# MONTHLY REVIEW

OF

# AGRICULTURAL AND BUSINESS CONDITIONS

IN THE

### NINTH FEDERAL RESERVE DISTRICT

JOHN R. MITCHELL, Chairman of the Board and Federal Reserve Agent

CURTIS L. MOSHER
Assistant Federal Reserve Agent

OLIVER S. POWELL Statistician

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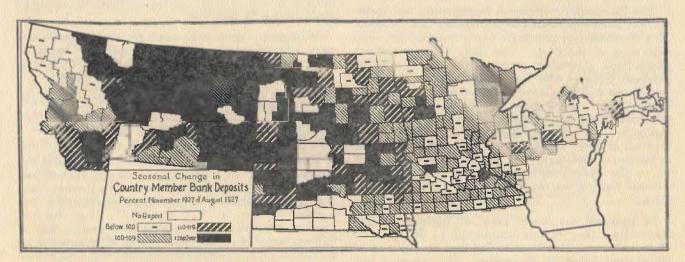
December 29, 1927

## 1927 CROP INCOME AND BANK DEPOSITS

