	113.0 114.9										82. 3 84. 4
April	April	111. 7	110. 5	129. 5	103. 2	100. 4	113. 3	90. 9	117. 0	152. 0	87. 9	89. 3	127. 0	117.8	117.1	150. 2	86. 1
May 111. 5 111. 6 131. 9 99. 3 103. 1 114. 3 92. 8 116. 0 147. 1 88. 1 91. 8 123. 1 113. 1 118. 9 146. 5 80 109. 2 109. 9 131. 6 97. 8 105. 6 113. 6 92. 2 107. 9 130. 9 89. 8 92. 5 117. 0 111. 2 120. 0 120. 6 80 80. 8 80	May June		111.6					92.8 92.2		147. 1 130. 0							86. 1 88. 5
July 104.8 103.5 128.2 90.4 105.6 111.4 93.5 97.1 110.2 97.8 86.1 112.6 111.2 123.3 115.1 8	July	104.8	103. 5	128. 2	90.4	105. 6	111.4	93. 5	97. 1	110. 2	97.8	86. 1	112.6	111. 2	123.3	115. 1	87. 9
August 109. 4 109. 3 127. 5 97. 4 105. 0 112. 8 94. 7 106. 8 128. 0 105. 0 91. 2 113. 2 113. 0 125. 1 110. 9 90 90 90 90 90 90 90 90 90 90 90 90 9	August September														125. 1 129. 3		90. 6 93. 4
			-50.0									- 2. 9					

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, 1929), in which monthly figures for 1928 and 1929 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.

he cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	CNT IN- (+) OR LSE (-)	CUMULATI FROM THROUGE	JAN. 1	Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	creas (-) cumu lative 1929 from 1928
TEXTILES												1520
Wool Receipts at Boston:										-		
Total thous, of lbs_ Domestic thous, of lbs_ Foreign thous, of lbs_	47, 795 40, 596 7, 199	56, 981 53, 652 3, 329	40, 476 35, 594 4, 882	19, 444 16, 975 2, 469		10, 315 7, 156 3, 159	4, 598			273, 622 193, 906 79, 716		-2.
mports: In condition importedthous. of lbs_ Grease equivalentthous. of lbs_ consumption by textile mills,	16, 592 17, 903	18, 815 21, 931	17, 068 19, 015	18, 158 21, 450	19, 463 23, 066	14, 510 17, 015		+7.2 +7.5	-6. 1 -4. 7	208, 718 235, 192	240, 711 270, 581	+15. +15.
grease equivalentthous. of lbs_fachinery, activity, hourly: Looms—	44, 066	47, 296	52, 644	49, 7 55	59, 352	43, 492	51, 477	+19.3	+15.3	442, 387	501, 763	+13.
Wideper ct. of hours active Narrowper ct. of hours active Carpet and rugper ct. of hours active Sets of cardsper ct. of hours active Combsper ct. of hours active	65 61 69 85 78	62 60 61 80 86	60 62 66 80 93	64 63 66 83 94	65 66 71 85 91	59 53 62 85 74	66 67	+1.6 +4.8 +7.6 +2.4 -3.2	$ \begin{array}{r} -3.0 \\ 0.0 \\ +6.0 \\ -8.6 \\ +11.0 \end{array} $			
Spinning spindles— Woolen———per ct, of hours active— Worsteds——per ct, of hours active— 'rices:	82 65	78 62	77 69	77 70	78 72	80 6 2	88 68	$^{+1.3}_{+2.9}$	-11.4 +5.9			
Raw, territory, fine, scoured_dolls. per lb_Raw, Ohio and Pa. fleeces,	. 97	. 93	.93	.92	. 90	1. 14	1. 10	-2.2	-18.2			
Worsted yarndolls. per lb Women's dress goods, French	1. 42 1. 45	. 42 1. 45	. 43 1. 45	. 43 1. 48	. 43 1. 48	. 54 1. 58		0. 0 0. 0				
serge, 39-indolls. per yd Suiting, 13-ozdolls. per yd tocks, grease equivalent, end of quarter:	2.008 2.008	1. 996		. 98 1, 901 ² 369, 642	1. 901	2.008		0.0	0.0 -5.3			
Total thous, of lbs. Held by manufacturers thous, of lbs. Held by dealer thous, of lbs.	2 348, 496 2 156, 796 2 191, 670							+6.1 +4.4 +7.5	0. 0 +3. 4 -2. 6			
Cotton Production, crop estimatethous, of bales					³ 15, 009		14,478					
thous of bales teceipts into sight thous of bales mports, unmanufactured bales	222 26, 113	126 21, 369		2, 431 23, 974	4, 184 19, 815	2, 078 18, 508	* 11, 321 * 3, 983	+72.1 -17.3	+5.0 -28.8	10, 237 264, 153	11, 184 374, 954	+9. +41.
Cxports, unmanufactured (including linters) bales Consumption by textile mills bales	308, 947 570, 281	246, 983 546, 457	235, 914 558, 113		1, 263 , 202 640 , 798	814, 569 492, 307	61,252,066 6 616,238	+72.7 +17.4	+0.9 +4.0	6, 192, 275 5, 427, 596	5, 602, 076 6, 060, 532	-9. +11.
tocks, domestic, end of month: Total, mills and w'houses_thous. of bales_ Millsthous, of bales_ Warehousesthous of bales_ tocks, world visible, end of month:	2, 665 1, 289 1, 376	2, 038 1, 052 986	2, 189 802 1, 387	4, 017 792 3, 225	6, 672 1, 360 5, 312	3, 358 720 2, 638	§ 1, 196	+66. 1 +71. 7 +64. 7	+14.5 +13.7 +14.7			
Total thous, of bales American thous, of bales.	4, 476 2, 302	3, 651 1, 693	3, 458 1, 629		6, 677 4, 982	4, 114 2, 563		+52.4 +87.9	+7.7 +7.3			
To producerdolls. per lb_ In New York, middlingdolls. per lb_ Cetton Yarn	. 179 . 188	. 178 . 186	. 180 . 187	. 182 . 189	. 175 . 186	. 176 . 185		-3.8 -1.6	-3, 3 -5, 1			
Machinery activity of spindles: Active spindles thousands. Total activity millions of hours. Activity per spindle hours. Ratio to capacity per cent. Carded sales yarn:	30, 628 8, 155 232 104. 8	30, 396 7, 744 222 100. 3	30, 237 8, 130 234 97. 7	30, 038 7, 881 226 104. 0	30, 135 9, 004 258 108. 7	196	8, 694	+0.3 +14.2 +14.2 +4.5	+3.6			
Production thous. of lbs Stocks, end of month thous. of lbs Unfilled orders, end of month thous. of lbs	20, 272 8, 785 32, 650	13, 211 8, 901 32, 472	8, 185		18, 199 7, 173 40, 749	18, 839 10, 248 34, 836	8, 476	+6.3 -3.4 +13.7	+3.3 -15.4 +4.4	175, 712		+5.
Prices: 22/1 cones, Bostondolls. per lb 40/1s, southern spinningdolls. per lb Cotton Goods	. 348 . 499	. 348 . 5 15	. 349 . 510	. 357 . 510	. 359 . 503	. 358 . 501	. 372 . 495	+0.6 -1.4	-3.5 +1.6			
cotton textiles: Production thous. of yds. New orders thous. of yds. Shipments thous of yds. Stocks, end of month thous. of yds. Unfilled orders, end of mothous. of yds.	285, 928 228, 244 252, 008 401, 260 358, 748	234, 439 262, 889 252, 779 382, 920 368, 858 408, 659	312, 635 326, 398 364, 060 355, 095	268, 611 371, 485 287, 628 345, 043 438, 952 381, 760	283, 064 222, 196 265, 450 362, 657 395, 698 454, 524	253, 688 387, 151 278, 110 417, 245 398, 005	401, 953 307, 402 394, 742 492, 556	+5. 4 -40. 2 -7. 7 +5. 1 -9. 9	-13.6 -8.1 -19.7	2, 989, 637 2, 883, 807	2, 894, 424 2, 967, 587	+2.
Jotton cloth: Imports thous. of sq. yds. Exports thous. of sq. yds. Cabric for tire manufacture,	465, 658 4, 880 44, 730	5, 175 50, 412	3, 927 42, 359	3, 972 42, 274	5, 936	3, 139 34, 694	3, 676	i	+61.5	2, 423, 896 51, 064 429, 637	51, 582	+1.
consumptionthous. of lbsthous. of dolls	20, 359 1, 473	18, 126 1, 357	15, 803 1, 399			17, 797 1, 478	20, 295		-1.5	14,003		
Prices: Print cloth, 64 x 60dolls. per yd. Sheeting, browndolls. per yd. Cotton goods (Fairchild) rel. to 1911-1913	. 072 . 084	. 073 . 083		. 076	.078	.074	. 078	+2.6	0.0 -3.3			

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) or	CUMULATIV FROM J THROUGH	AN. 1	Per ci in- crease (+) or de
October, except where otherwise noted Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
TEXTILES—Continued												
Cotton Finishing												
White, dyed and printed (outside mills): Billings, finished goods	78, 964 65, 462 45, 674 35, 487 60 5. 1	75, 582 69, 475 44, 809 37, 299 57 4. 9	75, 845 69, 168 45, 238 36, 320 60 4. 9	6 73, 116 6 67, 991 6 43, 586 6 35, 062 61 6 4. 6	81, 549 78, 806 46, 173 37, 635 65 3. 9	69, 805 74, 483 45, 767 33, 410 61 5. 0	83, 935 87, 175 50, 984 32, 046 66 6. 0	+11.5 +15.9 +5.9 +7.3 +6.6 -15.2	-2.8 -9.6 -9.4 +17.4 -1.5 -35.0	739, 382 734, 512 462, 027		+7. +10.
Production thous. of yds. Stocks, end of month thous. of yds.	72, 808 78, 492	60, 902 87, 397	69, 315 87, 918	66, 766 88, 864	82, 724 87, 446	66, 079 75, 161	77, 320 73, 687	+23. 9 -1. 6	+7.0 +18.7	644, 150	780, 154	+21.
Silk Imports, rawthous. of lbs_ Deliveries (consumption)bales_	7, 596 46, 504	7, 858 51, 624	9, 620 59, 704	8, 811 53, 274	9, 396 57, 489	7, 212 47, 797	8, 272 49, 940	+6.6 +7.9	+13.6 +15.1	73, 185 478, 275	80, 773 525, 026	+10. +9.
Stocks, end of month: At warehouses bales At manufacturing plants bales	47, 425 23, 162	42, 596 20, 985	48, 408 25, 854	55, 104 29, 594	64, 129 28, 200	50, 464 22, 786	49, 381 26, 676	+16.4 -4.7	+29.9 +5.7			
Silk machinery activity: Broad looms per cent of normal. Narrow looms per cent of normal. Spinning spindles per cent of normal.	100. 7 67. 8 63. 1	99. 7 65. 1 63. 8	101. 9 65. 5 65. 2	100. 7 63. 1	102. 6 58. 1 66. 9	92. 7 54. 0 66. 9	102. 0 50. 5 69. 3	+1. 9 -7. 9 +0. 1	+0.6 +15.0			1
Prices: Raw, Japanese, 13-15, N. Ydolls, per lb Silk goods, compositedolls. per yd	4. 925 1. 19	4. 876 1. 18	5, 073 1, 18	5. 122	4. 925 1. 18	5. 096 1. 16	5. 145 1. 16	-3.8 0.0	-4.3 +1.7			
Rayon Importsthous. of lbs_ Stocks, bonded, end of monththous. of lbs_ Price, 150 denier, A grade, N. Ydolls, per lb	1, 582 2, 902 1, 23	858 2, 802 1. 15	990 2, 747 1. 15	2, 451	1, 540 1. 15	924 2, 814 1, 50	1, 238 2, 663 1, 50	+47. 5	+24. 4 23. 3	10, 227	14, 161	+38.
Clothing	2, 20	2, 20	2.20	2.12	_,				2010			
Men's and boys' garments cut: Suitsthous. of garments. Separate trousersthous. of garments. Overcoatsthous. of garments	2, 198 2, 221 507	2, 202 2, 307 631	2, 132 2, 353 763	1, 797 2, 156 763		1, 876 2, 173 728	1, 816 2, 251 812			7 19, 444 7 18, 883 7 4, 0 61	⁷ 19, 486 ⁷ 20, 270 ⁷ 4, 444	l +7.
Overalls: Cutthous, of dozen garments_ Net shipments_thous, of dozen garments_	362 317	380 361	416 408	6 419 6 403	477 396	385 358	404 340	$+13.8 \\ -1.7$	+18.1	3, 710 3, 242	3, 971 3, 599	+7.
Unfilled orders, end of mothous, of dozen garments.	161	220	144	6 172	171	161	174	-0.6	-1.7			
Hosiery	9 549	2 000	9 417	0 577	4 104	2 055	3, 852	117.0	10.6	24 414	25 001	+4
Production thous, of dozen pairs. Net shipments thous, of dozen pairs. Stocks, end of month thous, of dozen pairs. New orders. thous, of dozen pairs. Unfilled orders,	3, 543 3, 567 8, 413 3, 513	3, 068 3, 075 7, 943 2, 813	3, 417 3, 485 8, 139 3, 427	3, 577 4, 039 7, 887 4, 025	4, 184 4, 332 7, 730 4, 426	3, 255 3, 755 8, 128 3, 810	4, 166 7, 849 4, 342	$ \begin{array}{r} +17.0 \\ +7.3 \\ -2.0 \\ +10.0 \end{array} $	+8.6 +4.0 -1.5 +1.9	34, 414 34, 654 34, 477	35, 801 35, 677 36, 323	
end of monththous. of dozen pairs	4, 841	4, 437	4, 234	4, 139	4,066	3, 957	3, 888	-1.8	+4.6			
Knit Underwear Productionthous, of dozen garments Net shipmentsthous, of dozen garments Stocks, end of mothous, of dozen garments	1, 187 1, 126 1, 735	1, 091 1, 064 1, 797	1, 152 1, 382 1, 689	1,422	1,398 1,528 1,190			+27.1 -0.3 -16.3		11, 073 11, 299	11, 895 12, 021	+6
New ordersthous. of dozen garments Unfilled orders, end of monththous. of dozen garments	1, 157 2, 293	891 2, 103	1, 149 1, 870	1, 461 6 1, 783	1,372 1,607	1, 213 1, 696	1, 483 1, 645	-6.1 -9.9	-7.5 -2.3	11, 182	12,322	+10.
Burlaps and Fibers		,	,	1	,		,					
Imports: Burlaps thous. of lbs. Fibers (unmanufactured) long tons.	51, 216 21, 182	41, 526 20, 469	74, 698 25, 048	33, 568 22, 210	42, 067 26, 613	43, 617 21, 004	30, 874 25, 615	+25.3 +19.8	+36.3 +3.9	536, 817 250, 706	555, 905 276, 499	+3. +10.
Pyroxylin Coated Textiles Pyroxylin spread thous of lbs	4, 615	4, 331	4, 294	3,812	3, 875	4, 844	5, 712	+1.7	-32. 2	51, 005	49, 817	-2.
Pyroxylin spread thous, of lbs Shipments billed thous, of linear yards Unfilled orders, end mothous, of linear yards	4, 007 2, 910	3, 509 2, 805	3, 540	3, 315	3, 529 2, 403	3, 914	4, 499 3, 824	+6.5 -7.5	-21.6	39, 701	41, 829	
Fur Sales by dealersthous, of dollars Buttons	8, 546	8, 13 5	11, 335	11, 434	8, 187	10, 244	12, 576	-28.4	-34.9	120, 575	118, 726	—1.
Fresh-water pearl buttons: Productionratio to capacity- Stocks, end of monththous. of gross	50. 1 11, 351	40. 9 11, 170		46. 6 10, 836	48. 1 10, 686	47. 5 10, 593	51. 0 6 10, 521	+3, 2 -1, 4	-5.7 +1.6		· · · · · · · · · · · · · · · · · · ·	
IRON AND STEEL												
Iron Manganese ore, importsthous. of long tons	51	48	33	13	2 5	15	2 6	+92.3	-3,8	173	284	+64
Iron ore: Importsthous. of long tons_ Shipments from mines_thous. of long tons_ Receipts—	244 10, 174	301 10, 671	298 10, 807	247	270	211 8, 748	170	+9.3 -16.3	+58, 8 -5, 5	2, 025 49, 720	2, 585 61, 253	+27
Lake Erie ports and furnacesthous. of long tons Other portsthous. of long tons Consumptionthous. of long tons	6, 985 2, 805 5, 677	7, 509 3, 127 5, 808	7, 518 3, 284 5, 779	2,710	2, 267	5, 827 2, 710 4, 608	2, 580	-8.6 -16.3 +0.4	+0.8 -12.1 +7.1		42, 627 17, 107 54, 885	+14
Stocks, end of month— Total————thous. of long tons— At furnaces——thous, of long tons—	23, 701 19, 619	28, 697 24, 245	33, 831 28, 720		41, 135 34, 770	35, 808 29, 708		+7.9 +7.4	+4, 0 +5, 1			

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGE	JAN. 1	Per ci in- crease (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	creas (-) cumt lative 1929 from 1928
IRON AND STEEL—Continued Iron—Continued												
Pig-iron production: Total, United Statesthous. of long tons Merchant furnacesthous, of long tons Canadathous, of long tons_ Furnaces in blast, end of month:	3, 717 717 90	3, 785 746 100	3, 756 690 6 113	⁶ 3, 498 ⁶ 635 ⁶ 99	685	3, 062 585 91	3, 374 644 93	+2. 6 +7. 9 -8. 1	$^{+6.3}_{+6.4}_{-2.2}$	31, 166 6, 256 839	36, 267 7, 356 921	+17.
Furnaces number Capacity long tons per day Obio gray-iron foundries: Meltings—	218 122, 590	216 121, 965	210 119, 130	205 § 116, 405	203 113, 600	197 106, 755	197 108, 800	-1.0 -2.4	+3.0 +4.4			
Actual long tons Normal long tons Ratio to normal per cent of normal Stocks, end of month per cent of normal Receipts per cent of normal	21, 214 19, 164 110, 6 131 105	19, 508 18, 535 105. 3 131 99	18, 670 17, 104 109. 1 120 113	20, 081 19, 595 102, 5 130 100	20, 627 115, 6 117	14, 586 16, 155 90. 2 131 90	19, 349			160, 298		+31. +22.
Malleable castings: Production	72, 378	70, 625 73. 5 69, 665 61, 401	68, 651 70. 0 69, 240 61, 982	6 59, 589 6 62, 0 6 63, 049 6 52, 957	62, 4 52, 092	62, 665 66. 3 61, 736 61, 163	73. 4 63, 510	+1.0 +0.6 -17.4	-14.1 -15.0 -18.0 -11.7	656, 489 637, 520	727, 146 717, 344	+12.
Wholesale prices: Foundry, No. 2 northerndolls. per long ton Basic (valley furnace)dolls. per long ton Composite pig irondolls. per long ton		20. 26 18. 50 18. 31		20. 26 18. 50 19. 00	18. 50	18. 64 16. 19 18. 04	17. 10	0. 0 0. 0 0. 2	+7. 4 +8. 2 +3. 4			
Cast-iron Bollers and Radiators Round boilers: Production thous. of lbs. Shipments thous. of lbs. New orders thous. of lbs. Stocks, and of month thous. of lbs.	10, 578 10, 171 9, 059 89, 437	8, 997 13, 553 14, 490 84, 027	12, 189 15, 092 13, 916 81, 162	11, 602 18, 263 16, 936 74, 254	23, 487 19, 583	13, 655 17, 021 14, 504 82, 931	22, 621	$+32.8 \\ +28.6 \\ +15.6 \\ -10.4$	$ \begin{array}{r} -14.2 \\ +3.8 \\ -1.2 \\ -15.1 \end{array} $	132, 919 132, 346	116, 153 123, 340 112, 493	-7.
Square bodgers: Production thous, of lbs. Shipments. thous, of lbs. New orders tbous, of lbs. Stocks, end of month thous, of lbs.	16, 119 17, 458	11, 598 22, 927 26, 039 169, 044	19, 014 28, 757 27, 242 159, 661	20, 766 34, 671 36, 481	32, 819 43, 185 35, 715	26, 760 41, 989 36, 527 167, 063	30, 098 52, 505 53, 522	+58.0 +24.6 -2.1 -7.3	+9.0 -17.8 -33.3 -6.9	300, 469 274, 038 283, 106	232, 738 217, 841 213, 369	il — 20.
Radiators: Production _ thous. sq. ft. heating surface Shipments _ thous. sq. ft. heating surface New orders _ thous. sq. ft. heating surface Stocks, end of	9, 603	6, 756 11, 729 13, 621	10, 365 13, 665 14, 267	9, 545 14, 980 15, 680	18, 214 16, 148	13, 770 18, 092 16, 533	23, 062 23, 394	1 1	-4.3 -21.0 -31.0	129, 238 136, 339	111, 671 104, 996 108, 110	-18.
month	74, 189 285, 223 213, 780 271, 330 1, 197, 768	69, 277 315, 696 254, 856 248, 993 1, 115, 865	65, 792 486, 659 365, 280 235, 877 951, 598	59, 794 549, 424 459, 124 306, 158 885, 625	522, 400 427, 629 317, 234	72, 902 395, 265 322, 000 169, 376 622, 687	63, 082 351, 367 274, 760 187, 196 596, 143	-10. 2 -4. 9 -6. 9 +3. 6 -8. 7	+69.5	2, 259, 878 1, 822, 285 1, 627, 600	3, 097, 556 2, 432, 981 2, 595, 015	+37. +33. +59.
Steel ingots, production: United States, totalthous. of long tons_ Ratio to capacityper cent_ Canadathous. of long tons_	4, 881 100 120	4, 838 95 130	4, 927 93 120	4, 511 92 99	4, 512 85 116	4, 148 88 100	4, 650 91 109	0.0 -7.6 +17.2	$ \begin{array}{r} -3.0 \\ -6.6 \\ +6.4 \end{array} $		47, 754 1, 203	
U. S. Steel Corporation: Unfilled orders, end of monththous, of long tons Steel castings:	4, 257	4, 088	3, 658	3, 903	4, 087	3, 698	3, 751	+4.7	+9.0			
Production— Total short tons— Ratio to capacity per cent— Railroad specialties short tons— Miscellaneous short tons— New orders—	116, 221 80 54, 154 62, 067	117, 187 80 51, 989 65, 198	6 82 51, 400	6 106, 909 6 73 6 44, 609 6 62, 300	49, 950	75, 761 51 25, 311 50, 450	87, 952 60 29, 471 58, 481	+13.6 +13.7 +12.0 +14.8	$+38.1 \\ +38.3 \\ +69.5 \\ +22.3$	314, 281	1, 136, 351 489, 729 646, 622	+55.
Total short tons Ratio to capacity per cent Railroad specialties short tons Miscellaneous short tons Sheets, black, blue, galvanized, and full finished:	95, 201 65 34, 947 60, 254	102, 443 70 37, 731 64, 712	6 99, 291 6 68 36, 500 6 62, 791	6 86, 413 6 59 6 33, 463 6 52, 950	72, 400	82, 762 56 35, 234 47, 528	78, 860 54 26, 736 52, 124	+56.7 $+57.6$ $+116.4$ $+19.0$	+71. 7 +72. 2 +170. 8 +20. 9	311, 390	1, 147, 481 520, 040 627, 441	+67.
Production— Total net tons_ Ratio to capacity per cent Stocks and of month	337, 841 110. 4	323, 905 98. 1	366, 734 109. 7	302, 490 97. 7	319, 660 95. 3	318, 907 101. 0	369, 243 103. 5	+5. 7 -2. 5	-13. 4 -7. 9	3, 287, 369	3, 501, 390	+6.
Total	163, 607 52, 274 347, 989 307, 911 676, 568	154, 854 47, 103 344, 676 337, 222 658, 155	282, 107	154, 928 43, 886 301, 330 274, 568 522, 803	258, 810	146, 832 44, 519 322, 876 370, 936 539, 960	150, 600 49, 800 354, 925 344, 614 525, 161	+9.3 +44.0 -3.4 -5.7 -8.6	+12. 5 +26. 9 -18. 0 -24. 9 -9. 0	3, 125, 164	3, 471, 114 3, 430, 790	+9. +9.
Steel barrels: Production	774, 853 61. 8 779, 567 52, 222 1, 548, 999		65. 2 809, 860 56, 700	668, 224 54. 5 658, 583 66, 341 1, 098, 650	57, 636 901, 621	593, 255 50. 2 595, 640 55, 059 996, 820	50, 071 823, 872	-5.7 -5.9 -3.0 -13.1 -17.9	$ \begin{array}{r} -4.0 \\ -9.0 \\ -3.4 \\ +15.1 \\ +9.4 \end{array} $	6, 285, 460	7, 145, 901 7, 134, 730	
rion, steer, and neavy nardware salesrel. to Jan., 1921 Lock washers, shipmentsthous, of dolls	14, 838 220 397	13, 844 223 391	14, 818 240 320	12, 962 229 298	12, 902 243	10, 767 207 257	9, 493 236 269	-0.5 +6.1 -11.7	+35.9 $+3.0$ -2.2	120, 205		+16.
Wholesale prices: Steel billets, Bessemer dolls, per long ton Fron and steel compdolls, per long ton Structual steel beamsdolls, per 100 lbs. Composite finished steel dolls, per 100 lbs.	35. 25 37. 01	35. 00 36. 72 1. 95	35. 00 36. 57 1. 95	35. 00 36. 50 1. 95 2. 54	35. 00 36. 27 1. 90	32. 00 35. 17 1. 85	32. 80 35. 48 1. 85	0. 0 -0. 6 -2. 6 -1. 2	+6.7 $+2.2$ $+2.7$			

he cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM : THROUGH	JAN. 1	Per in crea (+
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crea (cum lati 192 from
IRON AND STEEL—Continued Fabricated Steel Products				w								
tructural steel, fabricated: New orders (prorated)	346, 500 90 292, 600 76	350, 350 91 304, 150 79	95 6 342, 650	⁶ 319, 550 ⁶ 83 319, 550 83	342, 650 89 354, 200 92	319, 550 83 273, 350 71	⁶ 257, 950 ⁶ 67 319, 550 83	+7. 2 +7. 2 +10. 8 +10. 8	+32.8 +32.8 +10.8 +10.8	2, 798, 950 2, 571, 800	3, 299, 450 3, 022, 250	
teel plate, fabricated, new orders: Totalshort tons Ratio to capacityper cent Oil storage tanksshort tons teel bars, cold finished, shipments short tons	45, 918 58 6, 890 51, 181	48, 968 62 14, 963 49, 910	11, 150	6 41, 653 6 53 6 15, 189 40, 889	30, 669 39 8, 607 39, 296	40, 281 50 18, 572 43, 893	53, 983 68 23, 960 50, 867	-26. 4 -26. 4 -43. 3 -3. 9	-43. 2 -42. 6 -64. 1 -22. 7	437, 951 195, 230 417, 961	444, 606 126, 063 512, 666	
teel boilers, new orders: Quantitynumber_ Areathous, of sq. ft_ Fabricated-Steel Products	1, 685 1, 823	2, 052 2, 075	1, 859 1, 781	6 1, 910 6 1, 957	1, 712 1, 871	1,749 1,453	1,803 1,500	-10.4 -4.4	-5.0 +24.7	16, 669 14, 917	16, 258 17, 427	
teel furniture: Business group— Supplementsthous. of dolls New ordersthous of dolls	2, 574 2, 522	2, 625 2, 560	2, 483 2, 418		2, 971 2, 856	2,689	3, 159 3, 193	+27.3 +24.7	-6.0 -10.6	29, 972 29, 687	28, 397 28, 177	_
Unfilled orders, end mo_thous. of dolls_ Shelving— Shipmentsthous. of dolls_ New ordersthous. of dolls_ Unfilled orders, end mo_thous. of dolls_	2, 320 920 959 934	2, 240 867 939 999	890 931	6 2, 055 6 843 6 880 6 1, 079	2, 067 979 928 1, 015	2, 062 678 800 754	2, 095 954 959 760	+0.6 +16.1 +5.5 -5.9	-1.3 $+2.6$ -3.2 $+33.6$	7, 590 7, 897	9, 605 10, 019	
on and steel: Exportslong tons Importslong tons	247, 811 46, 397	270, 532 51, 275	242, 856	222, 408 46, 346	247, 646	228, 056 47, 685	256, 870 50, 176	+11.3 +6.8	-3.6 -1.3	2, 384, 301 497, 538	2, 575, 281 484, 242	+
aths: pleces. Shipments pleces. Stocks, end of month pieces. New orders pleces. Unfilled orders, end of month pieces.	89, 388 181, 677 82, 349 41, 644	99, 705 162, 694 119, 670 61, 118	152, 349 116, 532	77, 374 152, 107 58, 574 55, 984	65, 861 161, 648 57, 397 47, 554	86, 342 134, 749 76, 074 53, 303	93, 174 147, 656 90, 665 44, 842	-14.9 +6.3 -2.0 -15.1	+9.5	989, 144 1, 084, 367	840, 257 863, 563	-:
vatories: Shipments Stocks, end of month New orders pieces	101, 900 246, 575 92, 709	108, 077 223, 657 140, 109	125, 920 192, 213	6 96, 210 6 172, 442 6 72, 088	86, 323 177, 104	94, 383 168, 211 89, 126	99, 250 180, 651 91, 575	-10.3 +2.7 +0.9	-13. 0 -2. 0 -20. 5	1, 114, 395 1, 219, 292	983, 542 1, 018, 821	
nks: ShipmentspiecesStocks, end of monthpiecesNew ordersplecespiecesstocellaneous sanitary ware:	102, 709 298, 739 94, 446	114, 051 273, 463 138, 064	120, 018 254, 210 142, 536	6 233, 532	93, 896 246, 148 79, 432	101, 777 216, 255 99, 749	111, 740 230, 725 110, 396	-8.9 +5.4 -5.1	-16.0 +6.7 -28.0	1, 154, 231 1, 259, 146	1, 060, 999	-=
Shipments pieces Stocks, end of month pieces New orders pleces nall ware (all except baths): Unfilled orders, end of month pieces	42,061 142,411 41,817	44, 762 133, 265 54, 131 214, 996	126, 626 53, 402	6 37, 205 6 119, 359 6 28, 924 207, 826	38, 881 131, 672 34, 653 174, 626	44, 910 103, 509 44, 707 155, 483		+4.5 +10.3 +19.8 -16.0	-21.1		398, 946 411, 518	
nameled sheet-metal ware: Shipments	337, 375	290, 532	385, 162	338, 169	371, 292	352, 484	417, 387	+9.8	-11.0	3, 540, 547	3, 806, 865	-
acuum cleaners, shipmentsnumber ater softeners, shipmentsunits ater systems, shipmentsunits unps: Domestic shipments—	87, 951 1, 228 13, 031	62, 750 1, 177 6 12, 268	1,581	1,484		89, 222 1, 187 10, 200	1,505	-2.3 -2.7	-3.7 +7.8	14, 136 99, 967	14,064 111,438	
Pitcher, hand, etcunits Power, horizontal typeunits Steam, power, and centrifugal New ordersthous. of dolls	39, 898 2, 989 2, 014	39, 586 2, 768 1, 778	2, 902 1, 819	1,628	2, 532 1, 868	1, 405	1, 708	$ \begin{array}{r} -13.5 \\ +11.9 \\ +14.7 \end{array} $	-1.8 -7.3 +9.4	14, 490	454, 316 25, 160 18, 059	+ +
Shipmentsthous. of dolls_ Unfilled orders, end mo_thous. of dolls_ ricultural machinery and equipment: Shipments— Totalrel to 1923-25_	1, 715 4, 364 240. 1	1, 849 4, 282 231, 2	4, 115	4, 052	3, 981	1, 369 3, 056 179. 1	3, 128	+9. 0 -1. 8 -15. 2	+27.3	14, 277	17, 543	
Domestic	233. 3 275. 3 174. 2	224. 9 263. 8 167. 7	218. 4 285. 7 156. 4	6 152. 8 6 275. 9 6 155. 1	127. 2 246. 3 154. 4	145. 7 353. 7 145. 5	129. 1 280. 3 148. 5	-16.8 -10.7 -0.5	-1.5 -12.1 +4.0			
New orders rel. to 1922-24. Shipments rel. to 1922-24. Unfilled orders, end of mo rel. to 1922-24. kers, mechanical, sales: Quantity number	177. 3 172. 7 300. 8	219. 3 182. 1 368. 7	150. 8 441. 1	176. 8 480. 8	214. 1 492. 5 178	129.7	254. 3 462. 6	+13. 4 +21. 1 +2. 4 +14. 8	+78.0	1, 272	1, 530	 +
Quantity number Power horsepower achine tools: rel. to 1922-24 New orders rel. to 1922-24 Shipments rel. to 1922-24 Unfilled orders, end of mo_rel. to 1922-24	67, 322 292 296 722	65, 197 259 278 694	298 277	241 257	322 315	265 205	284 221	+22.8 +33.6 +22.6 -1.7	+42.5	428, 538	515, 140)
ectric hoists: New orders— Quantitynumber_ Valuedollars_	600 283, 170	504 249, 447	437 264, 888	423 230, 543	461 231, 372	447 228, 510	405 209, 594	+9.0 +0.4	+13.8 +10.4	4, 248 2, 000, 410	5, 352 2, 659, 605	2 +
Shipmentsdollarsectric overhead cranes: thous. of dolls. New ordersthous. of dolls. Unfilled orders, end of mo_thous. of dolls.	269, 978 1, 091 1, 189 5, 047	290, 141 1, 146 1, 157 5, 118	1,060 1,165	1, 048 701	1, 322 1, 142	464 713	806 775	+26. 1 +62. 9	+64.0 +47.4	5, 802 6, 314	9,748	3 +
Toolworking machinery: New orders thous. of dolls thous. of dolls thingments thous. of dolls Shipments number of machines.	1,678 1,612	1, 691 1, 767	1, 748 1, 974	1, 297 1, 555	1, 351 1, 568	1, 639 1, 413	1, 585 1, 666	-3. 5 +0. 8	-21. 1 -5. 9	14, 306 13, 361	16, 862	2 ∔

The cumulatives shown are through			1929			19	28		int in- (+) or ise (-)	CUMULATI FROM THROUGE	JAN. 1	Per in cres (+
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crea cum lati 192 from
IRON AND STEEL—Continued												
Machinery—Continued											·	
Electric industrial trucks and tractors: Shipments, domestic—	17	18	15	21	.,	11	5	99.9	1100.0	97	159	
Tractorsnumber of vehicles	168 16	145 5	15 129 . 10	132	14 123 32	102	109 20	$ \begin{array}{r r} -33.3 \\ -6.8 \\ +357.1 \end{array} $	+12.8	87 972 122	1, 477	1 +8
'ire-extinguishing equipment, shipments: Motor vehiclesnumber Hand typesnumber	120	6 131	6 116	6 122	113	143	139	-7.4	-18.7	1, 089	1, 101	+
atents issued:	51, 929 3, 591	62, 266 4, 054	63, 806 3, 533		47, 840 4, 462	42, 193 3, 039	· 1	-6.6 +44.8				1
Total, all classesnumber_ Agricultural impelmentsnumber_ Internal-combustion enginesnumber_	51 39	53 92	51 55	51	63 86	40	59	+23.5 +95.5	+6.8	423	523 569	+
NONFERROUS METALS]]				
Copper roduction:												
Minesshort tons_ Smeltershort tons_	82, 354 95, 339	79, 229 94, 690	78, 885 91, 735	92, 538	82, 575 97, 405	78, 341 85, 795	100, 720	+4.0 +5.3	-3.3	738, 092 853, 571	994, 619	+1 +1
Refined (N. and S. America)short tons Vorld production, blistershort tons Domestic shipments, refinedshort tons	156, 447 174, 586 95, 258	153, 513 174, 347 98, 720	148, 648 174, 329 96, 970	6 174, 553	152, 840 178, 269 105, 729	137, 018 157, 518 88, 707	176, 623	+2.1	+0.9	1, 324, 496 1, 553, 418 798, 749	1, 528, 278 1, 804, 158 992, 280	11 +
tocks (North and South America), end mo.:	40, 852	33, 876	36, 811	42, 978	44, 502	36, 190	45, 168	+7. 8 +3. 5	-1.5	466, 380	427, 974	-
Refinedshort tonsBlistershort tonsVholesale price, electrolyticdolls. per lb	83, 140 251, 481	97, 729 239, 470	104, 372 241, 678	6 253, 519	88, 401 254, 598	51, 812 239, 142	241, 732	-6.7 +0.4	+93.7 +5.3			
Wire Cloth	. 1778	. 1778	. 1778	. 1778	. 1778	. 1472	. 1520	0.0	+17.0			
roduction thous of sa ft	456 404	438	498	373	422 417	403	466 442	+13.1 +5.8	-9.4	4, 378	4, 577	
hipments thous, of sq. ft. locks, end of month thous, of sq. ft. ew orders thous, of sq. ft.	1, 084 244	461 1, 049 345	434 978 302		933 454	423 1,099 412	1,068 419	+36.3 +36.3	-12.6	4, 123 3, 878		
fake and hold orders, end	249	405	211	242	257	320	266	+6.2	-3.4			
of monththous, of sq. ft	568	507	480	435	499	453	459	+14.7	+8.7			
eliveries (consumption)long tons	7, 455	6, 865	7, 185	8, 120	6, 515	6, 885	6, 475	-19.8	+0.3	64, 565	76, 775	+:
tocks, end of month: World visible supplylong tons	23, 751 3, 820	23, 789 3, 087	26, 400 2, 858	24 , 556	25, 580 2, 720	19, 924 3, 508	20, 907 4, 598	+4.2 +9.7	+22.4 -40.8			
United States long tons nports long tons long tons rice, pig, New York dolls. per lb.	7, 150 . 4426	5, 521 • 4640	9, 737 • 4665	2, 479 7, 712 . 4538	6, 201 . 4235	8, 187 . 4807	8, 048 . 4901	-19.6 -6.7		66, 464	78, 319	+
Zinc								-				
etorts in operation, end of monthnumber_ er cent of totalper cent	72, 087 60. 2	72, 329 60. 1	58, 800 49. 2	68, 828 57. 4	66, 996 55. 9	61, 965 53. 4	59, 8 3 2 51, 5	-2.7 -2.6				
roductionshort tons_ tocks, end of monthshort tons_	52, 953 36, 932	54, 441 44, 142	55, 290 47, 833	53, 285 53, 362	50, 938 57, 116	49, 361 47, 915	50, 2 59	-4.4 +7.0	+1.4	518, 743	531, 852	+
Pre, Joplin district: Shipmentsshort tons Stocks, mines, end of monthshort tons	60, 119 47, 458	48, 995 39, 813	63, 127 42, 876	45, 084 43, 832	48, 810 44, 622	41, 429 48, 474	41, 165 53, 209	+8.3 +1.8	+18.6 -16.1			+:
rice, slab, prime westerndolls. per lb	. 0669	. 0677	. 0680	. 0680	. 0674	. 0625	. 0625	-0.9				
Lead roductionshort tons	57, 579	56, 924	53, 316	o 56, 807	61, 491	55, 167	58, 118	+8.2	+5.8	535, 884	576, 871	4
re shipments: Joplin districtshort tons Utahshort tons	8, 49 1 76, 003	5, 373 66, 083	7, 808 92, 668	7, 461 75, 927	7, 588 77, 693	9, 326 65, 353	10, 514 71, 887	+1.7 +2.3	-27. 8 +8. 1	79, 207 694, 884	85, 115 805, 454	+
Receipts in U. S. oreshort tons_tocks, U. S. and Mexico, end mo_short tons_ Price, pig, desilverized, N. Ydolls. per lb_	53, 542 173, 612	54, 865 173, 549	54, 365 175, 641	54, 623 168, 707		51, 978 155, 482	55, 610 152, 746			7 473, 114		+
rice, pig, desilverized, N. Ydolls. per lb Other Metal Products	. 0700	. 0680	. 0675	. 0689	. 0687	. 0645	. 0650	-0.3	+5.7			
abbitt metal, consumption:												
Total apparent thous of lbs. Direct by producers thous of lbs.	5, 928 1, 107 4, 821	5, 361 1, 313	5, 433 1, 435	5, 225 1, 337	5, 481 1, 512	5, 308 999 4, 309	5, 796 1, 191 4, 605	+4.9 +13.1	-5.4 +27.0	49, 060 10, 227	57, 231 12, 710	+1 +2 +1
Direct by producersthous. of lbs_Sale to consumersthous. of lbs_sals and tubs, galvanized: Productiondozens	98, 857	4, 048 105, 454	3, 997 107, 004	3, 888 113, 698	3, 969 129, 282	150, 845	153, 813	+2.1 +13.7	-13.8 -15.9	38, 833 1, 550, 910	44, 521 1, 409, 449	+,
Production dozens Shipments dozens dozens.	104, 762	109, 841	108, 461	120, 297	135, 197	139, 183	152, 2 58	+13.7 +12.4		1, 557, 309	1, 448, 855	-
Production dozens Shipments dozens	37, 479 35, 334	42, 384 44, 117	53, 250 54, 860	46, 594 52, 970	45, 117 49, 511	55, 850 50, 606	56, 469 54, 5 9 6	-3. 2 -6. 5		445, 833 424, 242	475, 147 460, 795	+
Electrical Equipment					ļ							
lectrical mfrs., new orders (quarterly)thous. of dolls	2 340, 898			² 336, 806		² 264, 46 6		-1.2	+27.4	747, 495	1, 000, 129	+3
lectrical porcelain, shipments: Standarddollars Specialdollars	101, 013 172, 704	139, 240 168, 066	97, 631 165, 385	135, 487 171, 668		112, 210 129, 587	128, 255 148, 990			⁷ 718, 634 ⁷ 1, 127, 984	⁷ 1, 042, 583 ⁷ 1, 444, 120	$+4 \\ +2$
High tensiondollarsdollarsdollars	677, 099 3, 794	632, 172 8, 301	2, 794	4, 146		493, 067	539, 810			7 26, 697		1
Unglazed nail knobsthous, of pieces Tubesthous, of pieces	1, 998 1, 746	2, 426 3, 330	1, 968 1, 870	2, 250 1, 729		4, 213 2, 796 2, 694	3, 042 2, 807			7 14, 663 7 14, 929	⁷ 38, 813 ⁷ 21, 887 ⁷ 16, 804	+4 +1
aminated phenolic products, shipmentsdollars	1, 456, 335	1, 732, 023	1, 915, 381	1, 514, 902		1, 243, 476	1, 365, 690			7 8, 715, 110	⁷ 1 3 , 425, 531	+

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Federal Reserve Bank of St. Louis

³ Quarter ending in month indicated.

• Revised.

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGE	JAN. 1	Per increa
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crea (- cum lativ 192 fror 192
NONFERROUS METALS—Continued												182
Electrical Equipment—Continued						i	j					
Motors: New ordersdollarsdollars	1, 098, 864	811, 575	1, 082, 845			957, 093	926, 133					
Billings (shipments)dollars_ Power switching equipment, new orders:	883, 821	854, 986	853, 961			781, 472	950, 707					
Indoordollars_ Outdoordollars_	133, 418 598, 645	208, 495 520, 058	605, 273	181, 078 400, 343	503, 226	118, 301 281, 502	108, 478 313, 285	-3.3 +25.7	+60.6	3, 796, 602	1, 760, 141 4, 706, 297	+2
Outlet boxes and covers, shipmentspieces_ Vulcanized fiber: Shipments, totalthous. of dolls	2, 114, 582 814		2, 719, 688 1, 029	' '	4	2, 915, 560			}	7 5, 639	7 24,032, 626 7 7, 597	+3
Consumption thous of lbs Industrial reflectors, sales units	3, 470 130, 413	878 3, 489 124, 466	3, 803 157, 473	3, 411		2, 362 126, 151	$\begin{array}{c} 649 \\ 2,971 \\ 156,243 \end{array}$			24, 425	7 30, 521	
Power cables, shipmentsthous. of ft_ Flexible cords:	2, 112	2, 366	2, 411	2, 676	3, 288	2, 197	2, 384		+37.9	19, 485	22, 819	+1
Shipments thous. of ft. Stocks, end of month thous. of ft.	40, 588 66, 831	45, 114 58, 486	50, 538 57, 202			43, 854 44, 193	54, 973 43, 214			7 364, 008	7 423, 021	+10
Welding sets, new orders: Single operator	296	282	296	341	302		297	-11.4	+1.7	2, 321	3, 327	
Multiple operatorunits_ Nonmetallic conduits, shipments_thous, of ft_	6, 684	7, 320	6, 364	9 6, 954	7	7, 376	58 8, 804	-22.2		183 768, 263	74 761, 313	-1
Electric furnaces, new orderskilowatts_ Manufactured mica:	6, 237	6, 932		4, 105	7, 208	4, 226	4, 719	+75.6	- 1	48, 852	80, 779	į
Shipments thous of dolls Unfilled orders, end of mo thous of dolls	252 294	254 326	$\begin{array}{c} 274 \\ 275 \end{array}$	263 235	274 206	247 285	302 326	+4.2 -12.3	-9.3 -36.8		2, 821	
Delinquent accounts, electrical trade: Amountdollars Delinquent firmsnumber	168, 724 1, 223	146, 166 1, 027	174, 438 1, 176	128, 059 1, 117	167, 129 1, 392	140, 637 1, 220	6 162, 564 6 1, 245	+30.5 +24.6	+2.8 +11.8			
AUTOMOBILES	1, 220	1,021	1,170	1, 111	1, 392	, 1, 220	V 1, 245	724.0	111.0			
Production: United States—												
Totalnumber of cars_ Passenger carsnumber of cars_	6 545, 356 452, 598 1, 378	426, 137	441, 942	6 415, 697 364, 786	379, 942 320, 327	415, 314 358, 615	397, 284 339, 487	-12.2	-4.4 -5.6	3, 867, 503 3, 399, 425	5, 017, 806 4, 325, 504 14, 460	$ _{+2}^{+2}$
Taxicabs number of cars number of cars number of cars.	1,378 6 91,380	1,054	1,040 6 55,393	865	868 58, 747	276 56, 423	659 57, 138		$+31.7 \\ +2.8$	4, 977 463, 101	14, 460 677, 842	+19 +4
Canada— Total——number of cars—	21, 492	17, 461	14, 214	13, 817	14, 523	21, 193	18, 536	+5.1	-21.6	221, 188	248, 376	
Passenger carsnumber of cars Trucksnumber of cars Exports (assembled):	16, 511 4, 981	13, 600 3, 861	11, 037 3, 177	10, 710 3, 107	8, 975 5, 548	16, 572 4, 621	13, 016 5, 520		-31.0 +0.5	181, 853 39, 335	195, 935 52, 441	
From United States— Totalnumber of cars	50, 976	5 5, 54 5	42, 849	33, 919	32, 443	30, 559	46, 524	-4.4	-30.3	431, 098	489, 167	+1
Passengers carsnumber of cars Trucksnumber of cars	34, 106 16, 870	29, 082 26, 463	22, 123	20, 934	20, 931 11, 512	22, 494	29, 951 16, 573	0.0	-30.1	318, 444	314, 713	
From Canada— Total number of cars.	8, 219	7, 319	}	,	9, 637	8,670	9, 705	+45.1	-0.7	64, 319		+4
Passenger carsnumber of carsnumber of cars	5, 346	4, 732 2, 587	4,901	4, 292	5, 635 4, 002	6, 279	6, 696 3, 009	+31.3 +70.4		46, 556	58, 326	+2
Shipments (General Motors Co.): To dealersnumber of cars	200, 754	189, 428	168, 185	146, 483	122, 104	167, 460	120, 876			1, 727, 778	1, 798, 068	+
To usersnumber of cars_ Accessories and parts, shipments:	194, 705	181, 851	173, 884	<i>'</i>	139, 319	[140, 883	1				+
Original shipment rel. to Jan., 1925. Replacement parts rel. to Jan., 1925. Accessories rel. to Jan., 1925.	231 150 90		193 169 88	173	160 166 91		200 184 91		-20.0 -9.8			
Service parts rel. to Jan., 1925 Rim production thous. of rims	186	170	170	147		140	141	0.0	+4.3			
New passenger-car registrations: Total number of cars	386, 441	ĺ ,	376, 882	304, 359	288,782		6 2 84, 939	15			3, 557, 833	+2
Second highest groupnumber of cars_	11, 447 57, 915	11, 240 64, 768	12, 326 67, 177	11, 463 52, 325	11,561 47,606	11,600 60,475	12,264 656,707	+0.9 -9.0	-5.7 -16.0	113, 275 586, 624	113,965 561,083	-
Lowest price groupnumber of cars.	230, 801	267, 878	230, 023	52, 424 187, 846	47,795 181,450	64, 326 134, 688	662,698 6152,533	-3.4	+19.0	1,269,872	2, 137, 195	+6
Miscellaneousnumber of cars FUELS	365	1,038	522	301	370	732	6737	+22.9	-49.8	11, 386	4,620	-5
Coal and Coke	ļ											
Bituminous: Production—	ĺ						! 					
United Statesthous .of short tonsthous. of short tonsthous. of short tons	1 1 348	1, 290	1,344			1,412	6 51, 176 6 1, 739	+15.1	+0.1	409, 874 7 12, 574	⁷ 12, 660	1 +
Consumption— thous, of long tons.	1,721			1,631	1,596	1, 577	1,497	-2.1	i			H
By vessels thous of long tons. By electric-power			!			ll		-1.2	+3.0			II .
plantsthous. of short tons_ By railroadsthous. of short tons_	3, 403 7, 071					3, 418 6 7, 635				⁷ 29, 916 ⁷ 68, 314	7 32, 966 7 69, 381	
By coke plants— United States thous of short tons— Canada———thous of short tons—	7,442	7, 588	7, 571	7, 153				+3.3	+9.9	62, 712 7 2, 339	73, 057 7 2, 768	+1 +1
Stocks, end of month, held by consumers_thous. of short tons_			315			270 41, 100	1	1		2, 039	2, 108	
Mine aver. (spot)dolls, per short ton	1. 67		1. 77	1		li .			+3.8			
Wholesale, compdolls. per short ton_ Retail, composite_dolls. per short ton_	3,905	3.906	3.913	3.930	3, 961	4.019	4.020	∬ +0.8	-1.5			
Anthractie: Productionthous, of short tons.	5, 069	4, 993	5, 954	6, 792	8, 332	5, 927	6 8, 400	+22.7	-0.8			
Exportsthous. of long tons_ Stocks, end of mo. in	189	203	222	323	396	265	405	+22.6				+
yards of dealersno. of days' supply. Prices— Wholesale, compdolls, per long ton.	1			55	i	57	1	İ				.
W HOLESHIE, COURT . COURS DEF LODG FOR	12.628	12.754	12.848	12. 924	12.999	13.040	13.040	+0.6	0.3	11		.

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATIVE FROM J	AN. 1	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu- lative 1929 from 1928
FUELS—Continued												
Coal and Coke—Continued												
Production, U. S.— Beehive——————————————————————————————————	602 4, 510 221 92	600 4,614 225 84	562 4, 643 227 86	504 4, 413 220 98	470 4,610	322 3, 959 194 77	6 431 4, 219 210 100	$ \begin{array}{r} -6.7 \\ +4.5 \\ +28.6 \end{array} $	į	3, 598 39, 755 7 1, 680 761	5, 256 44, 974 7 1, 995 896	+13. +18.
Conellsvilledolls, per short ton	2. 80	2. 80	2. 76	2. 70	2. 70	2. 88	2. 91	0.0	-7. 2			
Crude Petroleum:					ļ	l l			į			ĺ
Productionthous, of bbls Stocks at end of month—	83, 403	91, 327	92, 288	87, 269	88, 104		6 79, 751	+1.0	+10.5	745, 848	847, 103	+13.
Total (comparable)thous, of bbls Tank farms and pipe	379, 089 331, 786	383, 343 335, 232	386, 677 339, 679	386, 662 341, 557	384,502 339,639	366, 720 326, 123	6 367, 949 6 328, 143	-0.6 -0.6	+4.5 +3.5		•••••	
linesthous. of bbls_Refineriesthous. of bbls_California—	47, 303	48, 111	46, 998	45, 105	44,863	40, 597	6 39, 806	-0.5	+12.7			
Lightthous, of bblsthous, of bblsthous, of bblsthous, of bblsthous, of bbls	32, 667 103, 660 6, 591	34, 430 105, 646 6, 122	37, 685 108, 362 5, 800	110,010	42,041 111,076 5,766	16, 870 96, 563 7, 139	6 16, 684 6 97, 025 6, 703	+4.0 +1.0 -17.1	+152.0 $+14.5$ -14.0	66, 052	68, 493	
Imports thous, of bbls. Consumption (run to stills) thous, of bbls. Refinery operation per ct. of capacity.	84, 400 83	85, 919 81	86, 733 81	84, 099 80	83,390 79	79, 894 84	6 79, 663	$+5.1 \\ -1.2$	+11.0 -3.7	756, 626	825, 984	+3. +9.
Refinery operationper ct. of capacity Price, Kansas-Oklahomadolls, per bbl_ Oil wells completednumber	1, 300 1, 316	1. 300 1, 420	1. 300 1, 671	1. 300 1, 440	1, 300 1, 535		1.210 61,206	0.0 +6.6	十7.4	10, 269	13, 145	+28.
Mexico— Productionthous, of bbls_ Exportsthous, of bbls_	3, 648 2, 961	3, 906 2, 483	4, 091 2, 511	3, 986 2, 586		3, 716 2, 244	3, 904 2, 731			⁷ 38, 768 ⁷ 26, 884	7 32, 941 7 20, 886	$\begin{vmatrix} -15 \\ -22 \end{vmatrix}$
Venezuela— Productionthous, of bbls	12, 101	10, 793	11, 394	11, 338	11, 591	9,478	10, 520	+2.2 +5.6	+10.2	84, 538	113, 147	+33
Exportsthous. of bbls	10, 564	10, 731	10, 897	10, 146	10, 717	8,615	9, 283	+5.6	+15.4	80, 947	101, 443	+25
Production— Raw (at refineries)thous, of bbls Natural gas (at plants)thous, of bbls Exportsthous, of bbls Consumptionthous, of bbls	35, 606 4, 250 5, 658 33, 163	37, 855 4, 417 5, 925 36, 860	38, 510 4, 507 5, 491 37, 759	37, 152 4, 574 4, 233 34, 193	39, 663 4, 912 5, 896 32, 816	3,488 4,670	3, 919	+6.8 +7.4 +39.3 -4.0	+50.4		359,758 43,310 49,840 313,800	+15
Stocks, end of month— Raw (at refineries)thous. of bbls_ Natural gas (at plants)_thous. of bbls_ Retail distribution, 41 States.thous. of gals_	41, 991 1, 357 944, 989	37, 880 1, 156 1, 025, 073	33, 788 893 1, 101, 808	661	490	26, 378 436 919, 055	6 26, 435 402 893, 735	+5.5 -25.9 -10.8	$+32.6 \\ +21.9 \\ +9.9$	7 8, 206, 714	7 7 012 038	
Prices— Wholesale, New Yorkdolls. per gal Retail, wagon, 50 citiesdolls. per gal	. 190	. 190	. 188	. 166	. 165	. 180	. 180	-0.6	-8.3	0,200,711		-3
Retail, wagon, 50 cities_dolls. per gal_ Kerosene: Productionthous, of bbls_	. 160 4, 928	. 158 4, 406	. 157 5, 111	. 160 4, 667	. 158 5, 379	H	. 163 8 5, 145	-1.2 +15.3		49, 650	47 477	
Exports	1, 761 2, 547 8, 348 31, 266	1, 281	2, 034 3, 189 8, 689	1, 101 3, 387	2, 237 3, 136	2, 068 3, 164	1,749 6 3,405 6 8,633	+103. 2 -7. 4 0. 0	+27.9 -7.9	18, 536 30, 207	47,477 16,838 30,750	-4 -9 +1
Price, 150° water whitedolls. per gal Gas and fuel oils:	. 074	. 069	. 068		i	.086	. 082					
Productionthous, of bbls_ Consumption— By vesselsthous, of bbls_	37, 338 4, 544	37, 980 4 593	39, 011	1		1	1		·	i '	375, 499	
By electric pow. plants thous. of bbls. By railroads thous. of bbls.	616 4, 170	701 4, 477	4,326	4,375	1,061		619		-0.4 +71.4	42, 803 5, 680 7 36, 528	44, 068 7, 781 7 39, 091	
Stocks at refineries, end mo_thous. of bbls_ Price Okla. 24-26, refineries_dolls. per bbl_ Subricating oil:	37, 332 . 675		39, 316 . 744	40, 646 . 775		39,900			-2.2 +28.9			
Production thous, of bbls. Consumption thous, of bbls. Stocks at refineries, end mo thous, of bbls. Prices, cylinder oil dolls, per gal.	2, 928 2, 446 7, 869 . 400	2, 936 2, 167 7, 524 . 388	3, 143 2, 268 7, 478 . 238	2, 054 7, 589	1,378 8,021	1, 995 7, 742	6 2, 122 7, 830	+5.7	-35.1 + 2.4	19, 675	29, 039 19, 930	+0 +1
Asphalt: Productionthous. of short tons_ Stocks, end of month_thous. of short tons_ Importsthous. of short tons_	327 247 13	386 243 3	379 247 18	231	227	203		-32.9 -1.7 +45.5	+8.1		3,035	+8 +16
Coke: Productionthous. of short tons	154	158	169	161	172	119	125	+6.8	+37.6	1, 162		
Stocks, end of month_thous. of short tons Wax: Productionthous. of lbs	52, 714	46, 171	53, 377	44, 513	56,377	50, 428	54, 546	+26.7	+3.4	li .	530, 195	+2
Stocks, end of monththous, of lbs RUBBER	188, 764	191, 298	190, 878	183, 714	189,094	85, 417	6 92, 814	+2.9				
Crude Rubber												
World shipments, plantationlong tons_ Imports (including latex)long tons_ Consumption by tire mfrsthous. of lbs_	61, 390 41, 828 56, 861	44, 318	37, 85	34, 814		48, 338 39, 838 55, 351	44,072	+10.5	-12.7	⁷ 424, 044 356, 513	⁷ 646, 505 476, 683	
World stocks, end of month: World totallong tons United Stateslong tons_ Europelong tons_	245, 553 92, 062 37, 135	95, 536	90, 769	84, 362	88, 483	198, 481 68, 851 35, 243	66, 421	+4.9	+33. 2			
Producing countrieslong tonslong tonslong tons	36, 336	39, 131	36, 80	37, 753	37, 902	2 17, 687 76, 600	15.489	+0.4	+144.7			
Wholesale price, smoked sheets, New Yorkdolls. per pound	. 206	. 213	.20	3 . 202	. 196	. 182	. 187	-3.0	+4.8			ll .

7 Cumulative through Sept. 30.

The cumulatives shown are through		-	1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGH	JAN. 1	Per of increase (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crea: (-) cum lativ 192: from
RUBBER—Continued Tires and Tubes												152
Pneumatic tires: Productionthousands Stocks, end of monththousands	5, 478	4, 856	6 4, 3 54	3, 5 57	3, 706	5, 101	5, 495	+4.2	-32.6	49, 779	49, 838	+0
Shipments—	13, 468 5, 288	11, 872 5, 891	6 10, 669 6 5, 884	9, 635 4, 343	9,674 3,542	7, 324 5, 191	8, 640 4, 096	+0.4 18.4	+12.0 13.5	47, 041	48, 650	+3
Domestic thousands Export thousands nner tubes:	153	168	6 217	158	199	L 168	191	+25, 9	+4.2	1, 571	1, 864	+18
Production thousands Stocks, end of month thousands Shipments—	5, 234 14, 056	4, 634 14, 055	6 4, 385 6 10, 618	4, 113 9, 9 2 3	4, 062 10, 296	5, 327 10, 158	5, 197 11, 464	-1.2 +3.8	-21.8 -10.2	52, 089	49, 464	
Domestic thousands Export thousands	5, 115 98	5, 993 91	6 6, 137 6 109	4, 624 117	3, 708 119	5, 245 121	4, 138 108	19.8 +1.7	-10.4 + 10.2	49, 490 1, 004	49, 918 1, 196	
olid and cushion: Productionthousands Stocks, end of monththousands	40 133	39 129	6 32 6 118	27 113	34 109	43 151	47 153	+25.9 -3.5	-27.7 -28.8	4 46	349	-2
Domesticthousands	38	39	6 40	35	34	42	43	-2.9	20, 9	416	365	
Exportsthousands Other Rubber Products	3	2	63	z	2	2	3	0.0	-33.3	37	24	-3
Rubber-proofed fabrics, production: Totalthous. of yds	4, 409	4, 260	5, 085	5, 507		4, 966 780	5, 914		107.0	7 29,034	7 37, 929	+3
Total	1, 199 1, 948 1, 262	1, 188 1, 864 1, 208	1, 349 2, 419 1, 317	1, 120 3, 063 1, 324	778	3, 179 1, 007	4,009	30.5		7,823 79,800 712,020	9,845 713,194 715,668	+3
Productionthous, of pairs	20, 007	19, 315	23, 095			21, 451	21, 932			7 178, 471	7 177, 096	
Shipments— To shoe manufacturers thous, of pairs— To repair trade———thous, of pairs—	12, 262 8, 256	13, 785 6, 337 794	14, 942 8, 025	13, 645 7, 859		9, 207 9, 199	9, 813 9, 580			7 91, 292 7 71, 044	⁷ 110, 075 ⁷ 66, 058	
To repair trade thous. of pairs. For export thous. of pairs. Stocks, end of month thous. of pairs.	926 44, 581	794 44, 243	1, 098 43, 960	1, 054 42, 958		875 49,751	1, 262 50, 111			7 7, 717	7 9, 708	+2
Rubber soles: Productionthous. of pairs	2, 502	1, 295	2, 948	,		2,725	' 1	ı i			7 24, 594	-1
To shoe manufacturers thous, of pairs.	2, 185 522	1, 272 163 70	2, 548 517 78	693		1,703 893 29	1, 655 958 328			7 17, 187 7 8, 342 7 1, 918	7 19, 531 7 5, 474 7 481	-3
For exportthous. of pairs Stocks, end of monththous. of pairs Mechanical rubber goods, shipments:	3, 843	2,895	3, 319			5, 501	5, 212				. 401	-7
Total thous, of dolls Belting thous, of dolls	6, 792 1, 613 2, 658	6, 306 1, 645 2, 355	6, 792 1, 940 2, 196	5, 906 1, 490 1, 964		5, 393 1, 412 1, 731				7 52, 795 7 13, 090 7 19, 772	7 59, 201 7 14, 418 7 21, 928	+10
Hose thous, of dolls All other thous of dolls Rubber bands, shipments thous of lbs	2, 535 2, 521 187	2, 305 2, 305 192	2, 196 2, 656 196	2, 452		2, 250 186	2, 424 2, 424 216	+14.3		7 19, 952 1, 935	7 22, 855 2, 163	+14
Rubber flooring, shipmentsthous. of sq. ft Calendered rubber clothing: Productionno. coats and sundries	525 87, 530	566 89, 871	598 96, 281	630 93, 444	543 99, 588	92,588	559 106, 005	-13, 8 +6, 6		5, 819 1, 018, 344	5, 644 854, 308	-
Net ordersno, coats and sundries HIDES AND LEATHER	98, 444	60, 921	37, 906			108, 156	75, 482	+52.6		709, 038	599, 557	-i
Imports: Hides												
Total hides and skinsthous. of lbs Calfskinsthous. of lbs Cattle hidesthous. of lbs	41, 509 6, 559 17, 450	49, 910 5, 636 24, 259	47, 956 4, 900 28, 137	51, 903 3, 178 29, 132	48, 489 4, 886 28, 264	34, 448 2, 707 18, 504	35, 982 4, 310 17, 883	-6.6 +53.7 -3.0	+13.4	450, 802 38, 351 252, 260	422, 576 39, 655 211, 331	+:
Cattle hides thous of lbs. Goatskins thous of lbs. Sheepskins thous of lbs.	8, 309 6, 824	9, 361 6, 849	7, 692 4, 405	8, 893 7, 336	6, 434 5, 091	6,728			-19.5	78, 455 54, 632	83, 960 56, 949	+
Stocks, end of month: Totalthous. of lbs Cattle hidesthous. of lbs	250, 025 196, 202	248, 549 194, 453	253, 415 202, 564	253, 680 203, 304		249, 272 203, 227	253, 921 209, 902					 -
Calf and kid skins thous. of lbs. Sheep and lamb skins thous. of lbs.	32, 525 21, 298	30, 951 23, 14 5	28, 141 22, 710	27, 071 23, 305		24, 059 21, 986	23, 118					
Prices: Green, salted, packers' heavy native steersdolls, per lb Caliskins, country, No. 1dolls, per lb Inspected slaughter of livestock:	. 168 . 186	. 181 . 199	. 188 . 198		. 186 . 197	. 246 . 275		-5.1 -3.4	-15.1 -19.9			
United States— Cattlethous, of animals	636 344	706 363	726 388	753 365	839 398	764 352	801 405	+11.4	+4.7 -1.7	7, 038 3, 961	6, 935 3, 834	=
Calves thous, of animals. Swine thous, of animals. Sheep thous, of animals.	3,756 1,108	3, 597 1, 255	3, 130 1, 298	3, 104	3, 857	2,508	3,713	+9.0 +24.3 +3.6	+3.9	39, 477 11, 245	38, 864 11, 773	-
Canada— Cattle and calvesthous. of animals	93	105	99	98	120	96	111	+22.4	+8.1	938	932	_
Swinethous. of animals Sheepthous. of animals	161 25	159 55	160 77			161 86	200 142	+45, 8 +91, 4	+3.5 +25.4	2, 077 454	1, 897 541	
Leather Sole and belting leather:												
Production— Sole only_thous, of backs, bends, sides— Sole and beltingthous, of lbs_	1, 244 24, 911	1, 176 23, 965	1, 300 25, 323	6 1, 178 23, 291		1, 324 23, 510	1, 447 25, 711	+10.4	-10.1	13, 660 7 220, 902	12, 054 7 210, 191	-1
Stocks, end of month— In process of tanning—thous, of lbs—	79, 153	80, 641	80, 587	81, 574		85, 990	83, 388					
Finished thous of lbs_ Exports thous of sq. ft_ Price oak, scoured backs dolls, per lb_	70, 616 758 . 49	68, 538 832 . 51	66, 276 782 . 52	539	583		825	+8. 2 +1. 9	-29.3 -12.7	8, 346	8,842	+
Upper leather: Production thous. of sq. ft Stocks, end of month—	66, 425	71, 323	82, 954			66, 380	!!			7 612, 814	⁷ 615, 0 71	+
Stocks, end of month— In process of tanning_thous. of sq. ft_ Finishedthous. of sq. ft_	135, 198 235, 156	141, 207 230, 871	147, 678 216, 406	200 520		146, 010 247, 386	251, 350					
Exports thous, of lbs Chrome calf, "B" gradesdolls, per sq. ft	8, 491 . 50	9, 267	7,736	8, 264	9,007	9,093	11, 174	+9.0 0.0	-19.4 -10.9	114, 261	96, 144	

6 Revised.

The cumulatives shown are through			1929			19	28	CREASE	CNT IN- (+) OR LSE (-)	CUMULATI FROM THROUGE	JAN. 1	Per ct. in- crease (+); or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu- lative 1929 from 1928
HIDES AND LEATHER—Continued												
Leather Products												
Shoes: Productionthous. of pairsthous. of pairsthous. of pairsthous.	28, 120	30, 223	36, 445	34, 489		31,000	33 , 3 93			7 262, 607	7 273, 670	
Exportsthous, of pairs Wholesale prices— Men's black calf	357	320	291	321	426	275	340	+32.7	+25.3	3, 573	3, 645	+2.0
blucher, Massdolls, per pair	6. 75	6. 75	6. 75	6. 75	6. 75	6. 75	6.75	0.0	0.0			
Men's dress welt, tan calf oxford, St. Louis dolls. per pair	4.85	4.85	4.85	4.85	4.85	4. 85	4.85	0.0	0.0			
Women's black kid, dress welt, lace, oxforddolls. per pair	4. 25	4. 25	4. 25	4. 25	4. 25	4. 25	4. 25	0.0	0.0			
Gloves, cutdozen pairs	252, 703	255, 711	292, 545	285, 094		213, 945	236, 907	+11.6	+34.2	2,149,070	2,63 7,961	+2.27
PAPER AND PRINTING												
Wood Pulp Mechanical:												
Productionshort tons Consumption and shipmentsshort tons	142, 915 136, 669	122, 946 136, 695	111, 878 145, 432	102, 202		108, 166 122, 771	131, 558 146, 383		•••••	7 1, 193, 456 7 1, 819, 753	7 1,231,941 7 1 250 164	+3.2 -31.3
Stocks, end of month short tons. Imports short tons.	185, 209	171, 535	137, 982	106, 669		133,006	118, 182		+13.1		216, 054	
Chemical:	24, 014	18, 724	24, 731	20, 666			23,884			i l		+5.9
Productionshort tons_ Consumption and shipments_short tons_	225, 940 223, 016	221, 388 220, 714	237, 762 235, 310	218,980 219,842		201, 646 204, 378	228, 434 231, 800			7 1,923,194 7 1,929,502	7 2,059,014	+7.2 +6.7
Stocks, end of month short tons. Imports short tons. Price, sulphite dolls. per 100 lbs.	36, 188 153, 956	35, 940 161, 185	37, 354 142, 502	134, 533	145, 878	42, 510 124, 048	149, 112	+8.4	-2.2	1, 187, 183	1, 338, 360	+12.7
	2. 53	2. 60	2. 60	2. 60	2. 60	2. 53	2. 53	0.0	+2.8			
Newsprint Paper												
Production: United States, totalshort tons	113, 407	111, 578	120, 868	108, 155	122, 009	102, 821	122, 415	+12.8	-0.3	1, 170, 017	1, 160, 252	-0.8
Ratio to capacity per cent	82 225, 055	81 229, 0 45	77	80 227, 665		74	81	+10.7			2, 244, 518	+15, 1
Canada short tons. Consumption by publishers short tons. Shipments:	192, 424	173, 375	172, 239	193, 045		169, 625				1, 544, 974	1, 674, 983	+8.4
United Statesshort tons	114, 558 233, 920	112, 616 227, 502	118, 789 224, 254	107, 495 226, 623	122, 040 252, 591	107, 834 197, 532		+13.5 +11.5			1, 170, 527 2, 147, 763	+1.5 +10.1
Canada short tons. Imports short tons.	202, 398	210, 497	209, 901	196, 123	221, 010	164, 648		+12.7				+12.8
Exports: Canadashort tons	219, 895	199, 692	217, 638	201, 249	232, 441	170, 840	214, 228	+15.5	+8.5	1, 79 7, 2 38	2, 061, 321	+14.7
Stocks, end of month: At mills—												
United States short tons Canada short tons	24, 602 24, 199	23, 603 28, 993	25, 656 29, 785	26, 490 30, 742	30,064	43,800		+0.3 -2.2	-27.0 -18.8			
At publishersshort tons	161, 318 48, 716	191, 647 44, 781	205, 532 44, 676	190, 331 52, 535		191, 287 48, 229	188, 980 45, 289				-	
In transit to publishersshort tons_ Price, roll, f. o. b. milldolls. per 100 lbs_	3. 25	3, 25	3. 2 5	3, 25	3. 25	3. 25	3. 25	0.0	0.0			
Printing												
Book publication: American manufactureno. of titles	695	501	819	739		835				7 5, 996		
Importedno. of titles Sales books:	125	131	177	57		261	160			1 1, 335	7 1, 197	-10.3
New ordersthous, of books	12, 332 12, 445	11, 476 13, 737							-0.9 -3.1 +11.3	124, 951 122, 406		+0.7 +3.8
Shipments thous. of books. Blank forms, new orders thous. of sets.	58, 687	57, 225	54, 054		75, 622		67, 957	+34.0	+11.3	488, 386	605, 363	+3.8 +24.0
Box Board												
Operation thous of inch hours operation per ct. of capacity	9, 171 83, 5	9, 045 79. 2	9, 590 80. 9	8,526 80 9		8, 344 83. 0	9, 430 82, 8			⁷ 75, 6 32	7 82,827	+8.8
Production short tons New orders short tons	241, 028 231, 230	236, 377 240, 617	264, 365 257, 318	237, 759		224, 971 234, 449	244, 894		l	7 1,992,076 7 2,009,361	2,227,948 2,202,301	+11.8 +9.6
Shipmentsshort tons	235, 865	235, 863	262, 889	242, 421		228, 880	246, 233			7 1,989,817	2, 218, 402	+11.5
Stocks, end of month short tons Stocks of waste paper, end of month:	62, 384	63, 333	61, 853									
On hand short tons In transit and unshipped purchases tons	159, 005 56, 904	175, 306 64, 359	171, 360 61, 571	89, 280		116, 197 53, 344 87, 097	127, 989 73, 235					
Unfilled orders, end of monthshort tons Consumption of waste papershort tons	81, 880 234, 119	88, 275 215, 537	82, 969 256, 560	230, 146		217, 361	81, 022 240, 930			⁷ 1, 852, 272	7 2, 214, 431	+14.2
Other Paper											,	
Binder's board, productionshort tons	3, 092	2, 828	3, 443	2, 903	2, 682	2, 431	2, 644	-7. 6	+1.4	30, 750	30, 103	-2.1
Book paper: Productionshort tons	129, 743	130, 768	138, 614	135,842		117, 374				7 1, 126, 079	7 1, 201, 689	+6.7
Ratio to capacity per cent- Shipments short tons	94 130, 132	91 13 0, 2 45	93 1 36, 951	103 1 35, 4 34		1 20, 895	133, 429				⁷ 1, 207, 524	+7.9
Stocks, end of monthshort tons New orders—	74, 255	74, 99 8	77, 24 8	78,020		82, 403	81, 579					
Coatedp. ct. of normal production Uncoated.p. ct. of normal production	84 82	82 81	85 77	87 86	89 92	81 80		+2.3 +7.0	+7.2 +7.0			
Unfilled orders, end of month— Coatedp. ct. of normal production	9	10	9	10	11		!	+10.0				
Uncoated p. ct. of normal production. Wrapping paper:	8	9	8	8	8		8	0,0				
Production short tons Ratio to capacity per cent	87, 191 85	84, 0 93 79	91, 849 83			83, 582 84	96, 907 85			7 844, 042	7 811, 721	-3.8
Shipments short tons Stocks, end of month short tons	86, 406	85, 775	90, 655	83,750		86, 173	94, 900			7 827, 914	7 813,878	-1.7
7 Cumulative through Sept. 30.	88, 091	86, 2 83	87, 104	00,014		91, 977	93, 416		l			

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The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(十) OR	FROM	IVE TOTAL JAN. 1 H OCT. 31	Per in crea (+
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crea (cur lati 192 fro
PAPER AND PRINTING—Continued												
Other Paper—Continued Yine paper:												l
Production short tons. Ratio to capacity per cent. Shipments short tons. Stocks, end of month short tons.	38, 513 90 37, 897 50, 103	37, 624 85 36, 608 47, 583	38, 943 84 39, 644 46, 840	88 34,936		34, 885 80 34, 885 53, 361	84 39, 839			7 785, 626		
Il other grades: Production short tons Shipments short tons Stocks, end of month short tons	100, 897 100, 098	100, 503 101, 783	105, 055 104, 638	97, 715 97, 209		100, 138 102, 437		!		⁷ 919, 941 ⁷ 914, 718	7 930, 599 7 922, 911	
otal paper (inc. newsprint and box board):	59, 875 710, 779	57, 592 700, 943	58, 009 7 60, 144			70, 140 663, 771				⁷ 6, 276, 097	7 7 250 012	+
Ratio to capacityper centShipmentsshort tonsStocks, end of monthshort tons	704, 956 359, 310	702, 890 353, 342	83	85 701, 245		681, 104 378, 839	83 751, 693			7 6, 244, 965		
Paper Board and Shipping Boxes												
reduction: Total	506, 830 406, 908 99, 922	481, 762 384, 885 96, 877	\$ 558, 845 448, 920 \$ 109, 925	434, 351	574, 171 457, 425 116, 746	434, 371 359, 553 74, 818	454, 662 374, 342 80, 320	+4. 9 +5. 3 +2. 6	+26. 3 +22. 2 +45. 4	3, 329, 527	4, 040, 315	ill +:
rotal per cent of normal Corrugated per cent of normal Solid fiber per cent of normal	85 87 77	80 82 74	89 91 82	89 91 82	91 93 86	79 78 80	88 89 83	+2. 2 +2. 2 +4. 9	+3. 4 +4. 5 +3. 6			
brasive paper and cloth: Domestic shipments reams Foreign shipments reams tope paper sacks, shipments index number	90, 355 16, 696 96	88, 566 11, 400 85	100, 924 20, 564 101	99, 221 17, 819 95	91, 782 24, 238 115	95, 131 18, 281 102	20, 085	-7. 5 +36. 0 +21. 1	-6.9 +20.7 +1.8	185, 145		
BUILDING CONSTRUCTION AND HOUSING			<u> </u>									
Building Costs				•								
Building materials: Frame house, 6-rm. 1st of mo_rel. to 1913 Brick house, 6-rm 1st of mo_rel. to 1913 ldg. cost, 1st of morel. to 1913	176 181 205. 7	177 182 204, 8	177 182 205. 9	176 182 207. 6	178 183 206. 3	177 181 207 . 3	179 184 207. 7	+1. 1 +0. 5 -0. 6	-0.7			
ldg. cost (A. G. C.), 1st of morel. to 1913 lumbing fixtures, 6 piecesdollars_ construction costs (Am. Appraisal): Framerel. to 1913	203 97, 54 204	202 97. 94 204	203 98. 84 204	201 98, 97 205	202 99. 20 205	201 101. 13 204	202 100. 67 204	$+0.5 \\ +0.2 \\ 0.0$	0. 0 -1. 5 +0. 5			
Brick, wood frame rel. to 1913 Brick, steel frame rel. to 1913 einforced concrete rel. to 1913	214 197 201	214 197 200	214 197 201	214 197 201	215 198 202	213 198 201	213 197 201	+0. 5 +0. 5 +0. 5	+0.9 +0.5 +0.5			
Contracts and Losses ontracts awarded (36 States):												
Commercial buildingsthous. of sq. ft Industrial buildingsthous. of sq. ft Residential buildingsthous. of sq. ft Educational buildingsthous. of sq. ft	13, 353 8, 341 36, 227 6, 349	12, 873 9, 563 36, 161 6, 525	13, 481 10, 148 28, 339 5, 190	12, 612 7, 585 24, 354 4, 914	12, 611 9, 041 27, 478 5, 461	11, 442 10, 348 38, 744 5, 651	13, 194 9, 705 48, 298 4, 876	0.0 + 19.2 + 12.8 + 11.1	$ \begin{array}{r} -4.4 \\ -6.8 \\ -43.1 \\ +12.0 \end{array} $	126, 352 78, 928 471, 606 52, 200	133, 756 86, 166 334, 613 51, 388	_ ;
Other public and semi- public buildings thous. of sq. ft. Grand total thous. of sq. ft.	5, 195 70, 297	5, 743 71, 320	5, 896 63, 875	6, 958 57, 152	7, 255 62, 590	6, 278 73, 146	6, 477 82, 906	+4.3 +9.5	+12.0 -24.5	60, 143 794, 028	52, 882 666, 103	
Grand total	78, 625 69, 621 185, 328 41, 745	88, 137 66, 318 194, 754	68, 365 71, 820 142, 049	71, 590 52, 090 114, 184	63, 682 59, 507 131, 809	58, 525 112, 925 196, 850		-11.0 $+14.2$ $+15.4$	+0.7 -2.7 -43.8	533, 522 2, 346, 352	1, 650, 445	+
Other public and semi- public buildingsthous, of dolls	39, 324	46, 333 49, 537	31, 149 42, 762	29, 034 49, 307	35, 970 54, 998	37, 088 51, 317	46, 820	+23.9 +11.5	+17.0 +17.5	332, 738 481, 539	432, 732	{
Contracts awarded, Canadathous. of dolls cuilding volume (A. G. C.)rel. to 1913	117, 426 532, 069 72, 420 231	179, 897 624, 976 57, 941 218	114, 766 470, 910 58, 622 239	114, 146 430, 351 46, 959 259	80, 206 426, 171 57, 084 233	115, 808 572, 513 45, 439 266		$ \begin{array}{r} -29.7 \\ -1.0 \\ +21.6 \\ -10.0 \end{array} $	$ \begin{array}{r} -45.1 \\ -26.9 \\ +2.8 \\ -4.1 \end{array} $	1, 124, 857 5, 536, 742 424, 090	4, 871, 380	—1
ire losses: United States and Canada, (Journal of Commerce)thous. of dolls Canada (Monetary Times)_thous. of dolls	26, 631 3, 079	31, 528 5, 027	27, 504 3, 776	21, 422 2, 040	29, 072 3, 777	17, 183 1, 739	22, 414 1, 795	+35. 7 +85. 1	+29.7 +110.4	249, 476 23, 971	273, 200 30, 417	
LUMBER PRODUCTS Softwood Lumber												
outhern pine: Production (computed)M ft. b. m	369, 971	393, 932	400, 274	359, 757	384, 227	386, 671	427, 623	+6.8	-10.1	4, 216, 208	3, 922, 648	_
Operationper cent of full time	83 370, 310	37 7 , 571	384, 203	83 347, 7 04	82	423, 218	90 464 , 558	$-1.2 \\ +7.9$	-8.9 -19.2	4, 469, 377	3, 862, 580	- <u></u> ;
New orders (computed) M ft. b. m Stocks, end of mo. (computed) . M ft. b. m Unfilled orders and mo. (comp.) M ft. b. m	343, 106 985, 538 293, 147	379, 217 1, 001, 899 294, 793	378, 878 1, 017, 970 289, 468	344, 703 1, 030, 023 286, 467	375, 228 368, 296 1, 039, 022 279, 535	434, 884 991, 781 340, 875	444, 566 954, 846 320, 883	$^{+6.8}_{+0.9}$ $^{-2.4}$	$-17.2 \\ +8.8 \\ -12.9$	4, 486, 463	3, 855, 600	
Snipments (computed)	59, 263 9, 311	57, 275 17, 474	52, 630 9, 300	43, 087 14, 874	11, 315	40, 83 7 14, 897	75, 504 14, 104	+20.2 -23.9	-31.4 -19.8	584, 911 146, 756	568, 363 106, 599	
Price, flooringdolls. per M ft. b. m Pouglas fir: Production	37. 04 334, 841	37. 27 302, 162	37. 43 353, 642	36. 76 315, 592	39. 50	37. 73 296, 343	37, 73 337, 527	+7.5	+4.7	7 3, 988. 096	7 2, 981. 336	
Shipments (computed) M ft. b. m. New orders M ft. b. m.	371, 995 354, 537	319, 621 306, 639	333, 498 327, 678	293, 209		315, 144 322, 754 293, 657	301, 267 302, 610			7 3, 988, 096 7 4, 307, 944 7 4, 377, 996	7 3, 137, 392 7 3, 088, 322	$\begin{vmatrix} -2 \\ -2 \end{vmatrix}$
Orders and the second s	278, 437 83, 966 51, 571 18, 74	328, 574 98, 179 43, 932 18. 77	245, 311 72, 811 48, 303 18. 57	299, 924 64, 085 38, 493 18. 36	80, 888 50, 558 17, 82	293, 657 64, 265 44, 264 17, 32	297, 686 65, 795 39, 330 18. 06	$+26.2 \\ +31.3 \\ -2.9$	+22.9 +28.5 -1.3	647, 605 466, 687	779, 895 469, 594	+2

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• Revised.

7 Cumulative through Sept. 30.

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGE	JAN. 1	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu- latiye 1929 from 1928
LUMBER PRODUCTS—Continued Softwood Lumber—Continued												
California redwood: Production (computed)	37, 866 41, 507 38, 776	28, 435 28, 672 35, 657	44, 923 48, 648 44, 930	35, 291 37, 363 34, 086	36, 745 36, 064 33, 080	34, 329 33, 107 33, 519	27, 851 32, 744 33, 115	+4. 1 -3. 5 -3. 0	+31. 9 +10. 1 -0. 1	383, 428 377, 614 383, 601	376, 781 381, 562 394, 690	+1.0
Unfilled orders, end of month (computed)	40, 257	47, 235	44, 590	41, 837	37, 097	47, 916	40, 350	11.3	-8. 1			
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.	118, 422 98, 779 463, 175 105, 832 156, 475	120, 968 97, 302 486, 416 88, 208 150, 643	126, 934 102, 334 516, 220 95, 986 162, 494	94, 983 93, 900 523, 772 80, 250 153, 701	131, 790 88, 363 567, 326 71, 398 172, 154	122, 708 105, 246 538, 136 86, 716 188, 747	126, 086 119, 074 552, 422 100, 760 183, 493	38.8 -5.9 +8.3 -11.0 +12.0	+4. 5 -25. 8 +2. 7 -29. 1 -6. 2	901, 105	1, 009, 720 997, 507 925, 301	-3. 3 -3. 1 +2. 7
North Carolina pine: Production (computed) M ft. b. m Shipments (computed) M ft. b. m Northern pine:	53, 270 59, 080	47, 831 50, 946	48, 993 48, 230	48, 132 45, 605	45, 878 47, 264	37, 457 39, 900	48, 090 51, 590	-4.7 +3.6	-4.6 -8.4	489, 412 511, 839	552, 447 540, 974	+12.9 +5.7
Lumber— Production M tt. b. m. Shipments M tt. b. m. New orders M ft. b. m. Lath—	50, 537 44, 197 37, 142	50, 733 44, 825 40, 012	49, 846 43, 764 42, 485	41, 822 37, 054 30, 291	38, 422 43, 737 35, 578	51, 618 44, 618 44, 209	55, 031 51, 378 41, 109	-8.3 +18.0 +17.5	-30. 2 -14. 9 -13. 5	425, 869	398, 340 410, 789 371, 858	 −3. 5
Production	6, 818 10, 2 56	8, 8 22 10, 083	8, 442 9, 258	6, 268 6, 509	5, 739 6, 892	12, 419 8, 897	11, 777 8, 937	-8.4 +5.9	-51.3 -22.9		64, 428 80, 086	-32. 9 -6. 4
Northern hemlock: Production M ft. b. m. Shipments M ft. b. m. Hardwood Lumber	13, 527 16, 262	15, 359 18, 614	14, 908 16, 020	17, 079 12, 859	11, 943 12, 378	15, 3 15 19, 951	16, 425 21, 042	-30. 1 -3. 7	-27.3 -41.2		148, 971 1 3 5, 694	-10.6 -21.6
Walnut lumber:	00											
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.	4, 532 3, 699 12, 960 3, 625 7, 636	3, 839 3, 570 12, 640 2, 627 6, 474	4, 608 3, 607 14, 303 3, 266 6, 892	4, 649 3, 289 15, 347 3, 398 7, 000	5, 284 4, 017 15, 817 3, 313 6, 562	2, 749 3, 299 12, 625 2, 635 4, 741	2, 857 3, 419 12, 249 4, 174 5, 483	+13.7 $+22.1$ $+3.1$ -2.5 -6.3	+84.9 $+17.5$ $+29.1$ -20.6 $+19.7$	30, 170	39, 891 36, 530 35, 500	+22.
Walnut logs: Purchased	3, 711	2, 951	3, 667	3, 367	4, 158	2, 274	2, 702	+23.5	+53.9	11 1	31, 007	+25.
veneer Mft. log measure Stocks, end of month Mft. log measure	3, 241 2, 253	3, 217 2, 773	3, 358 2, 441	3, 724 2, 148	3, 996 2, 265	2, 643 2, 684	2, 606 2, 636	+7.3 +5.4	+53.3 -14.1	25, 309	30, 543	+20.
Lower Michigan hardwoods: Production	4, 882 4, 672 24, 364	6, 179 5, 875 26, 121	2, 595 4, 094 17, 880	2, 929 6, 851 24, 606		4, 915 6, 467 20, 915	4, 411 6, 137 19, 434			⁷ 66, 960 ⁷ 63, 342	⁷ 46, 859 ⁷ 50, 184	-30. -20.
Northern hardwoods: M ft. b. m. Production M ft. b. m. Shipments M ft. b. m. Gum: M ft. b. m.	31, 348 24, 444	24, 961 24, 413	22, 459 27, 469	17, 195 24, 275	14, 643	16, 624 25, 086	16, 727 31, 473	-14.8 -6.9			296, 397 265, 991	-8. -12.
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 Oak:	475 325 150	465 318 147	469 325 144	482 328 154	339	529 396 133	532 398 134	0.0 +3.4 -7.1	$ \begin{array}{r} -9.4 \\ -14.8 \\ +6.7 \end{array} $			
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:	923 747 176	955 785 169	982 802 181	1, 004 808 195	1,022 823 199	954 775 161		$+1.8 \\ +1.9 \\ +2.1$	+11.3 +10.3 +16.4			
Production mill. ft. b. m. Shipments mill. ft. b. m. New orders mill. ft. b. m. Stocks, total, end month mill. ft. b. m.	300 285 277 2, 681	311 278 278 2, 731	334 296 300 2, 772	334 311 323 2, 848	296 278 281 2,887	270 293 293 2, 731	285 315 323 2, 722	-11.4 -10.6 -3.0 $+1.4$	+3.9 -11.7 -13.0 +6.1	2,735 2,818	3,024	+10.
Stocks, unsold, end monthmill. ft. b. m Unfilled orders, end monthmill. ft. b. m Exports, planks, joists, etc	2, 681 2, 031 657 211, 952	2, 088 643 231, 516	2, 122 645 181, 897	2, 848 2, 239 678 163, 427	2, 227 660 194, 083	2, 731 2, 164 566 170, 457	2, 722 2, 132 589 204, 979	-0.5 -2.7 +18.8	+4.5 + 12.1		2, 023, 742	+4.
Maple flooring: Production	5, 418	6, 450	6, 918	7, 334	7, 813	7, 675	8, 204	+6.5	-4.8	76, 812	66, 904	-12.
Shipments	6, 420 20, 964 3, 822 10, 600	6, 450 7, 883 21, 913 6, 159 10, 431	8, 435 20, 480 6, 927 8, 881	7, 334 7, 239 20, 827 4, 750 7, 641	6, 896	7, 675 7, 929 22, 554 7, 110 10, 106	8, 204 8, 543 21, 352 7, 230 7, 940	-4. 7 +7. 7 -9. 5 -7. 1	-19.3 +5.0 -40.6 -10.6	81, 110 77, 841	68, 612 61, 827	-15.
Oak 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.	36, 722 39, 979 72, 147 34, 479	37, 638 37, 002 70, 435 25, 901	36, 382 37, 631 70, 198 30, 972	33, 055 31, 464 72, 141 37, 388	35, 813 29, 704 76, 342 19, 743	45, 926 45, 020 68, 456 43, 141	51, 225 45, 652 72, 689 38, 132	+8.3 -5.6 +5.8 -47.2	+5.0			-22.
Unfilled orders, end of monthM ft. b. m	50, 832	43, 895	35, 937	40, 417	30, 887	47, 099	41, 151	-2 3. 6				
Doors at Wholesale Fir, manufacturing plants:	000 22	0.00		01			000 175					
Production number Shipments number Stocks, end of month number New orders number number number unfilled orders, end of month number	322, 987 258, 041 282, 150 261, 271 477, 349	302, 452 340, 978 217, 547 204, 745 315, 566	177, 332 177, 111 206, 382 164, 355 254, 210	225, 779	200, 107 209, 259 145, 596 194, 782 171, 315	273, 056 305, 555 238, 399 237, 769 300, 106	362, 004 243, 946 285, 147	$ \begin{array}{r} -7.4 \\ +8.1 \\ -36.4 \\ -13.7 \\ -39.7 \end{array} $	-31.7			
Wooden Furniture												
Household furniture and case goods: Shipmentsdolls., average per firm Unfilled ordersdolls., average per firm	47, 831 36, 232	53, 748 64, 573	70, 482 77, 568	75, 319 84, 138	82,440 62,355	65, 010 58, 576	70, 030 50, 266	+9.5 +25.9			617,364	+17.

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT IN- CREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH OCT. 31		cr (
	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	cr cu la fi
LUMBER PRODUCTS—Continued Wooden Furniture—Continued												
rand Rapids district:									İ			
Unfilled orders, end of month	58 22 20	68 24 36	64 30 30	58 32 31	45 35 29	49 30 31	38 37 31	-22, 4 +9, 4 -6, 5	+18. 4 -5. 4 -6. 5			
end of monthNo. of days' sales Cancellationsper cent of new orders Plant operationper cent of full time	44 11. 0 88. 0	46 5. 0 90. 0	53 5. 0 97. 0	58 6. 0 1 01. 0	61 23. 0 104. 0	65 9. 0 101. 0		+5. 2 +283. 3 +3. 0				
Plywood and Veneer		,										
ouglas-fir plywood: Productionthous. of sq. ft. of surface Shipmentsthous. of sq. ft. of surface New orders (sales) thous. of sq. ft. of surface	13, 169 12, 778 10, 525	15, 567 14, 113 12, 149	12, 713 12, 661 7, 863	11, 625 11, 698 10, 377	9, 292 7, 517 7, 134	9, 426 9, 257 10, 245	13, 07 9 12, 003 12, 654	-20. 1 -35. 7 -31. 3	-37.4			W.
Unfilled orders, end of month_thous. of sq. ft. of surface Stocks, end of	14, 120	12, 308	8, 691	5, 971	4, 850	7, 715	6, 628	-18.8	26.8			
monththous. of sq. ft. of surface	5, 702	7, 158	7, 201	7, 415	9, 190	7, 309	7,704	+23.9	+19.3			
New ordersthous, of sq. ft. of surface Shipmentsthous, of sq. ft. of surface	6, 135 4 , 234	10, 159 4, 533	5, 103 5, 608	7, 198 5, 309	8, 167 6, 070	3, 381 3, 177	4, 411 4, 235	+13. 5 +14. 3	$+85.2 \\ +43.3$	31, 616 29, 463	62, 277 46, 167	
Unfilled orders, end of month_thous, of sq. ft. of surface totary-cut veneer:	9, 724	14, 934	13, 123	14, 691	10, 748	5, 469	5, 817	-26.8	+84.8			
Receiptsnumber of carloads Purchasesnumber of carloads	169 181	272 260	$\frac{174}{122}$	223 287	251 306	244 199	337 255	+12.6 +6.6	-25.5 +20.0	1, 791 2, 106	2, 074 2, 447	
ushel baskets: Productiondozens Shipmentsdozens Stocks, end of monthdozens	202, 426 200, 814 665, 881	232, 860 232, 154 674, 339	264, 212 360, 050 584, 410	190, 939 314, 904 461, 717	225, 014 257, 904 428, 789	177, 982 285, 813 409, 110	156, 407	+17.8 -18.1 -7.1		1, 976, 227 2, 048, 030	2,042,620 2,002,655	
TONE, CLAY, AND GLASS PRODUCTS												
ommon brick: Stocks, end of month—	200 055	200 044	200 225	015 451		400.001	474 001					
Burned thousands. Unburned thousands. Shipments thousands	308, 257 154, 185 154, 021	290, 044 95, 756 118, 834	290, 265 110, 904 130, 982	224, 530		498, 691 257, 692 167, 078	454, 931 91, 226 122, 078			7 1, 792, 189	7 1 170 772	
Shipmentsthousands Unfilled orders, end of month_thousands Plants closed downnumber	163, 126 50	148, 289 17	109, 564 56	110, 215 26		213, 174 21	145, 427 49				- 1, 170, 773	-
Plants closed downnumber_ Price, red, New Yorkdolls. per thous_ orcelain plumbing fixtures:	11.00	10. 13	10. 13	10.50		12. 50			į			1
Net new orders. pieces. Shipments pieces. Unfilled orders, end of month pieces. Stocks, finished glost, end month pieces.	9, 669 10, 807 31, 234 45, 848	12, 153 11, 845 30, 088 37, 947	12, 168 13, 873 26, 911 40, 343	9, 524 9, 569 26, 115 39, 708	8, 548 8, 269 25, 376 40, 682	9, 939 16, 525 54, 583 50, 953	17, 018 50, 558	-13. 6 -2. 8	-51. 4 -49. 8	165, 806	106, 893	
itreous china plumbing fixtures: New orders. pieces. Shipments pieces. Unfilled orders, end of month pieces.	196, 707 246, 071 438, 715	244, 351 271, 411 411, 655	242, 596 268, 639 385, 632	195, 931 237, 788 343, 775	242, 879 217, 108 369, 546	180, 758 215, 284 318, 508	222, 190 236, 781 303, 917	+24.0 -8.7 +7.5	$-8.3 \\ +21.6$	2, 644, 536	2, 498, 199 2, 518, 279	II.
Stocks, end of monthpieces loor and wall tile: Production thous of so, ft.	591, 633 6, 247	582, 314 6, 244	559, 418 6, 390	566, 776 5, 629	602, 352	510, 864 6, 621	531, 119 7, 636		+13.4		7 54, 847	1
Production thous of sq. ft. Shipments, quantity thous of sq. ft. Shipments, value thous of dolls. Stocks, end of month thous of sq. ft. erra cotta, new orders:	6, 424 2, 412 18, 092	6, 459 2, 505 18, 301	6, 813 2, 690 17, 929	5, 469		6, 755 2, 572 12, 253	7, 239 2, 730			⁷ 52, 578 ⁷ 19, 995	⁷ 51, 551 ⁷ 20, 014	.
Quantitynet tons. Valuethous. of dolls.	10, 798 1, 178	11, 756 1, 183	8, 606 940	7, 784 817	6, 566 716	10, 570 1, 005	15, 597 1, 460	-15. 6 -12. 4		129, 304 12, 240	103, 119 11, 251	1
Production thousands Shipments by rail thousands Shipments by truck thousands.	17, 578 5, 412 13, 757	16, 061 4, 263 12, 266	16, 838 4, 684 11, 615	6 14, 121 3, 960 6 10, 951	11, 024 2, 602 7, 055 7, 857 7, 020	17, 267 6, 767 11, 281		-21.9 -34.3 -35.6	-53. 2 -55. 4	170, 772 57, 325 116, 537	134, 159 39, 512 103, 977	
Stocks, end of monththousands Unfilled orders, end of monththousands	10, 447 14, 968	8, 854 14, 739	9, 714 9, 925	6 9, 326 6 13, 286	7, 857 7, 020	15, 304 14, 455	14, 446 13, 435	$-15.8 \\ -47.2$:
Portland Cement		'				İ						
roduction thous, of bbls peration per ct. of capacity.	16, 803 80: 9	17, 281 80. 4	18, 585 86. 1	81.8	77.0	17, 884 91. 7	87.1	-5.9	-11.6		144, 896	.ll.,
hipments thous of bbls. tocks, end of month thous of bbls. tocks, clinker, end of month thous of bbls. locks, clinker, composite dolls. per bbl.	18, 949 27, 457 13, 586 1, 650	20, 295 24, 525 11, 619 1, 650	20, 056 8, 989	6 17, 325 6 6, 985	15, 361 5, 914	16, 799 7, 566	14, 579 5, 944	-11.3 -15.3	+5.4 -0.5		152, 240	
Highways												
Concrete pavements, new contracts: Totalthous, of sq. yds Roadsthous, of sq. yds Pederal-aid highways:	16, 421 10, 410	18, 022 11, 344	11, 969 7, 010						+86. 1 +137. 5	131, 568 83, 153	126, 843 84, 303	3
Completed— Cost thous of dolls Distance miles Under construction, end of month miles	15, 552 520 8, 359	16, 445 693 8, 494	442	830	996	1, 169	598	+20.0	+66.6	132, 926 5, 707	143, 233 5, 108	
Plate Glass												240
Production, polishedthous. of sq. ft	12, 278 sed.	13, 057	14, 722	14,011		10,897			+31.2	108, 423	129, 879)

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGE	JAN. 1	Per c in- creas (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	or de creas (-) cum lativ 1929 from 1928
STONE, CLAY, AND GLASS PROD- UCTS—Continued												
Glass Containers												
Actual production: Quantitythous. of gross.	2, 561	2, 396	2, 715	2, 246	2, 572	2, 322	2, 389	+14.5	+7.7	24, 331	24, 894	+2.
Relation to capacity per cent New ordersthous. of gross	81. 5 2, 023	73. 3 2. 224	77. 5 1, 922	74. 5	75. 6 2, 996	78. 7 2, 122	71. 6 2. 721	$+1.5 \\ +1.8$	$+5.6 \\ +10.1$	23, 768	25, 547	+7
Shipments thous of gross Unfilled orders, end of month thous of gross.	2, 679 9, 278	2, 507 8, 824	2, 656 8, 079	2,700	2, 445 8, 320	2, 433 8, 084	2, 261	$-9.4 \\ +3.1$	+8.1 -1.1	24, 148	25, 294	+4
Stocks, end of monththous. of gross	6, 500	6, 388	6, 447		6, 121	6, 173		+2.1	-2.9			
Illuminating Glassware Production:						İ						
Totalnumber of turns	3, 239 46. 3	1, 818 18. 7	2, 819 36. 4	3, 225 45. 3	4, 265 50. 2	3, 190 43. 0	50. 5	+32.2 +10.8	+1.7 -0.6	30, 850	32, 715	
New ordersper ct. of capacity Shipmentsper ct. of capacity	44. 6 45. 1	40. 1 35. 3	42. 9 43. 8	46. 8 49. 6	52. 9 51. 1	44. 2 43. 0		+13.0 +3.0	-0.6 -1.5			
Unfilled orders, end of monthnumber of weeks' supply	1. 6	1. 5		1.4	1. 5	1.7	1.7	+7.1	-11.8			
Stocks, end of month number of weeks' supply	6. 0	5. 4	4. 7	4. 6	4.6	4.3	4. 1	0.0	+12. 2			
Chemicals												
Sulphuric acid: Exportsthous. of lbs	693, 027	506, 758	641, 492		544, 462	581, 760	441, 867	+5.5	+23. 2	6, 046, 230	5, 585, 050	-7.
Price, wholesaledolls. per 100 lbs_ Nitrate of soda:	. 78	. 78				. 78		0.0	0. 0			
Importslong tons Production in Chile—	64, 733	40, 501	51, 684		54, 821	36, 644	'	+73.8	+26.4	896, 943	821, 842	
Quantitymetric tons Potash salts:	252, 600	272, 300	270, 300		207, 800	259, 400	· 1	-17.9	-26.4	2, 584, 000	2, 614, 100	
Importslong tons_ Production in France—	9, 895	37, 126	45, 505		51, 757	43, 313	28, 242	+29.1	+83. 3	310, 652	305, 69 5	-1
(K ₂ O content) metric tons Sales in Germany	39, 700	41,000	42, 500	1	#O ##O	35, 200	1					
(K ₂ O content)metric tons Superphosphate (acid phosphate):	97, 723	89, 190			79, 159	140, 818		-35.9	+3.5	1, 231, 607	1, 212, 235	l
Productionshort tonsstocks, end of monthshort tons	302, 434 967, 766	305, 808 1, 206, 174	1, 393, 654	1, 292, 970	348, 793 1, 507, 878	251, 190 1, 347, 735	1,546,290	$+39.4 \\ +16.6$	$^{+1.6}_{-2.5}$	3, 141, 077	3,075,178	
Shipments short tons Fertilizer:	55, 459	62, 956			154,012	149, 002		-5.3	+71.6	1, 746, 089		
Exports long tons Consumption, Southern States short tons	140, 090 99, 407	123, 515 20, 047	112, 346 45, 517	155, 103 174, 347	129, 849 101, 295	99, 149 131, 120		-16.3 -41.9	+50.5 -29.1	1, 050, 207 5, 375, 115	1, 278, 305 5, 289, 483	
Dyes and dyestuffs, exports: Vegetablethous. of lbs	264 21	126			247	157	231	-41.5	+6.9	2, 612 27, 909	2, 049	
Coulds: Arsenic	21	3, 180	13	39	18	1, 330	5, 194	-53.8		21, 909	5, 716	
Crude: Productionshort tons_ Stocks, end of monthshort tons_	2, 452 2, 161	1, 444 1, 998	887 1, 876		3, 113 3, 309	1, 079 2, 978		+203.1 +86.2	$+151.5 \\ +9.4$	13,648	15, 898	+16.
Refined: Productionshort tons_	917	812	857		1,036	799	835	+19.4	+24.1	7, 462	8, 863	+18.
Stocks, end of month short tons. Price index numbers:	3, 709	3, 305	3, 414			1, 971	2, 344	+15.5	+56.7			
Crude drugs rel. to Aug., 1914 Essential oils rel. to Aug., 1914	184 190	183 191	179 188		180 161	193 158		0.0 -4.2	-7. 7 +3. 9			
Drugs and pharmaceuticalsrel. to Aug., 1914	163				177	164			1			
Chemicals rel. to 1913-14 Oils and fats rel. to 1913-14	113 116	113	112	112	112	113		0.0	-0.9			
Wood Chemicals							_	,	•			
Acetate of lime: Production—												
United States thous. of lbs Canada thous. of lbs	11, 935 677	10,658 720	11, 025 715		12, 479 367	8, 605 446		+22.9 -12.8	+18.6 -63.3	107, 516 7, 608		
Shipments— United Statesthous. of lbs_	11, 772	11, 072			12, 142	13, 355			+16.7	120, 551	115, 688	-4.
Canada thous. of lbs Stocks, end of month—	676	1					1		-69.6		8, 106	
United Statesthous. of lbsthous. of lbsthous. of lbs	1, 755 102		73		1, 679 201	3, 134 183	349	+35.3 +36.7	-41. 4 -42. 4			-
Exportsthous. of lbs Price, wholesaledolls. per cwt Methanol, crude:	4. 50	120 4. 50		4. 50	4. 50	449 4. 00		0. 0	+12.5			
Production— United Statesgallons_	676, 193	633, 731	656, 414	598, 548	716, 789	495, 555	641, 823	±10.9	L11 7	6, 062, 626	6, 883, 156	+13
Canadagallons_ Stocks at crude plants, end of month—	28, 291	28, 688						+19.8 -3.9	+11.7 -63.1	311, 753		
United States gallons gallons gallons	227, 513 11, 533							-1.8 -24.2	-19.9			-
Stocks at refineries and in transit— United Statesgallons_	277, 376	475, 698	-			164, 972		+1.4	1			
Canada gallons gallons gallons	66, 870 16, 613	78, 120	63, 702	65, 505	47, 479	67, 314	57, 814	-27.5 -75.3	-17.9 -39.6			9
Wood at chemical plants: Consumption—	10,013	80, 100	00,048	20, 520	12,028	02,010	20, 408	-10.8	-09.0	200, 102	210,000	8.
United Statescords_ Canadacords_	72, 217 3, 509	68, 428 3, 587	70, 454 3, 228	63, 460 2, 041				+19.0 -4.3	$^{+15.8}_{-63.6}$		720, 407 42, 137	
Stocks, end of month— United Statescords_	530, 111	530, 264		· ·	·	514, 204	· 1	-4. 5	-03. 0 -4. 2		42, 101	1
Canadacords_ Daily capacity—	72, 586							-0.7	-2.2			
Total cords .	3, 326	3, 276	3, 264	3, 264 525		3, 486 1, 083	3, 486 668	-0.6 -45.0	-6, 9			II

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM . THROUGH	JAN. 1	Per ct in- crease (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	or de- crease (-) cumu lative 1929 from 1928
CHEMICALS AND OILS—Continued												1020
Wood Chemicals—Continued												
Methanol, refined: Production—	100.011	250							_			
United Statesgallonsgallonsgallonsgallons	423, 811 36, 900	259, 118 10, 400	454, 160 43, 700		445, 183 56, 300		487, 384 56, 700	$+3.0 \\ +102.5$	-8.7 -0.7	4, 778, 329 335, 350	4, 378, 356 415, 100	
United States. gallons. Canada gallons.	759, 740 51, 787	712, 752 31, 185	783, 674 37, 761	729, 932 21, 888	725, 620 14, 238	300, 478 33, 101	325, 914 23, 339	-0.6 -35.0	+122.6 -39.0			
Shipments— United States———————————————————————————————————	449, 245	365, 438	487, 153	598, 551	558, 179	415, 340	493, 712	-6.7	+13. 1	4, 935, 077	4, 991, 195	+1.
Canada gallons Price, wholesale, N. Y dolls. per gal	11, 650 . 58	21, 403 . 58	22, 188 . 58	31, 902 . 58	48, 532 . 58		48, 330 . 51	+52, 1 0. 0	+0.4 $+13.7$	239, 586	320, 662	+33.
Ethyl Alcohol												
Productionthous. of gals Withdrawn for denaturizationthous. of gals Warehouse stocks, end of month_thous. of gals	12, 545 12, 909 11, 860	16, 871 15, 982 11, 166	20, 026 18, 688 11, 489	19, 199	25, 426 24, 203 11, 932	18, 613 15, 269 11, 2 95	20, 685 20, 718 9, 907	-22.6 +52.1 +2.7	+22. 9 +16. 8 +20. 4	145, 863 131, 025	169, 502 155, 610	+16.3 +18.8
Explosives												
(Black powder, permissible, and other high explosives)												
Production thous, of lbs	34, 383 35, 032	35, 756 36, 811	40, 584 39, 163	42, 299	42, 108 40, 246	35, 310 37, 465	38, 636 38, 85 4	+0.2 -4.9	+9.0 +3.6	330, 509	371, 635 372, 549	+12,
New orders thous. of lbs Stocks, end of month thous. of lbs	34, 202 17, 225	35, 499 16, 964	39, 580 17, 529		40, 295 17, 811		36, 347 16, 011	+0.4 +5.4		313, 129	362, 584	+15.8
Naval Stores												
Furpentine (gum): Net receipts, southern portsbarrels Stocks at ports, end of monthbarrels Price, southern, New Yorkdolls. per gal	48, 658 57, 728 . 52	54, 872 65, 570 . 52	49, 436 63, 151 . 52	65, 770		73, 595	33, 924 79, 509 . 53	$-20.8 \\ +1.9 \\ +1.8$	-1.7 -15.7 +5.7	284, 193	325, 154	+14.
Rosin (gum): Net receipts, southern portsbarrels_ Stocks at 3 ports, end of monthbarrels_ Price, B, New Yorkdolls. per bbl	154, 168 123, 505 7, 88	181, 433 169, 420 8, 51	172, 670 205, 955 8, 51	140, 212 233, 215	120, 886 244, 767 9, 27	ŀ	115 , 23 5 216, 917 9, 31	-13.8 +5.0 +2.9	+4.9 +12.8 -0.4	956, 387		+17.6
Rosin (wood): Productionbarrels Stocks, end of monthbarrels	36, 123 113, 449	37, 844 104, 492	38, 315 98, 777	1	40, 903 6 84, 111	1	36, 942 111, 728	+10.8 -6.6	+10.7 -24.7	351, 115	372, 226	+6.0
Turpentine (wood): Productionbarrels_ Stocks, end of monthbarrels_	6, 505	6,718	6, 721	6, 695	6 7, 640	6, 257	6, 486	+14.1	+17.8	61, 486		+12.0
Pine oil: Productiongallons	4, 778 215, 153	4, 628 235, 892	4, 713 229, 388	222, 112	5, 569 259, 017	6, 027 211, 828	5, 704 219, 525	+28. 2 +16. 6	-2.4 +18.0	2, 272, 864	2, 272, 434	
Stocks, end of monthgallons	873, 358	882, 037	894, 993	888, 328	875, 424	845, 762	845, 645	-1.5	+3.5			
Roofing Roofing, felt: Production, dry felttons Stocks, end of month, dry felttons	29, 981 3, 077	28, 188 2, 846	26, 665 3, 974		25, 502 4, 790		23, 930 3, 367	+6.3 +7.3	$^{+6.6}_{+42.3}$	249, 521	268, 1 6 9	+7.
Fats and Oils	:											
Total vegetable oils and copra: Exportsthous. of lbs	1, 428	541	1, 285		3, 061	2, 222		+16.3	16.8	44, 508	21, 467	-51.
Total vegetable oils and copra: Exports	91, 375 23, 828	73, 157 21, 693	109, 091 26, 622	82, 942 18, 007	88, 743 17, 208	80, 914 20, 754	82, 176 22, 897	+7.0 -4.4	+8.0 -24.8	620, 845 190, 990	920, 638 249, 215	
Imports thous. of lbs Consump. in oleomargarine thous. of lbs	32, 571 12, 029	23, 669 12, 658	36, 623 14, 715	36, 952 16, 075	36, 770 19, 511		31, 534 15, 714	-0.5 + 21.4	$^{+16.6}_{+24.2}$	224, 522 128, 987	347, 434 150, 786	+54. +16.
Production thous, of lbs	24, 276	24, 873	28, 400 25, 788	·	36,624	28, 446	30, 631	+19.8 +10.1	i	257, 021	289, 931	+12.
Consumptionthous. of lbs_Animal glues, shipmentsthous. of lbs_	23, 379 6, 246	24, 972 6, 376	25, 788 7, 231	31, 423 6, 749	34, 591	29, 002 6, 256	30, 137 7, 528	+10.1	+14.8	256, 184 7 58, 63 0	285, 048 7 60, 456	+11. +3.
Cottonseed:												H
Receipts at millsshort tons Consumption (crush)short tons Stocks at mills, end of month _ short tons	26, 041 63, 274	29, 377 51, 438	239, 538 121, 769	488, 946	1, 487, 577 896, 904	421, 362	6 1, 536, 083 6 910, 576	+61.6 +83.4	-3.2 -1.5	3, 230, 942 3, 050, 560	3, 452, 989 3, 597, 939	
Cottonseed oil, crude:	63, 401	41, 340	159, 109	,	1, 181, 420		61, 192, 935	+100.0	-1.0			
Production thous. of lbs Stocks, end of month thous. of lbs	21, 552 30, 079	18, 558 19, 094	35, 453 29, 232	149, 388 77, 339	276, 280 121, 341	126, 787 68, 856		+84.9 +56.9	$-2.3 \\ -2.6$	970, 361	1, 144, 217	+17.
Cottonseed oil, refined: Production thous. of lbs Stocks and of month thous. of lbs.	40, 795 431, 100	27, 680 338, 320			206, 597 232, 699	61, 637 159, 588	6 201, 483 223, 046	+149.3 +33.0	+2.5 +4.3	885, 677	1, 044, 779	+18.
Production thous of lbs. Stocks, end of month thous of lbs. Price, yellow, prime, N. Ydolls, per lb Consumption in oleomarg thous of lbs.	. 096 2, 124	. 096 2, 051	, 094	. 093	. 093	. 099	. 099	0.0 +27.9	-6. 1	21,788	23,810	+9.
Productionshort tons	28, 423	25, 971	56, 311	215, 663	398, 987	185, 728	6 406, 795	+85.0	-1.9	1, 384, 739		li
Stocks, end of month short tons Exports short tons.	142, 014 4, 777	80, 914 11, 969	51, 727 12, 837	83, 778 21, 608	162, 074 33, 434	61, 411 22, 013	6 123, 803 60, 015	+93.5 +54.7		189, 756	182, 387	-3.
Flaxseed												
Production, crop estimatethous. of bushs Minneapolis and Duluth:		· · · · · · · · · · · · · · · · · · ·			⁸ 16, 060	li	4 18, 690				*	
Receipts thous, of bushs	492	381	1,479	4, 111	3, 132	3,812	6,600	-23, 8	-52, 5	15, 194	11, 262	$\begin{vmatrix} -25.7 \\ -22. \end{vmatrix}$

⁴ Final estimate for 1928.

⁶ Revised.

⁷ Cumulative through Sept. 30.

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) or	CUMULATIV FROM : THROUGH	JAN. 1	Per ct in- crease (+) or de-
October, except where otherwise noted, Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
CHEMICALS AND OILS—Continued											······································	
Flaxseed—Continued						;						
[mportsthous, of bushs Mill receipts at Duluth-	2, 366	1, 293	1, 020	842	2, 582	1, 254	1, 209	+206.7	+113.6	14, 649	21, 209	+44.
Superior thous, of bushs Price, No. 1, Minneapolis 8dolls. per bush	33 2. 48	$\begin{array}{c} 84 \\ 2.76 \end{array}$	42 2. 79	572 3, 23	$935 \\ 3, 32$	62 2, 09	1, 014 2, 28	+63.5 +2.8	-7.8 + 45.6	1, 610	1, 789	+11.
Linseed oil: Shipments from Minneapolis_thous, of lbs_Price, New Yorkdolls, per lb_Linseed, cake and meal:	15, 205 . 105	14, 381 . 120	10, 787 . 129	14, 789 . 155	13, 7 0 7 . 159	14, 443 . 098	15, 437 . 101	-7.3 +2.6	+57.4	148, 862	141, 709	-4.
Shipments from Minneapolis thous, of lbs Exportsthous, of lbs	7, 632 30, 065	12, 215 40, 428	15, 683 37, 437	27, 415 29, 770	30, 466 26, 211	26, 257 38, 772	30, 071 51, 894	+11.1 -12.0	+1.3 -49.5	217, 228 470, 950	189, 712 316, 290	
FOODSTUFFS												
Wheat												
Production, monthly estimate: Winter					³ 568, 233 ³ 223, 535 ³ 791, 768		4 578, 133 4 324, 058 4 902, 191					
Visible supply, end of month: United Statesthous, of bushs	94, 060	142, 855	190, 911	198, 982	202, 781	114, 523	138, 239	+1.9	+46.7			
Canada thous. of bushs. Receipts, principal markets thous. of bushs. Shipments, principal markets thous of bushs. Stocks, millers', end of quarter thous. of bushs.	118, 249 25, 694 18, 644 2 75, 355	103, 315 94, 158 42, 577	96, 224 101, 669 60, 983	47,046	36, 256	78, 069 73, 322 39, 508 2 151, 228	84, 423 30, 365	+36. 2 -22. 9 -15. 6 +131. 9	-57. 1 -10. 7	248, 480	419, 387 269, 591	-6. +8.
Exports: United States— Wheat onlythous, of bushs Including wheat flour thous, of bushs Canada—	4, 564 8, 814	8, 691 13, 575	12, 094 16, 935			17, 939 22, 528		-33.1 -20.0		78, 068 122, 215	73, 003 124, 610	
Including wheat flour thous of bushs_ Prices:	29, 796	20, 538	13, 050	9, 624	23, 215	30, 928	48, 957	+141.2	-52.6	279, 871	210, 239	-24.
No. 1 Northern Spring, Minneapolis 8dolls. per bush	1, 15	1.43	1, 35	1, 35	1.31	1.19	1. 16	-3.0	+12.9			
No. 2 Red Winter, St. Louis 8dolls, per bush. No. 2 Hard Winter,	1. 21	1, 39	1.32	1.35	1, 32	1. 45	1. 44	-2, 2	-8, 3			ļ
Kansas City 8dolls. per bush	1, 05	1, 25	1, 23	1. 24	1, 22	1.07	1. 10	-1.6	+10.9			
Wheat Flour												
Grindings of wheat: United States thous, of bushs Canada thous, of bushs.	40, 833 7, 029	42, 895 7, 247	50, 725 7, 178	6 47, 583 5 745		48, 014		+6.0	-4.7	433, 914	443, 741	+2. +2.
Production: United States, actualthous. of bbls_	8, 912	9, 337	11, 058			8, 554 10, 512		+5.7	-5. 4	7 6 3, 6 17 93, 951	⁷ 65, 071 96, 861	+3.
United States, prorated thous of bbls	9, 838 1, 548	10, 449 1, 603	12, 562 1, 607	11,870 1,283		11, 197 1, 892	13, 316 2, 130	2		7 91, 995 7 13, 814	7 96, 525 7 14, 325	+4. -3.
Canada thous of bbls_ Production, gain offal thous of lbs_ Capacity operated, flour millsper cent_ Consumption (computed) thous of bbls_	711, 357 54	746, 628 55	882, 931 62	66	62	820, 934 66	66	+6. 2 -6. 1	$ \begin{array}{r} -3.1 \\ -6.1 \end{array} $	7, 598, 488	7, 715, 727	+1
Stocks, all positions, end of month (computed)thous. of bbls	8, 494 8, 000	8, 365 10, 084	11, 686 8, 800			9, 078 8, 500	12, 536 7, 900			7 81, 168	7 84, 244	+3
Stocks, millers', end of quarter_thous. of bbls Exports:	2 3, 826			² 4, 479		² 4, 180		+17.1				
United States thous, of bbls Canada thous, of bbls thous, of bbls Standard patents,	944 935	1, 085 782	1, 076 643	1, 163 492	1, 311 554		1, 381 1, 171	+12.7 +12.6		9, 811 8, 655	11, 468 8, 377	+16. -3.
Minneapolis dolls. per bbl. Winter straights,	6. 38	7. 69		7. 17	6. 91	6. 59		-3.6	+7.8			
Kansas Citydolls. per bbl Corn	5. 26	6. 31	6. 24	6. 10	6. 01	5. 65	5. 59	-1.5	+7.5			
Production, crop estimatethous, of bushs					³ 2, 621, 451		49 995 670					
Exports, including mealthous. of bushs Visible supply, end monththous. of bushs	981 13, 932	850 9, 493	895 5, 765		732 3, 924	668 7, 114	42, 835, 678 870 2, 271	+5. 6 -15. 4	$-15.9 \\ +72.8$	18, 488	33, 226	+79.
Receipts, principal marketsthous. of bushs shipments, prin. marketsthous. of bushs Prindings (starch, glucose)thous. of bushs Prices:	20, 644 15, 160 6, 697	21, 205 15, 644 6, 558	19, 023 13, 643 7, 672	19, 532 11, 082	18, 303 11, 075	19,658 11,949	13, 323	-6.3 -0.1 +10.2	$+37.4 \\ +22.5$	261, 414 182, 033 72, 839	217, 227 147, 807 74, 111	-16. -18. +1.
No. 3, Yellow, Chicago 8 dolls. per bush No. 3, Yellow:	. 91	. 99	1. 01	1. 01	. 95			-5.9	}			
Kansas City 8dolls, per bush No. 3, White, Chicago 8dolls, per bush	. 88 . 94	. 93 1. 00	. 99 1. 01		. 92 . 96	. 94 1. 00		-7.1 -5.9	+7.0 -2.0			
Oats												
Production, crop estimatethous. of bushs_ Receipts, principal marketsthous. of bushs	8, 486	10, 123	36, 320	13, 833	³ 1,226, 573 15, 336	14, 375	4 1,448,677 13,872	+10.9	+10.6	132, 251	132, 040	
Visible supply, end of month thous, of bushs. Exports, including mealthous, of bushs Frice, No. 3, white, Chicago & dolls. per bush Grindings, Canadathous, of bushs	8, 114 254 . 45 895	8, 129 255 . 47 854	25, 897 837 . 43 1, 101	28, 809 1, 080 . 48	32, 069 917 . 47	14, 373 18, 004 2, 308 . 41 1, 100	17, 882	+10.9 +11.3 -15.1 -2.1	+79.3 -44.5	8, 810	5, 881	-33.
Production, oatmeal and rolled oats, Canada thous of lbs	11, 360	12, 145				1, 100	· '			7 106, 292	7103, 510	-2.

² Quarter ending in month indicated.
³ As of Nov. 1.
⁴ Final estimate for 1928.

Revised.
 Cumulative through Sept. 30.
 See tables on pp. 21 and 22 of the November, 1929, issue for earlier data.

The cumulatives shown are through			1929			19	28		CNT IN- (+) OR SE (-)	CUMULATI FROM THROUGE	JAN. 1	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
FOODSTUFFS—Continued												1020
Barley Production, crop estimatethous. of bushs Receipts, principal marketsthous. of bushs	3, 338	4, 849	18, 666	7, 807	* 313, 368 5, 554	21, 710	4 356, 667 16, 797	-28.9	-66. 9	88, 645	59, 749	-32.
Visible supply, end mothous. of bushs Exportsthous. of bushs Price, No. 2, Minneapolis *dolls. per bush	5, 731 2, 783 . 60	5, 518 4, 120 . 69	9, 805 4, 624 . 61	9, 519 6, 209 . 60	9, 877 1, 795 . 59	8, 084 14, 830 . 63	8, 962 11, 639 . 63	+3.8 -71.1 -1.7	+10. 2 -84. 6 -6. 3	45, 461	30, 391	-33.
Rye Production, crop estimatethous. of bushs					8 4 1, 028		4 41, 676					
Receipts, principal marketsthous. of bushs Visible supply, end mothous. of bushs Exports, including flourthous. of bushs Price, No. 2, Minneapolis 8dolls. per bush	870 6, 422 295 . 84	880 6, 447 106 1. 07	5, 766 8, 015 470 . 98	3, 720 8, 889 1, 220 . 97	3, 405 9, 903 562 . 97	1,927	6, 770 4, 437 3, 098 . 94	-8.5 +11.4 -53.9 0.0	-49. 7 +123. 2 -81. 9 +3. 2	24, 327 12, 771	20, 247 3, 473	-16. -72.
Total Grains												
Total grain exports, incl. flour_thous. of bushs Rice	13, 127	18, 907	23, 761	27, 537	18, 671	42, 80 5	45, 533	-32. 2	-59.0	203, 737	197, 582	-3.
Production, crop estimatethous. of bushs_ Southern paddy, receipts at millsbbls_ Shipments:	191, 944	125, 737	583, 944	1, 387, 795	³ 39, 176 2, 330, 286	1, 197, 924	41, 881 2, 113, 697	+67. 9	+10.2	7, 368, 665	6, 933, 201	-5.
Total from mills	650, 414 130, 369 865, 117 261, 377	515, 342 113, 969 485, 177 231, 401	506, 895 126, 470 506, 953 221, 314	841, 027 156, 232 1, 099, 055 131, 509	249, 474 2, 173, 838	147, 464 1, 102, 564	1, 245, 714 202, 697 2, 142, 144 228, 255	+63. 7 +59. 7 +97. 8 +74. 7	+10. 5 +23. 1 +1. 5 +0. 6		7, 905, 843 1, 418, 633 3, 099, 175	-0. -9. +9.
Importspockets (100 lbs.)	2, 984	6, 556	5, 549	6, 292		15, 412	8, 864	+5.9	-24 . 8	289, 547	189, 147	-34,
Other Crops Apples:					3 140 000		4 185, 743					
Production, crop estimate_thous. of bush_ Cold-storage holdings, end of monththous. of bbls_ Car-lot shipmentscarloads_	82 1,001	31 1, 903	79 3, 532	6 1, 633 13, 114	³ 140, 099 7, 647 36, 366	1, 631	8, 733	+368.3 +177.3	-12. 4 -17. 4	88, 610	81, 234	8.
Potatoes: Production, crop estimate_thous. of bush_ Car-lot shipmentsearloads_ Onions, car-lot shipmentscarloads_	24, 321 1, 700	19, 359 2, 351	16, 871 2, 545	23, 978 5, 040	3 353, 977 31, 253 5, 484		4 464, 483 28, 921 4, 115	+30.3 +8.8	+8.1 +33.3	220, 161 29, 990	216, 487 30, 351	-1. +1.
Citrus fruits, car-lot shipmentscarloads Hay, all tame: Production, crop estimatethous. of tons	11, 820	8, 152	2, 545 7, 348	5, 684	8, 652 3 100, 582		5, 868 4 92, 983	+52.2	+47. 4	69, 191	117, 601	+70.
Cattle and Beef					100,002		02,000				•	
Cattle movements, primary markets: Receiptsthousands	1, 444	1 650	1,616	2,099	2, 401	2, 191	2, 541	+14.4	-5.5	18, 004	16, 891	-6
Shipments, totalthousands_ Shipments, stocker and feeder_thousands_ Local slaughterthousands_	528 176 901	1, 659 592 173 1, 039	685 267 938	883 423 1, 118	1, 267 757	1,067 563	1, 327 799	+43.5 +79.0	-4.5	7, 466 3, 216	6,744	9 11
Beef products: Production, inspectedthous. of lbs Apparent consumptionthous. of lbs Exportsthous. of lbs	364, 470 388, 426 1, 496	402, 501 420, 212 2, 268	406, 700 419, 494 1, 457	419, 281 6 423, 701 1, 259	458, 439 453, 474 1, 223	418, 882 433, 958 647	421,850	+9.3 +7.0 -2.9	+6.4 +7.5 -4.2	3, 950, 769 4, 059, 872 11, 513	3, 644, 299	-10
Cold-storage holdings, end of monththous. of lbs Prices:	52, 055	45, 930	48, 014	⁶ 56, 434	72, 126	37, 223	58, 036	+27.8	+24.3			
Cattle, corn-fed, Chicago dolls. per 100 lbs_ Steer rounds No. 2dolls. per lb Western dressed steers, N. Y. dolls. per lb	14. 38 . 234 . 238	14. 98 . 238 . 255	14. 69 . 238 . 251		. 236	16. 19 . 259 . 284	14. 63 . 255 . 282	0.0	-7.5			
Hogs and Pork												
Hog movements, primary markets: Receipts	3, 230 1, 149 53	3, 257 1, 199 38	38	1,123 40	1,377	1,093 55	1, 341 65	$\begin{array}{r rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	+2.7 -23.1	37, 679 14, 186 625 23, 452	13, 276 517	-6. -17.
Local slaughter thousands. Pork products, total: Production, inspected. thous. of lbs. Apparent consumption thous. of lbs.	2, 081 672, 947 582, 512	2, 055 675, 915 604, 320	586, 150 617, 430	552, 490 6 614, 118	651, 682 720, 196	434, 296 588, 472	623, 716 675, 222	+18.0 +17.3	+4.5 +6.7	6, 868, 783 6, 055, 255	6, 840, 534 6, 038, 474	-0 -0
Exports thous, of lbs. Cold-storage holdings, end of month— Total thous, of lbs. Fresh and cured thous, of lbs.	100, 556 61, 041, 636 6841, 937	96, 298 1, 017, 364 814, 354	6 899, 485	6 754, 188	589, 117	641, 977	516, 634	-21.9	+14.0	1		+9
Lard (included in pork products): Production thous, of lbs. Exports thous, of lbs. Cold-storage holdings,	144, 272	139, 693 64, 274		114, 179		80, 135	113, 968	+21. 2	1		⁷ 1, 312, 598 665, 804	+1 +9
end of monththous. of lbs Prices: Hogs, heavy, Chicagodolls, per 100 lbs	10.66	203, 010 11, 20 , 267	1	9, 96	9.65	12. 43 . 254	10. 03 . 260	—9.4	-3.8 -6.9			
Hams, smoked, Chicagodolls. per lb Lard, prime contract, N. Ydolls. per lb	. 123	. 125					. 124		-8.1			
Sheep and Lambs Sheep movement, primary market:												
Receipts thousands Shipments, total thousands Shipments, total thousands Local slaughter thousands	740 226	876 231	1,384 639	1, 969 1, 027	2, 818 1, 831	2, 161 1, 080	2,485 1,466	+43.1 +78.3	+13.4 +24.9	11, 539 4, 272	12, 034 4, 807	+4 +12

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGE		Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	creas (-) cum lativ 1929 from
FOODSTUFFS—Continued												
Sheep and Lambs—Continued												
Lamb and mutton: Production, inspectedthous, of lbs Apparent consumptionthous, of lbs Cold-storage holdings,	42, 012 41, 967	46, 804 47, 563	49, 096 48, 743		52, 677 51, 973	49, 237 49, 042	54, 107 52, 077	+5.0 +4.9	-2.6 -0.2	435, 926 437, 753	456, 516 461, 051	+4 +5
end of monththous. of lbs	3, 061	2, 639	3, 159	6 4, 113	4, 989	2, 113	4, 321	+21.3	+15.5			
Prices: Sheep, ewes, Chicagodolls. per 100 lbs Sheep, lambs, Chicagodolls. per 100 lbs	5. 31 12. 75	5. 55 13. 80	5. 16 12. 88		4. 63 12. 09	5. 50 14. 16	5. 35 13. 08	-1. 1 -3. 7	-13.5 -7.6			
Miscellaneous Meats						ļ						
Cold-storage holdings, end mothous. of lbs Total Meats	81, 132	81 , 06 8	76, 539	6 71, 511	63, 594	49, 798	5 2, 20 1	-11.1	+21.8			
Production, inspectedthous. of lbsCold-storage holdings, end mothous. of lbsApparent consumptionthous. of lbs	1, 177, 884	1, 125, 221 1, 147, 001 1, 072, 095	1,027,197		729, 826	731, 111	1, 108, 511 631, 192 1, 149, 149	+13.8 -17.6 +12.7	+15.6	11, 255, 475 10, 552, 880	11, 254, 517 10, 597, 298	+0
Poultry		, ,		, ,	, == :, ===		, .					
Receipts at 5 marketsthous. of lbs Cold-storage holdings, end of mo.thous. of lbs	20, 434 42, 001	22, 548 40, 896	26, 150 49, 010		37, 725 86, 854	23, 859 43, 578	35, 613 58, 093	+32.5 +40.1	+5.9 +49.5	225, 127	238, 530	+6
Fish												
Total catch, prin. fishing portsthous. of lbs_ Cold-storage holdings, 15th of mo_thous. of lbs_ Canned salmon:	31, 728 40, 451	43, 185 51, 334	43, 903 64, 723	50, 270 72, 198		24, 284 71, 352		-33.9 +4.3			327, 821	+30
Shipments, United Statescasescasescasescases	217, 781 42, 794	367, 842 38, 983	830, 404 53, 100		162, 831	1, 113, 495 168, 963	810, 723 253, 265	+37.7	-35.7	7 3, 796, 988 1, 024, 000		+
Production (factory)thous. of lbs_	181, 359	170 914	144 400	117 401	100 700	117 700	104 207		+5.1	1, 289, 842	1, 391, 992	+
Receipts, 5 markets thous. of lbs Cold-storage holdings, creamery, and of month thous. of lbs	69, 511 91, 962	173, 314 68, 104 151, 621	144, 436 54, 885 168, 952	44, 500	109, 733 42, 963 138, 324			-6.6 -3.5 -12.8	+2.6 +30.7	505, 294	524, 597	+:
Apparent consumptionthous. of ibs Wholesale price, New Yorkdolls. per lb	192, 0 45 . 44		185, 708	174, 193	172, 923 . 46	176,879	171, 922	-0.7 0.0		1, 764, 416	1, 798, 941	+:
Cheese Total, all varieties:												
Production (factory) thous. of lbs. Receipts, 5 markets thous. of lbs.	48, 854 18, 404	47, 004 20, 548	37, 751 18, 605	30, 373 15, 289	27, 665 14, 344	45, 156 18, 222	40, 654 18, 665	-8.9 -6.2	-32.0 -23.2	458, 808 170, 743		
Apparent consumptionthous, of lbs_ Cold-storage holdings, end mo thous, of lbs_	38, 625 79, 724	36, 607 98, 070	39, 453 106, 009	38, 414	42, 329 94, 901	48, 660 98, 339	43, 522	+10. 2 -7. 7	-2.7	414, 586		
Imports. thous. of lbs. Exports, United States. thous. of lbs.	8,608	6,653	5, 268	4,929	6, 911	6,744	9,410	+16.6	-26.6	63, 187	62, 506 2, 273	-
Exports, Canadathous. of 10s	209 8, 403	285 15, 074	138 11, 047		195 17, 144	141 17, 123	204 24, 282	-31.3 +1.1		2, 133 93, 148	74, 058	-2
American whole milk: Cold-storage holdings,end mo_thous. of lbs_ Wholesale price, New York_dolls. per lb_	62, 737 . 23	79, 907 . 23	86, 558 . 23		78, 062 . 24	81, 833 . 27	82, 318 . 26	-8.0 0.0				
Eggs												
Receipts, 5 marketsthous. of cases Cold-storage holdings, end of month:	1,813	1, 409	1, 151		735	939		-22.1	-7.4	14, 986	14,545	-
Casethous. of casesthous. of lbs	8, 510 84, 766	8, 962 91, 488	8, 547 86, 693	67, 195 681, 544	4, 931 70, 323	8, 542 82, 255	6, 247 73, 327	-31. 5 -13. 8				
Condensed milk:						1		1		Ì		
Total stocks, mfrs., end mo.— Case goods.————thous. of lbs.—	31, 459	34, 750	32, 142	29, 893	29, 182 27, 271	27, 837	23, 949	-2.4				
Bulk goodsthous. of lbs_ Unsold stocks, mirs, end mo.—	25, 803		29, 217					H		1		
Case goods thous. of lbs. Bulk goods thous.	25, 140 9, 296	9, 221	26, 950 8, 751	8,019	23, 614 7, 687	21, 821 6, 351	4,840	-4.1	+58.8			
Exportsthous. of lbs_ Wholesale price, New York_dolls per case. Evaporated milk:	3, 280 6. 13	3, 865 6. 13	3, 366 6. 13	3, 116 6. 13	4,019	3, 405 6. 18			+58.8 -0.8	32, 397	35, 406	+
Manufacturers' stocks, end of mo.— Total, case goods———thous, of lbs.—	222, 956	281, 137	272, 427	249, 936	243, 672	165, 682	164, 989	—2. 5	+47.7			
Unsold, case goods thous. of lbs. Exports thous. of lbs.	173, 684 7, 121	215, 878	186, 717	192, 761	191, 723	134, 259	138, 808	-0.5 +39.9	+38.1		58, 816	
Wholesale price, New York dolls. per case Production, condensed and	4. 30		4. 30	4. 21	3. 95							
evaporated milkthous. of ibs_ Powdered milk: Manufacturers' stocks, end	290, 350	Í	,		1						1, 826, 988	+
of monththous. of lbs_ Exportsthous. of lbs_	31, 103 488	400		329	1 678		16, 864 313	17. 9 +106. 1	+49.8 +116.6	3, 151	4, 335	
Net new ordersthous, of lbs Fluid milk: Receipts—	8, 228	7, 786	8, 069	7,780	6, 890	5, 662	6, 284			59, 425	68, 659	+1
Boston (includ. cream) _thous. of qts_ Greater New Yorkthous. of qts_ Production—	19, 920 122, 902		19, 115 114, 768			17, 329 113, 552		+0. 2	-0. 3	7 162, 017 1, 141, 036		
Minneapolis, St. Paulthous. of lbs Consumption in manufacture	36, 949	32, 021	25, 737	21, 974		21, 572	20, 274			7 247, 628	7 269, 737	+
of oleomargarinethous. of lbs	6, 487	7,045	8, 144	8,824	10, 321	8, 530	9, 151	+17.0	+12.8	75,940	80,186	#

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	(+) OR	CUMULATI FROM THROUGH	JAN, 1	Per ct in- crease (+)
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	or de- crease (-) cumu lative 1929 from 1928
FOODSTUFFS—Continued												1020
Sugar Raw:											İ	
Imports— From Hawaii, Porto Ricolong tons From foreign countrieslong tons Meltings, 8 portslong tons Stocks at refineries, end monthlong tons	112, 546 338, 905 450, 035 875, 942	156, 633 359, 393 445, 904 864, 589	90, 922 410, 479 504, 207 830, 508	120, 481 292, 699 322, 716 873, 286	92, 684 256, 953 380, 758 798, 870	89, 047 315, 722 417, 983 465, 386	104, 841 257, 825 436, 122 357, 506	-23. 1 -12. 2 +18. 0 -8. 5	12.7	1, 286, 993 3, 019, 787 4, 036, 603	1, 146, 548 4, 023, 267 4, 235, 160	-10.9 +33.5 +4.9
Refined: Shipments, 2 ports long tons Stocks, 2 ports long tons Exports, including maple long tons	81, 088 50, 753 6, 341	93, 673 42, 889 11, 631	89, 294 47, 419 8, 579	47, 447 49, 631 5, 705	60, 610 39, 375 5, 674	66, 428 26, 725 7, 413	61, 799 32, 920 11, 971	+27. 7 -20. 7 -0. 5	$-1.9 \\ +19.6 \\ -52.6$	620, 807 88, 795	720, 511 84, 079	+16. -5.
Prices: Wholesale, 96° centrif., N. Y. dolls. per lb Wholesale, granulated, N. Y. dolls. per lb Retail, granulated, N. Ydolls. per lb Retail ayerage, 51 citiesrelative to 1913	. 035 . 049 . 056 116	. 038 . 052 . 057 116	. 038 . 054 . 060 120	. 040 . 053 . 061 122	. 040 . 054 . 061 122	. 042 . 056 . 063 127	. 039 . 052 . 062 . 126	0. 0 +1. 9 0. 0 0. 0	+2. 6 +3. 8 -1. 6 -3. 2			
Cuban movement (raw): Receipts at Cuban portslong tons_ Exportslong tons_ Stocks, end of monthlong tons_	196, 995 356, 616	153, 925 428, 066 978, 543	211, 090 464, 310 739, 068	120, 530 349, 972 503, 592	94, 130 241, 256 326, 927	168, 638 370, 339 630, 548	154, 547 323, 317 446, 210	-21. 9 -31. 1 -35. 1	-39. 1 -25. 4 -26. 7	3, 753, 634 3, 429, 724	4, 687, 084	
Candy Sales by manufacturersthous. of dolls	22, 774	17, 962	26, 174	34, 779	38, 523							
Coffee Importsthous, of bags	817	864	875	925	1, 004	1, 655	809	+8.5	+24.1	10, 147	9, 453	-6.8
Visible supply: World	5, 352 700 1, 069	5, 448 760 1, 056	5, 269 685 1, 191	5, 227 689 1, 266	5, 043 686 1, 365	5, 378 702 1, 040	5, 390 693 1, 157	-3.5 -0.4 +7.8	-6.4 -1.0 +18.0	11, 798	11, 607	-1.0
Clearances: Total, Brazil, for worldthous. of bags Total, Brazil, for U.Sthous. of bags Price, Rio No. 7, Brazil gradesdolls. per lb	1, 020 488	1, 267 634 . 163	1, 242 655 . 161	1, 234 642 . 158	1, 324 682 . 139	997 570 . 173	1, 330 667 . 178	+7.3 +6.2 -12.0		11, 501 6, 082	11, 559 5, 978	+0. -1.
Tea												ļ
Importsthous. of lbs Price, Formosa, fine, New York_dolls. per lb_	6, 029 . 325	6, 734 . 310	7, 019 . 310	8, 737 . 310	10, 555 . 310	9, 754 . 325	10, 512 . 310	+20.8 0.0	+0.4 0.0	71, 302	71, 606	+0.
Cocoa Shipments from the Gold Coast and											!	
Nigeria, Africa	9, 889 14, 486 . 1069	7, 224 18, 862 . 1069	5, 238 15, 922 . 1081	4, 459 10, 481 . 1100	18, 491 16, 147 . 1063	3, 724 6, 388 . 1163	15, 326 5, 450 . 1125	+314. 7 +54. 1 -3. 4	+20. 7 +196. 3 -5. 5	187, 901 148, 498	210, 687 189, 504	
Production, crop estimatethous. of lbs Consumption (tax-paid withdrawals):				·	³ 1, 480, 965		1, 378, 139					
Large cigars thousands. Small cigarettes thousands. Manufac. tobaeco and snuff_thous. of lbs.	556, 746 10, 839, 673 32, 353	589, 282 10, 724, 403 32, 694	10, 930, 629	10, 350, 544	11, 202, 294	586, 267 9, 126, 271 31, 789	723, 318 9, 921, 537 35, 333	+18.6 +8.2 +4.6	-3.0 +12.9 -4.5	5, 411, 228 89, 864, 438 328, 597	5, 517, 882 101, 736, 443 324, 731	+2. +13. -1.
Exports: Unmanufacturedthous. of lbs. Cigarettesthousands. Sales of loose-leaf, warehousesthous. of lbs.	28, 588 784, 160 48	26, 266 504, 565 5, 887	41, 343 659, 187 76, 2 38	55, 965 558, 249 133, 771	79, 150 586, 767 1 6 6, 4 5 6	57, 509 961, 827 133, 718	88, 509 956, 846 122, 62 7	+41. 4 +5. 1 +24. 4	-10.6 -38.7 +35.7	437, 107 9, 482, 337 533, 066	428, 879 7, 338, 350 667, 137	-1. -22. +25.
TRANSPORTATION												
Biver and Canal Cargo Traffic Panama Canal:		0. #00	0.001	0 400		0.010	0.500			701 505	700 546	10
Total eargo trafficthous. of long tons In American vesselsthous. of long tons In British vesselsthous. of long tons Sault Sta Maria earnelsthous. of short tons.	2, 424 1, 186 591 14, 076	2, 598 1, 335 583 14, 120	2, 681 1, 311 639 14, 085	2, 433 1, 194 600 13, 358		2, 313 1, 140 602 12, 812	1, 195 679	-16. 1	—17. 6	721, 595 710, 109 76, 075 75, 273	723,546 711,011 76,192 85,188	+8. +1.
In British vessels thous of long tons Sault Ste. Marie canals thous of short tons New York State canals thous of short tons Cape Cod Canal short tons	387 161, 143	444 175, 179	380 206, 188	389 199, 955	491 243, 668	411 130, 566	536 160, 903	+26. 2 +21. 9	-8.4	2, 811 1, 111, 480	2, 544 1, 779, 395	-9. +60.
Welland Canal short tons.	760, 431	2, 745 628, 041 781, 310 94, 141	2, 762 612, 943 809, 323 85, 000	2,772 574,241 775,772 6 90,947	623, 651 749, 287	2, 634 996, 833 1, 150, 058 148, 377	2, 622 1, 115, 190 1, 270, 051 120, 444	-3.4	-41.0		7 25, 894 4, 274, 113 5, 137, 485 1, 115, 456	-32. -29.
Mississippi River Govt. barges. short tons. Ohio River, Pittsburgh, Pa., to Wheeling, W. Va short tons. Allegheny River short tons. Monongahela River short tons.	1, 056, 795 345, 995 2, 460, 644	1. 088. 912	1, 080, 996	1, 144, 682	1, 151, 819 366, 351 2, 464, 099	963, 766	1, 010, 860 377, 744	+0.6 +0.6	+13.9 -3.0		9, 414, 890 2, 720, 808 23, 717, 749	+11, +12, +9.
Ocean Traffic	2, 100, 011	2,000,000	2, 000, 011	2,011,010	2, 101, 000	2, 303, 001	2,000,001	10.0	,	22, 010, 100	20,111,120	'
Clearances, vessels in foreign trade: Total thous. of net tons. American thous of net tons. Foreign thous of net tons.	7, 664 2, 985 4, 679	8, 099 3, 176 4, 923	8, 428 3, 219 5, 208	7, 559 2, 833 4, 726	7, 503 3, 041 4, 463	2,912	7, 806 3, 252 4, 554	+7.3	-3.9 -6.5 -2.0	66, 012 25, 804 40, 208	69, 916 26, 847 43, 069	+4.
Shipbullding Completed during month:		_										
Total gross tons Steel seagoing gross tons Building or under contract, end of month: Merchant vessels thous of gross tons World construction	37, 616 14, 379 170		21, 497			27, 833 24, 483 242	4, 318			7 147, 991 7 90, 741 7 2, 161	7 97, 824	+7.
(quarterly)tnous, of gross tons	2 2, 838					2 2, 521		-0.7	+11.7			
World launchings (quarterly)thous, of gross tons	2 715			2 715		2 811	l	0.0	-11.8		·	

he cumulatives shown are through	l		1929			19	28	PER CE CREASE DECREA	(十) OR	CUMULATI FROM THROUGE	JAN. 1	Per cin- crease (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
TRANSPORTATION—Continued												1320
Freight Cars												
urplus (daily av. last week of month): Totalcars	217, 657	197, 923	158, 112	118, 523	124, 194	103, 906	105, 017	+4.8 +11.5	+18.3 +49.2			
Boxcars Coalcars chortage (daily av. last week of month):	116 , 6 57 55 , 150	96, 577 58, 4 85	87, 985 31, 021	72, 612 12, 117	80, 956 17, 0 66	53, 170 21, 809	54, 263 21, 128	+11.5 +40.8	$^{+49.2}_{-19.2}$			
Totalcars_	75	3	12	127	436	279	44	+243.3				
Boxcars	11			112	34	159	44	-69.6	-22.7			
Total cars. Grain and grain products cars.	5, 260, 571 215, 606	4, 153, 220 246, 696	5, 590, 853 315, 570	4, 538, 575 199, 367	4, 677, 375 185, 681	4, 470, 541 238, 470	6 4, 703, 982 6 219, 320	+3.1 -6.9	-0.6 -15.3	2, 061, 036	44, 556, 961 2, 042, 808	-0
Livestockcars Coal and cokecars Forest productscars	116, 744) 842, 553	91, 969 644, 715	121, 285 916, 215	123, 644 811, 081	149, 101 877, 576	136, 923 764, 880	6 154, 670 6 869, 300	+20.6 +8.2	+1.0	1, 248, 500 7, 529, 178	1, 160, 262 8, 041, 394	11 +0
Forest productscars_ Ore;cars_ Merchandise and l. c. lcars_	347, 917 379, 813	245, 036 304, 962	343, 449 378, 560	251, 726 274, 599	254, 356 240, 164	254, 527 250, 969	6 240, 985	+1.0 -12.5	-3.9 -0.3	2, 793, 852 1, 706, 048 10, 944, 531	2, 793, 776 2, 102, 338 11, 016, 069	+23
Miscellaneouscars_	1, 273, 002 2, 084, 936	1, 623, 485	1, 307, 417 2, 208, 357	1, 048, 579 1, 829, 579	1, 086, 098 1, 884, 399	1, 789, 815	61, 081, 804 61, 873, 213	+3.6 +3.0	+0.4 +0.6		17, 400, 314	14
Railroad Operations												
Perating revenue: Freightthous, of dolls Passengerthous, of dolls	390, 360 79, 329			434, 972 75, 736		6 424, 092 6 80, 200	492, 275 69, 564					
Total operatingthous, of dollsthous, of dolls	531, 748 381, 596	557, 568	586, 563	566, 720 383, 349		6 556, 916 6 376, 241	617, 782 401, 160					
Vet operating income thous, of dolls reight carried mills, ton-miles.	105, 961 40, 725	122, 783	152, 232 44, 944	133, 898		6 134, 491 6 43, 791	166, 315 48, 206					 -
Railway Equipment					 					1		
ocomotives (Am. Ry. Assn.): Owned, end of month—	FE 050		400		FF 104	ro coo	FO 791		4.0			
Quantitynumbermills, of lbs Tractive powermills, of lbs In bad order end of month—	57, 876 2, 546		57, 477 2, 540	6 57, 355 2, 540		59, 600 2, 582		-0.3 -0.1				
Quantitynumber_ Per cent of total in useper cent_	7, 453 13. 0	7, 681 13. 4	7, 106 12. 4		7, 631 13, 4	7, 815 13. 2		-0.5 -0.7	-6.7 -3.6			
Installed number Retired number	158 297	120	153	127	166 327	93 260	102	+30.7 +31.9	+62.7	1, 190	1, 377 2, 881	+ 10
New ordersnumber_ Shipments, manufacturer's (Census)—	181		l	1	130	8	_	+49.4	l	253	826 688	+220
Totalnumber Steam, domesticnumber	78 58	39	117	60	96 90	28 28		+28. 0 +50. 0	+166,7 +246,2	471 311 87	570	⊪ ∔8:
Electric, domesticnumber. Unfilled orders (railroads), end of mo.— From manufacturersnumber.	334		370		248	98	104		!			
In railroad shopsnumber_ Unfilled orders, manufacturers' (Census)—	55				46	15		+84.0	+170.6			
Totalnumber Steam, domesticnumber	552 489	539 490			423 347	178 118	113		+207.1			
Electric, domesticnumber_ Exports, steamnumber_	21 14	18 32				27 33		-10.9 -45.0		174	184	T
Freight cars (Am. Ry. Assn.): Owned, end of month— Quantity————thous, of ears—	2, 266	2, 267	2, 268	2, 266	2, 265	2, 296	9 202		-1. 2			
Capacitymills. of lbs_ In bad order, end of month—	208, 867	209, 095	208, 897	6 209, 001					-0.5			
Quantitycars_ Per cent of total in useper cent_	142, 064 6. 4	6. 2	6.0	6.0	5.7	6. 6	6. 2	-5.0	-8.1			
New orders cars. Shipments—	5,869	l		1	Į.	1, 236 3, 320		+305. 2		26, 271 36, 157	1	li
Totalcarscarscarscarscarscarscarscars	6, 517 6, 514					3, 000	2, 345		+214.0	35, 108		+5
Total cars From manufacturers cars	39, 173		27, 289	25, 554	29,857	3,878	1,880	+13.0 +16.8				
In railroad shopscars Passenger cars:	5, 028		1	3, 763	3, 266		· ·	-13. 2	1	ll.	1 154	
New orders cars. Shipments— cars Total cars		1		96	İ	146		-28, 1	-8.9 +1.5	1		li .
Domesticcars						143						+25
Passenger Travel Jational parks:									i E		ĺ	il
Visitorsnumbernumber	273, 059 59, 412					222, 698 44, 873		-69.6 -74.7				
Arrivals from abroad: Immigrantsnumber_	22, 490	20, 068	22,778	28,020	 	29, 317	29, 917	! 		7 217, 218	7 202, 837	-e
United States citizensnumber Departures abroad:	28, 119	37, 636	1	1		80, 233	1	t		7 350, 659		
Emigrants number United States citizens number number.	4, 881 42, 846	56,339	70, 551	49, 429	2 405	8, 093 42, 105	34, 643		-0. 1	7 53, 307 7 369, 776 171, 813	7 365, 074	li:
Passports issuednumber_ Pullman company operations: Revenuethous, of dolls_	29, 508 7, 763				8, 485	8, 056 7, 297	1	ļ	-0.1	7 61. 916	1	1
Passengers carriedthousands	3,000	2, 9 3 9		3, 031		3, 081				7 25, 962	7 25, 546	-
Room occupancyper ct. of capacity Average sale per occupied roomdollars	66	63	65	69 4, 02		68 3. 98	72 4,07		+4.2			

6 Revised.

7 Cumulative through Sept. 30.

The cumulatives shown are through			1929			19	28		ENT IN- (+) OR ASE (-)	CUMULATI FROM THROUGE	JAN. 1	Per c in- creas (+) or de
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	creas (-) cum lativ 1929 from 1928
TRANSPORTATION—Continued												
Warehouses												
Public merchandise warehouses, space occupiedper ct. of total	71. 0	71. 2	6 71. 9	74. 4		66. 1	66. 4					
PUBLIC UTILITIES				i			i					
Pelaphone companies: Operating revenuesthous. of dolls_ Operating incomethous. of dolls_ Pelegraph companies:	74, 622 18, 194	75, 141 15, 905	75, 898 17, 601	75, 606 18, 197		68, 432 16, 496	72, 464 18, 565			7 609, 002 7 149, 041	672, 976 61, 390	+10. +8.
Commercial telegraph tolls thous of dolls Operating revenues thous of dolls Operating income thous of dolls	11, 396 14, 446 1, 516	11, 679 14, 843 1, 528	12, 067 15, 316 1, 688	11, 531 14, 751 1, 724		11, 010 13, 911 1, 918	11, 765 14, 928 2, 247			⁷ 96, 874 ⁷ 121, 259 ⁷ 15, 576	7 103, 1 ⁶ 3 7 130, 820 7 14, 910	+6. +7. -4.
Gross earnings thous, of dolls. Net earnings thous, of dolls.	183, 000 79, 000	178, 000 71, 000	179, 500 73, 000	185, 000 80, 000		179, 346 68, 236	190, 796 73, 671			7 1, 638, 724 7 622, 668	⁷ 1, 697, 250 ⁷ 731, 500	+3 +17
Electric railways (212 companies): Passengers carriedthous. of persons Average farecents	744, 310 8. 228	722, 289 8. 244	724, 812 8. 260	704, 818 8, 260	774, 466	717, 810 8, 121	795, 140 8, 129		-2.6 +1.8	7, 712, 505	·	-1
ELECTRIC POWER												
Electric power production: United States—												
Total mills, of kw. hours By water power mills, of kw. hours By fuels mills, of kw. hours	7, 768 3, 066 4, 702	6 8, 013 6 3, 054 4, 959	6 8, 285 6 2, 839 6 5, 446	2,479		7, 276 2, 788 4, 4 88	7, 922 2, 873 5, 049			7 68, 263 7 26, 275 7 37, 988	7 26, 505	1 +0
In street railways, manfg. plants, etcmills. of kw. hours	362	368	390	380		355	374			7 3, 871	7 3, 455	-10
In central stations_mills. of kw. hours Canada— Totalmills. of kw. hours	7, 406 1, 377	6 7, 645 1, 411	6 7, 895 6 1, 447			6, 927 1, 280	7, 548 1, 460			7 60, 439 7 11, 588	,	,
By water powermills. of kw. hours_ Exportedmills. of kw. hours_ dlectric power, gross revenue_thous. of dolls_ consumption of electrical power:	1,360 119 162,300	1, 393 129 159, 300	6 1, 428 6 133	1, 455 136		1, 262 130 156, 100	1, 439 155			⁷ 11, 436 ⁷ 1, 173	7 12, 6 81	$\parallel \pm i\epsilon$
United Statesrel. to 1923-25	135. 2	129. 0	128. 2	135.8	134.6							
New Englandrel. to 1923-25_ North Centralrel. to 1923-25_	123. 5 142. 0	113. 4 141. 3		118. 2 140. 6	126. 2 136. 9	149.7	143.5	-2.6	+5.8 -4.6			
Middle Atlanticrel. to 1923-25_ Southernrel. to 1923-25_ Westernrel. to 1923-25_	129. 5 128. 4 134. 2	120. 5 114. 7 129. 4	132, 7	138, 0 126, 3 143, 1	131. 2	127. 5	129, 7	+3.9	+1.2			
By industry— All industry—rel. to 1923–25 Chemicals and allied	135. 2	129. 0	128. 2	135. 8		134. 5				li		
productsrel. to 1923-25	133.8	127. 0	125. 0	139, 9	145, 0	132. 0	129, 4	+3.6	+12.1			
Food and kindred productsrel. to 1923-25_ Rolling mills and steel	121.8	129. 9	132, 2	1 4 1. 2	131.7	142.0	138. 0	-6.7	-4.6	 		
plantsrel. to 1923-25	154. 3 143. 4 147. 9	144. 4 144. 4 144. 2	134.6	147. 4	145. 0	144. 2	144.5	-1. 6	+0.3			
Leather and its productsrel. to 1923–25 Lumber and its	98. 7	82. 0	102. 2	105. 4	93. 0	106. 9	103.8	11.8	-10.4			ļ
productsrel. to 1923-25_ Paper and pulprel. to 1923-25_	113. 8 137. 3	103. 2 122. 3		111. 4 127. 0								
Rubber and its productsrel. to 1923-25_ Shipbuildingrel. to 1923-25_	158. 1 106. 9	136. 7 107. 7										
Stone, clay and glass rel. to 1923-25. Textiles rel. to 1923-25. Automobiles, including	170. 3 123. 0	154. 7 113. 4	157. 7	165. 7	159. 2	152. 0	144.7	-3. 9	+10.0			11
Automobiles, including repair partsrel. to 1923-25	154. 0	139. 5	143. 0	138. 1	122. 4	161. 0	141. 2	-11.4	-13.3			
EMPLOYMENT AND WAGES]	 }				1		
Employment in factories: Massachusettsrel. to 1919-23	77. 2	77. 0							+1.0			
New York State rel. to 1923. New Jersey rel. to 1923. Panneylyapia to 1923.	101	87. 3 102 86	103	104	103	94	95	-1.0	1 +8.4			
Pennsylvania rel. to 1923 Delaware rel. to 1923 Iowa rel. to 1923	78	81 129. 7	84	85	87 5 83 133. 6	77	7 74	-2.4	+12.2		.	II
Marylandrel. to 1924_ Illinoisrel. to 1925-27_	93. 9 104. 1	93. 0 103. 4	93. 0 105. 1	94. 2 105. 8	93. 1 103. 8	89. 0 97. 7	90. 4 97. 8	-1. 9 -1. 9	2 +3. (+6. 1			
Wisconsinrel. to 1923. Ohiorel. to 1923. Clevelandrel. to Jan., 1921.	98. 2 116	100. 3 116	116	118	5	109	110		+1.1			.11
Milwaukeenumber_ New York Statenumber_	43, 814	124. 2 43, 761 483, 142	43, 736	41, 555	40, 599		38, 090	-2.3	+6.6	5 		·II
Oklahomanumber Potal pay roll:	36, 795	34, 984	38, 978	38, 239		30, 812	31, 960			.		
New York State (weekly) thous of dolls. Oklahoma (weekly) thous of dolls.	1,005	14, 398 965	1,074	1,013	5'	86	5 868	il	+5.4			
Wisconsinrel. to 1923_ New York Staterel. to 1923_ New Jørseyrel, to 1923_	96. 5	100. 2 95. 5 111	96.8	99. 9	99.1	92. (94.0	-0.8	y —3.8 8 +5.4 7 ±19	3		
Pennsylvaniarel. to 1923_ Delawarerel. to 1923_	. 93	88	93	9:	L 93	8	3 87	+2.	2 +6.9 3 +15.4	1		
Illinoisrel. to 1925–27	. 107. 5				105. 8	97.		+0.	8 +7.6	611	.	ll

The cumulatives shown are through			1929			19	28		ENT IN- (+) OR ASE (-)	FROM	IVE TOTAL JAN. 1 H OCT. 31	Per in cres
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	cres cun lati 192 fro:
EMPLOYMENT AND WAGES—Contd.												
Employment, Canadarel. to calendar year 1926.	122. 2	124. 7	127. 8	126. 8	125, 6	119. 1	118.8	0.9	+5.7			
Ohio, constructionrel. to 1923 Employment, trade-unions;	132. 9	139. 6	141. 3	136. 5		135. 0						
United Statesper cent of total Canadaper cent of total	91. 0 97. 1	91. 0 97. 0	91. 0 96. 5	90. 0 96. 3	89. 0	90. 0 97. 8		-1.1	-2. 2			
Employmentrel. to 1923-25	95. 4	85. 6	93. 6	105. 5		112.7	135. 9	+4.1	-19.2			
Pay roll rel. to 1923–25 Vederal civilian employees,	71. 0	56. 8	68. 9	83. 4		112. 5	134. 7	+39.8	-13.4			li
Washington, D. C., end monthnumber verage weekly earnings, factories: Illinoisdollars	63, 904 29, 46	63, 372	63, 632 28. 57	63, 516	63, 713 26, 09	62, 010	62, 016 28. 57	+0.3 +2.7	+2.7 -8.7			II.
New York Statedollars_ Wisconsindollars_	30. 02 26. 03	28. 16 29. 80 23. 96	30. 08 26. 51	25. 40 30. 47 25. 17	30. 08 26. 70	28. 31 29. 72 26. 30	29. 78	$-1.3 \\ +6.1$	+1.0			
Oklahoma dollars Massachusetts rel. to 1914	27. 31 231. 5	27. 57 231. 0	27. 55 234. 2	26. 50 234. 4	231. 6	28. 08 230. 9	27. 16	-1. 2				
New York rel. to 1914 New Jersey rel. to 1913	240. 5 113	238. 8 110	241. 0 113	244. 2 112	241. 0 115	238. 1 110	238. 6 112	-1.3 + 2.7	$+1.0 \\ +2.7$			
Pennsylvania rel. to 1923. Delaware rel. to 1923.	108 108	101 102	107 105	104 103	107 107	101 101	106 104	+2.9 +3.9	+2.9			
Illinois rel. to 1925–27 Wisconsin rel. to 1923 rel. to 1923	103. 8 109. 0	99. 2 100. 0	6 100. 7 106. 3	89. 5 101. 6	92. 0 108. 1	99. 8 109. 7	100. 7 113. 7	+2.8 +6.4	-8.6 -4.9			
verage weekly earnings (National Industrial Conference Board):	20.20	22.00	07.04	00.50		97.70	07.70					
Grand total (both sexes) dollars Total male dollars Skilled male dollars	28, 28 31, 16 32, 66	28. 09 31. 0 1	27. 94 30. 69	31, 56		27. 76 30. 93 32. 42	30, 70					.
Unskilled male dollars Total women dollars	25, 45 17, 86	32, 52 25, 23 17, 54	32. 18 25. 09 17. 47	25. 82		25. 27 17. 33	24, 72					·II
verage weekly hours: Nominal (both sexes) hours	49. 7	49. 6	49. 4			49.8						il .
Actual (both sexes) hours Vages, road labor, by districts:	48. 5	48.8	48.4	49. 0		48. 2						
New England cents per hour Middle Atlantic cents per hour	51 42	49 42	51 42	51 43	51 42	48 42	51 41	0.0 -2.3	+2.4			.
South Atlanticcents per hour East South Centralcents per hour	29 26 32 38 37 47 52 40 50	30 25 30	30 25	29 25 31	27 26	24 25	26	$-6.9 \\ +4.0$	0.0			.
West South Central cents per hour East North Central cents per hour West North Central cents per hour.	32 38	40	30 39	39	38!	26 38	40	-3. 2 -2. 6	-5.0			.
Mountaincents per hour	37 47	36 47	37 48	37 48	37 48	39 52	49	0. 0 0. 0	-2.0		1	.
Pacificcents per hour United States, averagecents per hour	52 40	53 39	52 40	54 41	53 40	54 43	54 42	-1.9 -2.4	-4.8			.
Vage rates, U. S. Steel Corpcents per hour Vages, steel sheet workersper cent of base	127. 0	127. 0	127.0	50 127. 0	50 127. 0	50 125. 5		0. 0 0. 0				
pplicants per 100 jobs, employment agencies: United Statesnumber Eastern Statesnumber	128	131	124	114	127 132	107	117	+11.4 +9.1	+8.5			
Central Statesnumber	127 140	139 141	136 135	121 132 148	148 164	120 126 91	128 133 142	+12.1 +10.8	+11.3			II
Southern Statesnumber Western Statesnumber Illinoisnumber	185 71	174 83	178 75	67 136	71 147	63 130	62	+6.0 +8.1	+14.5			II
Wisconsin number Canada number	139 120 130	148 115 134	137 117 119	117 129	143	104 110	116	+10.9				
Factory Labor Turnover	200	101	110	120	110	110	120	, 15.0	, 10.0			
(Percentage of number on pay roll)												
Departures: Totalper cent (annual basis) Voluntary quitsper cent (annual basis)	51, 1	46. 5	48, 5	6 50, 6	41.9	50. 6	41.9	-17.2	0.0			
Voluntary quitsper cent (annual basis) Lay offsper cent (annual basis)	39. 5 5. 4	35. 7 5. 0	38. 4 4. 8	6.3 6.3	28. 0 9. 2		4. 7	-26.7 +46.0	+95.7			ll
Lay offs	6. 2 60. 9	5. 8 61. 4	5.3 54.3	6 6. 1 6 59. 7	4. 7 44. 7	5, 3 56, 9		-23. 0 -25. 1				
dustrial disputes: Disputesnumber Workers involvednumber	71	6 75	6 71 6 13, 245	74		34 62,862	$\frac{42}{41,474}$					
Man-days lost in monthnumber_	54, 584 1, 526, 627	8 21, 872 1, 116, 557		413, 928		2, 571, 982	1, 304, 913					
DISTRIBUTION MOVEMENT Retail Sales												
fail-order houses: Total sales, 2 housesthous, of dolls	57, 702	53, 309	60, 088	63, 078	79, 256	50, 814	63, 587	+25.6	±24.6	443, 314	571, 267	+
Sears, Roebuck & Cothous. of dolls Montgomery Ward & Cothous. of dolls	35, 748 21, 954	33, 501 19, 808	35, 133 24, 955	36, 950 26, 128	47, 075	30, 004 20, 810	37,002	$+27.4 \\ +23.2$	+27.2	268, 367 174, 947	345, 387	∥ +2
en-cent chain stores:	44, 401	42, 604	46, 613	6 43, 169	51, 061	42,906	48, 992	+18.3		403, 502		11
Total sales (4 chains)thous, of dolls Total stores operated (4 chains)number F. W. Woolworth & Cothous, of dolls	2, 744 23, 609	2, 767 22, 522	2, 787 24, 446	2, 816 22, 253	2, 834 27, 678	2, 586 22, 637	2, 615 6 26, 896	+0.6 $+24.4$	+8.4	217, 206		
Stores operated number S. S. Kresge Co thous of dolls	1, 775 12, 572	1, 789 11, 687	1, 802 13, 001	1, 815 11, 971	1, 823 13, 761	1,698 11,914	1, 718 12, 925	+0.4 +15.0	+6.1	109, 485		ii
Stores operatednumber McCrory Stores Corpthous. of dolls	537 3, 335	542 3,300	547 3, 853	560 3, 582	568 3, 798	474 3, 344	481 3, 471	+1.4 +6.0	+18.1 +9.4	30, 372		
Stores operated number S. H. Kress & Co thous. of dolls	238 4, 885	239 5, 095	240 5, 317	241 5, 363	243 5, 824	5, 011 5, 011	5, 701	+0.8 +8.6	$+8.5 \\ +2.2$	47, 440		
Stores operatednumber Metropolitan thous of dolls	194 1, 467	197 1, 337	198 1,612	200 1, 471	200 1,663	190 1, 109	192 6 1, 231	0.0 +13.1	+4.2 +35.1	9, 513	12,870	
F. & W. Grandthous, of dolls_	120 1,889	123 1, 635	131 1,731	134 1, 731	141 2, 016	100 1, 443	104 1,756	+5. 2 +16. 5	+35.6			l'
Stores operatednumber_ W. T. Grant Cothous. of dolls_	5, 374	90 4, 524	5, 066	90 4,777	91 6, 164	76 4, 708	80 5, 418	$+1.1 \\ +29.0$	+13.8	39, 144		
Stores operatednumber.	241	244	252	258	263	199	203					

The cumulatives shown are through			1929			19	28	PER CE CREASE DECREA	ent in- (+) or ase (-)	CUMULATI FROM THROUGE	JAN. 1	Per ct in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
DISTRIBUTION MOVEMENT—Con. Retail Sales—Continued												
Restaurant chains: Total sales (3 chains) thous. of dolls. Stores operated number. Childs Co., sales. thous. of dolls. Stores operated number. J. R. Thompson Co., sales thous. of dolls. Stores operated number.	4, 763 374 2, 177 114 1, 313 124	4, 821 372 2, 259 114 1, 302 124	5, 151' 369 2, 478 113 1, 331 122	$112 \\ 1, 282$		4, 591 366 2, 191 113 1, 185 121	4, 802 367 2, 266 110 1, 269	+2.7 -2.7	+6. 4 -0. 9	21, 850	22, 816	+4.
Waldorf Wystem (Inc.), salesthous. of dolls Stores operatednumber	1, 273 136	1, 260 134	1, 342 134	1, 323 133	1, 477 143	1, 215 132	1, 267 134	+11.6 +7.5		12, 065	13, 233	+9.
Other chain stores: Isaac Silver & Bros	613 39 17, 121 1, 215 1, 229 145	650 41 14, 554 1, 215 1, 148 145		150		512 29 16, 478 1, 006 1, 046 119	610 30 6 19, 447 1, 020 1, 056 120	+35. 3 +4. 7 +27. 7 +2. 7 +5. 0 0. 0	+50. 0 +19. 8 +34. 6 +32. 9	4, 676 132, 289 8, 537		
Advertising					2 242							
Magazine advertisingthous. of lines_ Magazine advertising, total cost thous. of dolls_ Newspaper advertisingthous. of lines_ Radio broadcast:	2, 895 17, 756 101, 200	2, 346 15, 437 83, 930	1, 978 12, 076 85, 136	2, 542 16, 063 105, 702	3, 046 19, 750 118, 616	2, 302 14, 349 99, 839	⁶ 2, 904 19, 595 ⁶ 112, 053	+19.8 +23.0 +12.2	+4. 9 +0. 8 +5. 9	157, 407 971, 287	166, 201 1, 015, 964	
Cost of facilitiesthous, of dolls National advertising in newspapers:	1, 309 56, 118	1, 312	1, 330	1, 599	1, 948	814	1, 362	+21.8		7, 985	14, 851 504, 748	
Total thous of lines Passenger cars thous of lines Tires, trucks, and accessories thous of lines	6, 603 7, 926	48, 023 6, 219 7, 565		52, 869 6, 884 5, 502	64, 037 7, 396 5, 719	43, 402 6, 720	52, 955 6, 523	+21.1 +7.4		424, 885 68, 199	73, 394	+7.
Financial thous of lines Building materials thous of lines Electrical appliances	7, 485 632	8, 672 275	6, 745 6, 304 274	7, 457 775	8, 812 769	4, 696 5, 821 811	5, 022 7, 193 821	+3. 9 +18. 2 -0. 8	+13. 9 +22. 5 -6. 3	43, 652 62, 246 5, 818	74, 663	+19.
suppliesthous. of lines Foods and beveragesthous. of lines Heating and plumbing	1, 763 8, 230	1, 093 6, 676	888 5, 895	1, 560 6, 440	1, 354 7, 713	895 5, 678	893 6, 628	-13. 2 +19. 8		8, 514 58, 607	11,854 64,007	
equipment thous of lines Medical thous of lines Radio thous of lines Tobacco thous of lines Toilet requisites thous of lines Transportation thous of lines All other thous of lines	381 2, 830 1, 885 4, 264 3, 123 4, 667 6, 291	319 2, 285 2, 515 2, 484 2, 592 3, 756 3, 572	422 2, 190 3, 017 2, 107 2, 372 3, 121	6 782 6 3, 019 6, 205 3, 217 3, 020 2, 321	817 5, 595 7, 109 4, 617 3, 807 2, 530 7, 800	979 2, 920 3, 759 2, 006 2, 139 1, 734	2, 653 3, 831 1, 996	+4.5 +85.3 +14.6 +43.5 +26.1 +9.0	+81. 2 +74. 0 -0. 6 +26. 8	5, 064 35, 972 14, 376 27, 135 24, 692 23, 304	5, 147 40, 129 29, 576 32, 793 28, 376 28, 742 54, 046	+11. +105. +20. +14. +23.
Postal Business	0, 291	3, 372	2, 672	5, 686	7, 800	5, 245	7, 366	+37.2	+5.9	47, 240	54,040	+14.
Postal receipts: 50 selected cities thous. of dolls. 50 industrial cities thous. of dolls. Money orders:	29, 280 3, 061	29, 069 3, 189	29, 251 3, 289	30, 549 3, 303	35, 743 3, 737	29, 261 3, 074	34, 196 3, 583	+17.0 +13.1	+4.5 +4.3	305, 659 33, 036	314, 673 33, 701	
Domestic issued (50 cities)— Quantity———————————————————————————————————	3, 545 36, 198	3, 602 37, 120	3, 510 37, 027	3, 407 35, 916	3, 843 39, 963	2, 879 32, 382	3, 669 37, 554	+12.8 +11.3	+4.7 +6.4	33, 673 343, 074	36, 525 371, 909	
Domestic paid (50 cities)— Quantitythousands- Valuethous. of dolls- Air mail, weight dispatchedpounds-	11, 223 86, 958 593, 254	10, 741 86, 573 645, 653	10, 862 88, 806 701, 538	10, 328 86, 974 6 658, 984	12, 690 107, 699 701, 625	9, 748 79, 877 423, 991	12, 020 99, 310 465, 635	+22.9 +23.8 +6.5	+8.4	108, 147 841, 909 2, 576, 206	113, 330 892, 274 5, 836, 418	+6.
BANKING AND FINANCE	000,201	010, 000	.02,000	000,001	701, 020	120, 001	100, 000	10.0	1 00. 7	2,010,200	0,000,110	1 120.
Association of Life Insurance Presidents) Policies and certificates new (44 companies): Ordinarynumber of policies. Industrialnumber of policies. Groupnumber of certificates. Total policies and certificatesnumber	66, 353	809, 110 72, 923	273, 484 795, 451 40, 622 1, 109, 557	6 245, 042 805, 623 21, 799 6 1,072, 464	289, 055 879, 483 49, 062 1, 217, 600	214, 010 770, 416 52, 943 1, 037, 369	946, 284 18, 911	+18. 0 +9. 2 +125. 1 +13. 5	-7.1 +159.4	388, 799	9, 011, 761 464, 008	+3. +19.
Amount of new insurance (44 companies): Ordinary thous of dolls Industrial thous of dolls Group thous of dolls Total insurance thous of dolls	750, 228 242, 166 106, 589 1, 098, 983	722, 451 223, 680 147, 658 1, 093, 789	698, 196 219, 144 99, 773 1, 017, 113	6 608, 869 221, 006 75, 151 6 905, 026	707, 478 240, 489 105, 393 1, 053, 360	534, 112 198, 949 277, 943 1, 011, 004	659, 844 233, 530 72, 119 965, 493	+16. 2 +8. 8 +40. 2 +16. 4	+7.2 +3.0 +46.1 +9.1	6, 721, 615 2, 243, 529 1, 058, 429 10, 023, 573	7, 256, 335 2, 414, 866 938, 686 10, 609, 887	+7. -11.
Premium collections (44 companies): Ordinary thous of dolls Industrial thous of dolls Group thous of dolls Total thous of dolls	158, 733 55, 801 7, 345 221, 879	169, 773 57, 932 11, 494 239, 199	154, 206 56, 143 7, 129 217, 478	143, 078 56, 773 6, 485 206, 336	169, 724 51, 705 8, 497 229, 926	135, 743 49, 343 5, 738 190, 824	154, 489 55, 961 6, 447 216, 627	+18.6 -8.9 +31.0 +11.4	-7.6	1, 537, 150 516, 758 74, 324 2, 127, 962	548, 261 91, 090	+6. +22.
Admitted life insurance assets (40 companies): Grand totalmills. of dolls. Mortgage loans—	13, 469	13, 594	13, 691	13, 798		12, 510	12, 634					
Total	5, 792 1, 599 4, 193	5, 849 1, 607 4, 242	5, 887 1, 600 4, 287	5, 925 1, 600 4, 325		5, 429 1, 604 3, 825	5, 484 1, 606 3, 878					
Total mills, of dolls Government mills, of dolls Railroad mills, of dolls Public utility mills, of dolls All other mills, of dolls	5, 119 1, 048 2, 507 1, 261	5, 171 1, 048 2, 517 1, 267	5, 188 1, 062 2, 526 1, 274	1, 070 2, 527		4, 718 930 2, 406 1, 151	4, 752 939 2, 410 1, 163					
Policy loans and premium notes mills. of dolls.	1, 652	339 1, 670	326 1, 688			231 1, 497	1		1	,		'

The cumulatives shown are through			1929			19	28		ENT IN- (+) OR (SE (-)	CUMULATI FROM THROUGE	JAN, 1	Per ct in- crease (+) or de-
October, except where otherwise noted Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
BANKING AND FINANCE—Continued										The second of the second secon		
Life Insurance—Continued												
(Life Insurance Sales Research Bureau)												
Sales of ordinary life insurance: United States totalthous. of dolls Eastern manuf. distthous. of dolls Western maric. districtthous. of dolls Southern districtthous. of dolls Far western districtthous. of dolls Canada total, 15 companies thous. of dolls	829, 202 334, 551 189, 447 125, 349 97, 104 82, 751 54, 700	796, 900 319, 437 182, 763 121, 224 90, 954 82, 522 56, 078	300, 810 177, 990 116, 749 90, 526 79, 627	677, 104 261, 657 161, 222 104, 534 77, 810 71, 881 43, 911	787, 133 309, 637 184, 974 121, 985 89, 697 80, 840 52, 985	218, 788 136, 379 90, 916 71, 371 60, 739	764, 577 316, 574 176, 739 112, 916 85, 408 72, 940 55, 743	+16.2 $+18.3$ $+14.7$ $+16.7$ $+15.3$ $+12.5$ $+20.7$	$ \begin{array}{r} -2.2 \\ +4.7 \\ +8.0 \\ +5.0 \\ +10.8 \end{array} $	7, 328, 122 2, 998, 291 1, 638, 420 1, 107, 889 865, 386 718, 136 469, 162	7, 942, 407 3, 245, 561 1, 836, 694 1, 164, 539 897, 141 798, 472 502, 182	+5. +3.
(Life Insurance Lapses) 9												!
Total rel. to 1925-26. New England rel. to 1925-26. Middle Atlantic rel. to 1925-26. East No. Central rel. to 1925-26. West No. Central rel. to 1925-26. South Atlantic rel. to 1925-26. East So. Central rel. to 1925-26. West So. Central rel. to 1925-26. Mountain rel. to 1925-26. Pacific rel. to 1925-26.	2 101 2 99 2 95 2 87 2 103 2 109 2 93 2 88			² 110 ² 112 ² 107 ² 96 ² 105 ² 109 ² 91 ² 105		2 103 2 109 2 104 2 89 2 101 2 101 2 86 2 96		+7.4 +8.9 +13.1 +12.6 +10.3 +1.9 0.0 -2.2 +19.3 +10.0	$ \begin{array}{r} +2.8 \\ +2.9 \\ +7.9 \\ +4.0 \\ +7.9 \\ +5.8 \\ +9.4 \\ \end{array} $			
Banking						i						
Check payments: New York City mills. of dolls. Outside New York City mills. of dolls. Canada mills. of dolls.	43, 263 26, 423 1, 817	49, 215 28, 444 2, 108		50, 342 27, 314 1, 884	32, 261	38, 725 24, 450 1, 681	45, 189 27, 705 2, 395	+25.8 +18.1 +30.6	+16.4	402, 014 250, 656 19, 127	509, 634 276, 876 19, 966	+10. 8
Federal reserve banks: 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, 125 1, 736 226 3, 041 2, 438 72, 9	1, 076 1, 779 232 3, 109 2, 398	328 3, 149 2, 348	931 1, 851 484 3, 141 2, 471	658 3, 177 2, 696	2, 751 2, 414	932 1, 710 671 2, 773 2, 419 67. 2	+6. 4 +1. 6 +36. 0 +1. 1 +9. 1	+9.9 -1.9 $+14.6$ $+11.5$			
Reserve ratio	16, 925 5, 560 13, 293	74. 4 17, 058 5, 549 13, 395	16, 950 5, 456	72. 7 17, 428 5, 401 13, 295	69. 4 18, 934 5, 496 15, 110	15, 952 6, 401	16, 067 6, 430 13, 368	-4.5 +8.6 +1.8 +13.7	+17.8 -14.5			
To N. Y. Stock Ex. members— Total mills. of dolls— Ratio to market value per cent— By New York F. R. member banks mills, of dolls—	7, 071 9. 15 5, 769	7, 4 73 8. 87 5, 960	7, 882 8, 79 6, 217	8, 549 9, 82 6, 804	6, 109 8. 51 5, 538	5, 513 9. 29 4, 570	6 5, 879 9. 62 4, 907	-28. 5 -13. 3 -18. 6	l i			
Interest rates: Time loans, 90 days	8. 13 7. 70 6. 00 5. 50 5. 00 5. 20 5. 62	7. 75 9. 23 6. 00 5. 13 5. 00 5. 29 5. 67	8. 88 8. 23 6. 13 5. 13 6. 00 5. 31 5. 67	8. 88 8. 50 6. 25 5. 13 6. 00 5. 44 5. 67	8. 00 6. 43 6. 25 5. 13 5. 00 5. 51 5. 68	7. 00 7. 26 5. 63 4. 50 5. 00 5. 04 5. 12	7. 13 6. 98 5. 50 4. 50 5. 00 5. 04 5. 24	-9.9 -24.4 0.0 0.0 -16.7 +1.3 +0.2	$egin{array}{c} +12.2 \\ -7.9 \\ +13.6 \\ +14.0 \\ 0.0 \\ +9.3 \\ +8.4 \end{array}$			
banks, end of monthmills. of dolls Public Finance	4, 459	4, 434	4, 426	4, 457	4, 372	4, 352	4, 345	-1.9	+0.6			
Government debt, gross, end mo_mills of dolls_ Customs receiptsthous. of dolls_ Total ordinary receiptsthous. of dolls_ Expenditures chargeable to	16, 931 52, 401 765, 882	16, 832 52, 144 169, 473	174, 502	16, 720 52, 612 670, 736	175, 998	50, 410 557, 398	187, 627	-0. 1 +9. 5 -73. 8			519, 274 3, 356, 320	+10. : +7.
ordinary receipts thous. of dolls U. S. money in circulation: Daily average mills, of dolls.	420, 473 4, 687	349, 825 4, 764	210, 725 4, 777	399, 068 4, 811	364, 678 4, 810	482, 600 4, 804	368, 653 4, 836	-8. 6 0. 0		3, 154, 557	3, 136, 635	-0.
Gold and Silver	1,001	1, 102	3,777	4,011	1,010	3,001	4,000	0.0	0.0			
Gold: Domestic receipts at mintfine ounces Rand output	73, 468 856, 029	92, 256 889, 480	6 889, 601	77, 029 6 849, 553		857, 731		+57.3 +3.7	-0.3 -1.9	801, 200 8, 626, 351	781, 858 8, 701, 339	-2. +0.
Daily average mills. of dolls. Imports thous. of dolls. Exports thous. of dolls. Silver: thous. of dolls. Production—	4, 311 30, 762 550	4, 335 35, 525 6 807	4, 351 19, 271 881	4, 368 18, 781 1, 205	4, 381 21, 321 3, 805	4, 125 4, 273 3, 810	4, 133 14, 331 992	+0.3 +13.5 +215.8	+6.0 +48.8 +283.6	114, 357 536, 208	276, 405 13, 7474	+141. 97.
Production— United States thous of fine oz. Canada thous of fine oz. Stocks, end of month— United States thous, of fine oz.	4, 976 1, 146 1, 382	4, 523 1, 910 682	6 5, 006 2, 744 1, 074	\$ 4,634 \$ 2,437	5, 053 2, 705 1, 451	2, 177	4, 352 2, 051 856	+9. 0 +11. 0 +30. 5	+31.9	46, 120 17, 054	49, 706 18, 093	+7.3 +6.
Canada thous, of fine oz. Imports thous, of dolls. Exports thous, of dolls. Price at New York dolls, per fine oz.	543 5, 022 5, 445 . 524	339 4, 723 6, 795 . 525	880 7, 345 8, 522	914 4, 111 4, 374	489 5, 403 7, 314	1, 4 57 5, 739 6, 229	718 7, 319 7, 252	-46.5 +31.4 +67.2	-31.9 -26.2 +0.9	57, 551 71, 2 18	54, 316 68, 360	-5. (-4. (

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The cumulatives shown are through			1929			19	28		CH OR (+) OR (SE (-)	CUMULATI FROM THROUGE	JAN. 1	Per cu in- crease (+) or de-
October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	June	July	August	Septem- ber	October	Septem- ber	October	Oct., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu lative 1929 from 1928
BANKING AND FINANCE—Continued Business Failures												
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):	31, 375 12, 721 13, 931 4, 723 3, 758	32, 426 12, 767 14, 605 5, 053 2, 441	33, 746 13, 857 16, 002 3, 888 1, 376	34, 125 14, 914 16, 660 2, 551 2, 423	31, 314 12, 071 14, 464 4, 778 2, 577	33, 957 14, 727 13, 567 5, 662 2, 632	34, 990 13, 490 17, 268 4, 232 2, 504	-8. 2 -19. 1 -13. 2 +87. 3 +6. 4	-10. 5 -10. 5 -16. 2 +12. 9 +2. 9	408, 184 149, 249 189, 144 6 9, 790 30, 185	363, 741 139, 289 180, 060 44, 393 24, 817	-6. -4. -36.
Total commercial number. Manufacturers number. Trade establishments number. Agents and brokers number. Firms (Canada) number. By groups:	1, 767 496 1, 154 117 154	1, 752 461 1, 190 101 176	1, 762 482 1, 163 117 132	1, 568 427 1, 039 102 164	1,822 483 1,211 128 178	1, 635 454 1, 073 108 119	528 1, 369 126	+16. 2 +13. 1 +16. 6 +25. 5 +8. 5	-9. 9 -8. 5 -11. 5 +1. 6 +11. 9	20, 061 4, 907 13, 945 1, 203 1, 486	19, 076 4, 967 12, 907 1, 202 1, 651	+1. -7. -0.
Manufacturers— Metals	40 47 107 19 23 45 12 3 6 194	39 63 88 6 15 31 10 7 9 193	35 48 102 11 11 34 4 6 6 225	29 48 77 8 10 38 11 3 9	35 66 94 3 10 36 17 4 8 210	35 74 73 8 6 24 15 4 3 212	6 7	+20.77 +37.55 +22.11 -62.55 -0.00 -5.33 +54.5 +33.33 -11.11 +8.2	+6. 1 -16. 5 0. 0 -76. 9 -44. 4 -23. 4 +21. 4 -33. 3 +14. 3 -3. 2	367 639 758 79 152 421 131 57 81 2, 222	352 580 941 102 150 397 127 63 82 2, 173	-1.3 -5. -3. +10.4 +1.
General stores	68 373 202 200 50 13 248	68 406 201 180 54 5 276	72 399 163 179 64 15 271	60 363 168 127 54 11 256	78 408 191 167 86 10 271	60 376 168 187 43 13 226	87 503 225 190 78 10 276	+30. 0 +12. 4 +13. 7 +31. 5 +59. 3 -9. 1 +5. 9	-10. 3 -18. 9 -15. 1 -12. 1 +10. 3 0. 0 -1. 8	838 4, 300 2, 703 2, 392 676 125 2, 908	848 4, 132 2, 211 2, 216 633 121 2, 746	+1. -3. -18. -7. -6. -3. -5.
Dividend and Interest Payments												
Grand total thous, of dolls. Interest payments thous, of dolls.	558, 200 386, 400	863, 356 515, 156	377, 000 201, 000	480, 600 292, 0 0 0	737, 450 424, 650	413, 250 262, 000	6 624, 400 388, 600	+53.4 +45.4	+18.1 +9.3	5, 027, 264 3, 086, 354	5, 723, 951 3, 433, 851	+13.9 +11.3
Dividend payments: Total	171, 800 136, 000 29, 300 6, 500	348, 200 250, 000 55, 000 13, 100	176, 000 132, 000 37, 100 6, 900	188, 600 152, 000 29, 500 7, 100	312, 800 241, 500 43, 900 15, 900	151, 250 121, 100 23, 400 6, 750	* 36, 800	+65. 9 +58. 9 +48. 8 +123. 9	+32.7 +37.3 +19.3 +43.2	1, 940, 910 1, 426, 480 325, 280 97, 150	2, 290, 100 1, 712, 800 368, 400 106, 400	+13.
New Security Issues												
Foreign loans in the U. Sthous. of dolls Foreign governmentsthous. of dolls Total corporationthous. of dolls	144, 626 6, 000 630, 102	48, 703 860, 747	20, 250 15, 000	13, 168 8, 000 1, 507, 376	60,000 3,500	108, 949 43, 500	36, 750	+355. 7 -56. 2 -49. 8	-7.9 -90.5	1, 254, 665 620, 120 5, 999, 083	628, 54 68, 250	
Purpose of issue— New capital thous, of dolls. Refunding thous, of dolls.	613, 880	801, 453	751, 177	1, 200, 784	757, 254 724, 166	428, 184 391, 158	600, 473	-39.7	+15.5 $+20.6$	3, 381, 037	9, 4 13, 4 51 8, 4 21, 9 2 3	+149.
Type of security— Stocks————thous, of dolls—	16, 222 357, 982	59, 294 648, 504		306, 592 1, 265, 387	33, 088 471, 166	37, 026 172, 047	390, 610	-89. 2 -62. 8	-40.0 +20.6	1, 618, 046 2, 434, 818	1, 288, 523 6, 635, 251	+172.
Bond and notesthous. of dolls Class of industry— Railroadsthous. of dolls	272, 120 91, 350	212, 243 27, 580	118, 132 660	241, 989 81, 520	286, 088 57, 220	256, 137	45 830	+18. 2 -29. 8	+8.0 +24.9	3, 564, 265 590, 461	2, 908, 200 618, 229	li
Public utilitiesthous. of dolls Industrialsthous. of dolls Oilthous. of dolls Land and buildingsthous. of dolls Shipping and miscthous. of dolls	129, 552 105, 205 45, 641 40, 843 217, 511	319, 796 127, 621 17, 639 41, 269 326, 844	111, 865 91, 282 2, 105 35, 503 534, 808	380, 291 280, 078 51, 000 6, 501 707, 987	102, 356 98, 202 109, 680 23, 723 306, 075	202, 239 98, 234 57, 517 70, 194	214, 466 114, 233 7, 000 85, 627	$ \begin{array}{r} -73.1 \\ -64.9 \\ +115.1 \\ +264.9 \\ -56.8 \end{array} $	-52.3 -14.0 -72.3 +86.9	2, 281, 967 1, 173, 345 109, 327 692, 128 1, 132, 926	2, 332, 007 1, 928, 592 460, 195 495, 220 3, 463, 982	+2. +64. +320. -28.
States and municipalities: Permanent loansthous. of dolls Temporary loansthous. of dolls	162, 168 48, 109	6 86, 745 59, 321	6 80, 415 86, 164	6 100, 575 6 95, 978	118, 285 3, 655	70, 170 73, 419		+17.6 -96.2	+20.4 -95.6	1, 099, 854 676, 114	1, 096, 913 700, 321	-0. +3.
Bond issues (Čanada): Govt. and provincialthous. of dolls Municipalthous. of dolls	5, 226 7, 363	1, 537	1, 449	8, 257 3, 760		9,733 260	24, 060 5, 144			7 59, 503 7 17, 370	⁷ 68, 466 ⁷ 67, 744 ⁷ 159, 793	11
Corporationthous. of dolls Tax-exempt securities outstanding, end of monthmills of dolls	16, 080 17, 523	39, 525 17, 556	693		18, 377	11, 980 16, 897	15, 396	+0.5	+8.4	7 222, 724	7 159, 793	-28.
Agricultural Finances	11,020	17,000	17,000	10, 277	10, 377	10,007	10,001	10.0	-1-0. 4			
Loans outstanding, end mo.: Federal farm loan banksthous. of dolls Joint stock land banksthous. of dolls Federal intermediate credit banksthous. of dolls	1, 204, 916 597, 956 68, 101	1, 204, 363 596, 403 68, 981		1, 202, 490 593, 388 72, 204	1, 200, 932 590, 507 75, 373	1, 189, 345 608, 451 68, 619	607, 632	-0.1 -0.5 +4.4	+0.9 -2.8 -1.5			
Stocks and Bonds	00, 101	00, 301	00, 002	12, 204	10, 313	00,019	10,041	1.4.4	-1.0			
Stock prices, average daily closing: 25 industrials, averagedolls. per share 25 railroads, averagedolls. per share 103 stocks, averagedolls. per share Southern cotton millsdolls. per share	372, 70 134, 37 82, 50 95, 15	414. 04 149. 27 86. 25 92. 45	431, 20 151, 29 90, 35 90, 41	448. 78 152. 26 82. 47 89. 37	395, 95 142, 30 69, 91 88, 61	283, 99 124, 82 78, 49 103, 31	123. 40 78. 45	-11. 8 -6. 5 -15. 2 -0. 9	+15.3 -10.9			

⁶ Revised.

⁷ Cumulative through Sept. 30.

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		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., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	creas (-) cum lativ 1929 from
BANKING AND FINANCE—Continued												
Stocks and Bonds-Continued												
Stock prices, average weekly closing: Industrials, rails, and utilities												H
(405) rel. to 1926. All industrial (338) rel. to 1926. All railroads (33) rel. to 1926. All utilities (34) rel. to 1926. Automobiles and trucks (13) rel. to 1926. Automobile tires and rubber	190. 7 191. 0 144. 8 233. 0 241. 7	207. 2 202. 7 160. 0 272. 8 241. 0	218. 1 210. 3 165. 4 . 304. 3 240. 8	225. 2 216. 1 168. 1 321. 0 240. 9	201. 6 194. 4 157. 0 276. 5 195. 6	156. 6 162. 2 129. 6 155. 8 270. 0	166. 2 128. 2 154. 5	-10. 5 -10. 0 -6. 6 -13. 9 -18. 8	+22.5 +79.0			
goods (7) rel. to 1926 Airplane (10) rel. to 1926 Agricultural implements (4) rel. to 1926 Chain stores (17) rel. to 1928	184. 8 1, 069. 0 380. 5 144. 5	184. 9 1, 131. 0 418. 6 148. 0	169. 5 1, 130. 0 423. 9 148. 7	994. 4 444. 8	147. 4 693. 9 373. 2 138. 7	127. 6 693. 7 301. 3 150. 5	667. 4 309. 4	-9.8 -30.2 -16.1 -10.3	+7.1 $+4.0$ $+20.6$ -8.1			
Copper and brass (9) rel. to 1926. Food, other than meat (20) rel. to 1926. Machinery and machine equipment (10) rel. to 1926.	270. 8 175. 6 159. 4	280. 8 189. 1	288. 9 186. 7	294, 4 191, 1	258. 7	172. 0 167. 1 139. 4	185. 1 167. 1	-12.1 -7.8 -10.0	+39.8 +5.4			
Oil producing and refining (10) rel. to 1926. Railroad equipment (9) rel. to 1926. Rayon (5) rel. to 1928. Steel and iron (10) rel. to 1926. Textiles (30) rel. to 1928.	144. 1 141. 7 138. 0 188. 2 122. 4	149. 1 148. 5 126. 6 211. 5 120. 3	157. 5 157. 8 126. 2 238. 4 118. 1	166. 7 157. 6	161. 4 143. 6 111. 0 217. 1	115. 7 129. 5 160. 7 155. 8 125. 9	117. 0 126. 8 161. 3 158. 7	-3. 2 -8. 9 -7. 3 -11. 0 -9. 6	$-31.2 \\ +36.8$			
Theaters, motion pictures, and amusements (7)rel. to 1926	133. 4	139, 0	142, 5		i	135. 1		-9.4	-3.8			l.
Tobacco and tobacco products (10)rel. to 1926	135. 1	139. 1	141. 6	ì	i i	142. 5		+3.5	+3.2			11
Traction, motor transportation, etc. (9)rel. to 1926.	83. 7	83. 0	83. 1	84.7	80.4	99. 5	96. 3	-5.1	-16.5			
tock yields: Total common (90) per cent. Industrials (50) per cent. Public utilities (20) per cent. Railroads (20) per cent. Performed birth grads industrial	3. 38 3. 51 2. 22 4. 62	3. 16 3. 36 1. 95 4. 17	3. 01 3. 26 1. 78 4. 04	3. 19 1. 69	3. 60 2. 02	3. 78 3. 72 3. 14 4. 98	3. 61 3. 19	+13.7 +12.9 +19.5 +7.6	-0.3 -36.7			
Preferred, high-grade industrial (20)per cent Stock sales, N. Y. Stock Exch_thous. of shares	5. 49 69, 548	5. 52 93, 379	5. 54 95, 705	5. 52 100, 056		5. 41 90, 907		+0.4 +41.6	+1.8 +43.0	712, 279	968,670	+3
Gond sales: Miscellaneous	227, 676 9, 848 237, 524	295, 577 13, 330 308, 907	251, 287 8, 510 259, 797	210, 995 9, 267	337, 374 15, 839	190, 582 10, 467	226, 621 11, 949	+59.9 +70.9 +60.4	+48.9 +32.6	2, 382, 564 150, 799	2, 365, 714 111, 040	$\begin{vmatrix} -2 \\ -2 \end{vmatrix}$
Highest-grade rails p. ct. of par, 4% bond. Second-grade rails p. ct. of par, 4% bond. Public utility p. ct. of par, 4% bond. Industrial p. ct. of par, 4% bond. Comb. price index. p. ct. of par, 4% bond.	86. 37 78. 59 74. 32 75. 29 78. 37	86. 06 78. 55 73. 25 75. 24 77. 99	85. 98 77. 25 73. 14 74. 54 77. 43	77. 64 73. 13 73. 84	79. 35 73. 31 74. 88	82. 51 79. 51 78. 18	81. 98 81. 12 78. 34	+0.2 +1.4	-9.6 -4.4			
30nd prices, 1st of following month: 5 Liberty bondsp. ct. of par 16 foreign govt. and cityp. ct. of par Comb. price index, 66 bondsp. ct. of par 30nd yields:	100. 87 103. 30 97. 69	100. 64 103. 60 97. 95	103.42	103. 16	102. 74	104. 55	104. 59	+1.9 -0.4 +0.3	-1.8			11
Total, 60 high grade	4. 73 4. 65 5. 09 4. 90 4. 26	4. 73 4. 67 5. 09 4. 90 4. 28	4.89	4. 71 5. 12 4. 90	4. 66 5. 08 4. 91	4. 95 4. 73	4. 43 4. 95 4. 74	+0.2	+5. 2 +2. 6 +3. 6			
Municipal (15) per cent. Municipal bond yield (20) per cent. J. S. Treasury notes and certificates, 3-6 months per cent.	4. 33 4. 89	4. 41 4. 49	4. 41	4.49	4.37	4. 16	4. 16	-2.7	+5.0			
certificates, 3-6 monthsper cent Liberty and Treasury bondsper cent ong-term real-estate bonds issued:	3. 71	3. 68	3. 72	3. 70	3. 67	3. 54	3. 55	-0.8	+3.4			
Grand totalthous. of dolls Purpose of issue— Finance constructionthous. of dolls Real-estate mortgagethous. of dolls Acquisitions and	20, 025 4, 295 4, 800	36, 790 24, 660 4, 556	28, 403 16, 108 8, 485	950	13, 875	4, 460	33, 290		-70.3 -58.3 -81.1	227, 800	127, 375	4
improvementsthous, of dolls Kind of structure— Office and commercial_thous, of dolls Hotelsthous, of dolls	7, 485 10, 845 700	2, 390 24, 860 1, 175	9, 875 9, 995	880	2,050 11,600	530 2, 510 400	15, 018 9, 900		+17.2	177, 689 44, 460	100, 235 36, 830	-4 -1
Apartmentsthous. of dolls FOREIGN EXCHANGE RATES	2, 200	1, 582	1, 588	215	225	270	8, 423	+4.7	-97.3	38, 702	15, 877	—5
Europe:												
England dolls. per £ sterling. France dolls. per franc. Italy dolls. per lira Belgium dolls. per franc. Netherlands dolls. per guilder. Sweden dolls. per krone. Switzerland dolls. per franc.	4. 85 . 039 . 052 . 139 . 402 . 268 . 192	4, 85 , 039 , 052 , 139 , 401 , 268	4. 85 . 039 . 052 . 139 . 401 . 268 . 192	. 039 . 052 . 139 . 401 . 268	.039 .052 .140 .403 .268	.039 .052 .139 .401	. 039 . 052 . 139 . 401 . 267	0.0	0.0 0.0 +0.7			
sia:dolls, per yen Indiadolls, per rupee	. 439	. 456	. 467	. 473	. 478	. 458	. 462	+1.1	+3.5			II
India dolls, per rupee. America: Canadian dolls, per Canadian doll. Argentina dolls, per gold peso. Brazil dolls, per milreis.	. 360 . 992 . 953 . 119	. 360 . 995 . 954 . 119		. 992	. 988 . 950	1.000 .957	1.000 .956	-0.4 -0.3	-0.8 -1.2		*	

The cumulatives shown are through October, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		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., 1929 from Sept., 1929	Oct., 1929 from Oct., 1928	1928	1929	crease (-) cumu- lative 1929 from 1928
U. S. FOREIGN TRADE		!										İ
Imports		İ										
Grand totalthous, of dolls_ By grand divisions:	6 353, 393	352, 981	⁶ 369, 358	6 351, 357	391, 026	319, 618	355 , 35 8	+11.3	+10.0	3, 425, 471	3, 751, 086	+9.5
Europe— Total thous, of dolls. France thous, of dolls. Germany thous, of dolls. Italy thous, of dolls. United Kingdom thous, of dolls.	106, 427 13, 267 19, 328 10, 608 25, 378	115, 145 14, 577 22, 806 8, 485 27, 970	109, 783 14, 026 22, 742 7, 657 25, 891	17 510		102, 315 13, 783 18, 661 6, 548 26, 373	121, 234 17, 279 22, 309 10, 072 33, 417			7 907, 456 7 112, 336 7 162, 615 7 70, 077 7 257, 655	⁷ 1, 000, 450 ⁷ 126, 805 ⁷ 193, 371 ⁷ 82, 165 ⁷ 252, 470	+12.9 +18.9 +17.2
North America— Total thous, of dolls. Canada thous, of dolls. South America—	81, 898 44, 292	79, 974 44, 671	82, 401 43, 909	76, 933 42, 248		76, 926 42, 209	84, 398 47, 404			7 722, 235 7 359, 330	⁷ 761, 111 ⁷ 378, 261	
Total thous. of dolls. Argentina thous. of dolls.	50, 740 8, 342	46, 630 7, 416	51, 611 7, 791			37, 560 6, 313	41, 535 6, 677			⁷ 436, 623 ⁷ 80, 433	⁷ 488, 056 ⁷ 85, 188	+5.9
Total thous, of dolls_ Japan thous, of dolls_ Africa, total thous, of dolls_	107, 848 32, 483 6, 488	104, 963 28, 883 7, 437	114, 595 40, 256 11, 140	39, 973		97, 554 33, 741 5, 263	100, 888 35, 261 7, 302			7 931, 850 7 284, 322 7 69, 974	⁷ 1, 023, 603 ⁷ 310, 847 ⁷ 87, 028	+9.3
Crude materialsthous, of dolls Foodstuffs, crude and	120, 724	119, 038		6 122, 062		110, 289	117, 624		(li .
food auimals thous of dolls Manufactured foodstuffs thous of dolls Semimanufactures thous of dolls Finished manufactures thous of dolls	6 40, 951 36, 527 6 75, 550 79, 637	42, 957 32, 990 71, 604 86, 392	6 79, 465	40, 700 32, 327 6 70, 198 6 86, 069	35, 110 81, 622	37, 207 33, 771 63, 455 74, 906	42, 007 35, 370 71, 174 89, 184	+16.0 +8.6 +16.3 +16.8	-0.7 +14.7	345, 914	757, 565	+7.1 +20.5
Exports												
Grand total, including reexportsthous. of dolls By grand divisions:	393, 293	403, 360	381, 365	6 437, 681	530, 000	421, 607	550, 014	+21.1	-3.6	3, 557, 585	3, 844, 405	+8.1
Europe— Total	153, 988 14, 603 21, 261 12, 642 52, 824	161, 005 15, 795 24, 634 8, 667 56, 889	160, 756 17, 095 26, 370 6, 764 58, 340	201, 300 24, 028 39, 026 14, 500 72, 609		192, 840 20, 049 46, 298 14, 275 59, 182	268, 856 28, 928 57, 989 16, 936 97, 963			7 1, 592, 650 7 153, 640 7 299, 007 7 112, 996 7 548, 962	⁷ 1, 642, 953 ⁷ 179, 508 ⁷ 270, 250 ⁷ 109, 169 ⁷ 590, 050	+3. 2 +16. 8 -9. 6 -3. 4 +7. 5
North America— Total thous. of dolls. Canada thous. of dolls. South America—	115, 658 80, 481	116, 845 79, 736	112, 012 77, 338	117, 659	 	115, 500 87, 139					7 1, 070, 401	+10.0
Total thous, of dolls Argentina thous of dolls Argentina thous of dolls	49, 690 20, 464	49, 312 20, 500		18, 003		33, 805 11, 457					⁷ 420, 287 ⁷ 163, 957	
Japan thous, of dolls. Africa thous, of dolls.	61, 667 16, 966 12, 289	63, 374 15, 005 12, 824		19, 121		71, 917 27, 542 7, 544	92, 484 39, 137 12, 630			⁷ 572, 572 ⁷ 183, 968 ⁷ 80, 517	⁷ 610, 936 ⁷ 172, 174 ⁷ 99, 829	-6.4
By economic classes: Total domestic exports only thous, of dolls Crude materials Foodstuffs, crude, and	⁶ 386, 800 56, 130		\$ 374, 725 \$ 50, 890	6 432, 329 6 112, 261	522, 278 174, 214	414, 859 120, 188	543, 171	+20.8 +55.2	-3.8		4, 301, 569 871, 577	
food animals thous of dolls Manufactured foodstuffs thous of dolls Semimanufactures thous of dolls Finished manufactures thous of dolls Agricultural exports (quantities):	62, 119	20, 259 35, 840 6 60, 511 5 227, 213	6 37, 107 6 57, 062	6 29, 943 6 40, 980 57, 948 6 191, 196	47, 744 64, 405	42, 363 35, 761 51, 077 165, 469	51, 643 59, 967	-19.5 +16.5 +11.1 +10.8	一7.5 十7.4	374, 765	622, 688	+6.5 +4.3
All commodities rel. to 1910-14. All commodities except rel. to 1910-14.	69 102	70 117		121 143	166 147	138 168						
CANADIAN FOREIGN												
Total trade: Importsthous, of dollsthous, of dollsthous, of dollsthous.	111, 949 114, 492			99, 380 8 9 , 424					+3.5 -15.6	1, 024, 608 1, 070, 794	1, 105, 845 1, 004, 652	

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Revised

? 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 or Current Business are listed below. A complete list may be obtained by addressing the Division of Publications. Department of Commerce, at Washington. Copies of the publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, at the prices stated. If no price is mentioned, the publication is distributed free.

OFFICE OF THE SECRETARY

Annual Report of Director of Aeronautics to Secretary of Commerce for Fiscal Year Ended June 30, 1929, iv+68 pages, 2 illus, 8 charts.

Air Commerce Bulletin, Nov. 1, 1929, 29 pages, 1 illus-This bulletin is issued semimonthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments and a list of air transport routes.

Airnorts and Landing Fields. Aeronautics Bulletin No. 5:

Airports and Landing Fields. Aeronautics Bulletin No. 5: 16 pages. This is a September 30, 1929, revision of a classified list of airports and tanding fields issued by the Aeronautics Branch of the Department of Commerce.

Airworthiness Requirements of Air Commerce Regulations. Aeronautics Bulletin No. 7-A; ii+87 pages, 19 illus. Rules for construction of airplanes issued by the Aeronautics Branch of the Department of Commerce, with proposed changes in present

the Department of Commerce, with proposed changes in present requirements

Customs Ports Authorized to Issue Marine Documents. Ninth edition of Department Circular No. 249; 2 pages.

Radio Service Bulletin, Oct., 1929. 13 pages. Issued monthly by the Radio Division of the Department of Commerce. Contains list of radio stations and references to current radio literature. Single copies, 5¢; annual subscription

BUREAU OF THE CENSUS

[Fer information concerning the plan of publication and distribution of Consus reports, address the Director of the Consus]

Census of Manufactures, 1927. Reports giving detailed information for various industries, by States:

mation for various inclustries, by States:

Afcratt, Motor vehicles, etc. Paper, 22 pages, price 56.

Artificial leather, Lineleum and Asphalted-Felt-Base Floer Coverings, Ollcloth. Paper, 11 pages, price 56.

Ashestos Products and Stone, Clay and Glass Industries not covered by separate reports. Paper, 12 pages, price 56.

Cash registers, Adding Machines, and Calculating machines; Gas machines and gas and water meters; Scales and halances; Typewriters and supplies. Faper, 12 pages, price 56.

Chopolate and cocor products, Confectionery and Chewing Gum. Paper, 17 pages, price 56.

Cotton manufactures; Cotton Groods; Cotton Small Wares; Cotton Lace. Paper, 59 pages, price 106.

Drug industries: Druggists: Preparations, Patent and promietary Medicines and Compounds, Fertunes, Cosmetics and other Tollet Preparations; Drug grinding; Essential Oils. Paper, 17 pages, price 56.

Flour and other grain-mill predicts, cereal preparations, prepared fields for animals and fowls, Bread and other bakery products: Paper, 39 pages, price 106.

Hals and millihery; Hals, wool-left; Hals, fur-felt; Hals, men's straw; Hals and caps, except full and straw, Hals and cap materials; Millinery, Paper, 20 pages, price 56.

Linen goods; Diveling and electric railway cars; Railroad repairs shops. Paper, 20 pages, price 56.

Miscellaneous filer and textile products; cordage and twine; Jute goods; Linen goods; Diveling and Finishing textiles; Flax and hemp, dressed; Halricioth, Mals and masting; Grass and coir, Waste. Paper, 29 pages, price 56.

The Subber Industries, Ethics is the stress and inner tubes; Rubber boots and shoes.

price 56.
The Rubber Industries. Rubber tires and inner tubes; Rubber boots and shoes; Rubber goods, other than tires; Inner tubes; and Boots and shoes. Paper, 20 pages, price 56.
Simp and boat building. Paper, 11 pages, price 56.
Stoves and ranges, Heating apparatus and steam fittings; Phimbers' supplies, not including pipe or vitreous-china sanitary wars. Paper, 16 pages, price 56.

Women in Gainful Occupations, 1870–1920. Census Monograph No. IX. A study of the trend of recent changes in numbers, occupational distribution, and family relationship of women reported in census as following gainful occupation, by Dr. Joseph A. Hill. Cloth, 432 pages, 8 diagrams, price \$1.50. Earnings of Factory Workers, 1899–1927. Census Monograph No. X. An analysis of pay-roll statistics in various industries showing estimated amounts of per capita earnings and their fluctuations, estimated average number of workers employed, and changes in earnings and purchasing power from 1899 to 1927, by Faul F. Brissenden. Cloth, 424 pages, 2 illus., 33 diagrams, price \$1.50.

diagrams, price \$1.50.

Pinancial Statistics of Cities having a population of 30,000, 1927. Statistics of receipts, expenditures, and cash balances of municipal governments, with assessed valuation of property subject to taxation in these cities. Cloth, 503 pages, 1 illus., 12.

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The Prisoner's Antecedents. Statistics concerning previous life of offenders committed in 1923 to State and Federal Prisons and Reformatories, Supplementary to "Prisoners, 1923."

Annual Report of the Director of the Census. Showing the work of the Bureau of the Census accomplished, in process, and commenced in the fiscal year 1929. Paper, 21 pages, price 5¢.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

[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, 1929. iv +57 pages, I chart. Reviews the activities of the Bureau during the past year, showing the part taken by each division. Price, 10c.

Monthly Summary of Foreign Commerce of United States, Sept., 1929. Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for September, 1928 and 1929, and for nine months ended September, 1928 and 1929. Part II contains summaries of exports and import trade: monthly average import and export prices; and import trade; monthly average import and export prices; and statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10¢; Part II, 5¢. Annual subscription, \$1:25.

BUREAU OF STANDARDS

Annual Report of Director of Bureau of Standards to Secretary of Commerce for Fiscal Year Ended June 30, 1929. Miscellaneous Publication No. 102; iv+51 pages, 1 chart. Report on the activities of the Bureau during the past year. Price, 106. Marine Bollers and Pressure Vessels: Rules for Design and Construction, compiled and promulgated by American Marine Standards Committee. American Marine Standard E No. 26–1929; iv+16 pages, illustrations, chart. Price, 106.

BUREAU OF FISHERIES

Annual Report of Commissioner of Fisheries to Secretary of Commerce for Fiscal Year Ended June 30, 1929. ii + xxx pages.

Laws and Regulations for Protection of Far Seals and Sea Offers. Second edition of Department Circular No. 285; 10 pages. In addition to the acts of Congress and regulations of the Department of Commerce for the protection of fur seals and sea otters, there is included in this publication the text of an international treaty promulgated for the protection of these

Review of Weakfishes (Cynoscion) of Atlantic and Gulf Coasts of United States, with Description of New Species, by Isaac Ginsburg, Document No. 1058. (From Bulletin of Bureau of Fisheries, Vol. XLV, 1929, pp. 71-85, 7 illustrations.) Study of weakfishes to determine distinguishing characteristics f species which may be recognized at all stages of growth. Price, 10¢.

BUREAU OF MINES

Nineteenth Annual Report of Director of Bureau of Mines to Secretary of Commerce for Fiscal Year Ended June 30, 1929. vi+63 pages, 3 charts. Report on the various activities of the Bureau during the year. Price, 106.

Facts Relating to Production and Substitution of Manufactured Gas for Natural Gas, by William W. Odell. Bulletin 301; vi+179 pages, 32 illus, 2 maps. Deals with means of supplying natural gas to consumers, quality of gas supplied, different kinds of gas investigated in search for a substitute for natural gas, some limiting factors affecting the selection of substitute gas, and some possibilities in solving the substitute-gas problem. Price, 356. Price, 35¢.

COAST AND GEODETIC SURVEY

Annual Report of Director United States Coast and Geodetic Survey to Secretary of Commerce for Fiscal Year Ended June 30. 1929. ii+41 pages, 6 plates, 13 maps. Discussion of the functions of the Survey, with report on accomplishments during the past year. Price, 156.
United States Coast Pilot, West Indies: Porto Rico and Virgin

Islands. Serial No. 446; vi+213 pages, 8 illus., 8 pages of plates, map. Descriptions of and sailing directions for the waters of Porto Rico and Virgin Islands. Price, 75%.

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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 col-

lection of statistics on mineral resources and mine accidents.

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

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

The prepagation and distribution of food fish and shellfish in order to prevent the depletion of the fisheries; investigations to promote conservation of fishery resources; the development 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 sids to water haviga-tion. Establishment and maintenance of sids 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

RAYMOND S. PATTON, Director

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

Publication of results through charts, coast pilots, tide tables, surrent tables, and special publications.

BUREAU OF NAVIGATION

ARTHUR J. TYRER, Commissioner

Superintendence of commercial marine and merchant seamen. Supervision of registering, enrolling, frequency, 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, iffnes, tonnage taxes, etc.

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

The inspection of merchant vessels, including boilers, built, 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 shirs; inspection of radio stations on shore, including broadcasting stations; licensing radio operators, assigning station wall letters; enforcing the terms of the International Radiofelegraphic Convention; and examining and settling international radio accounts.

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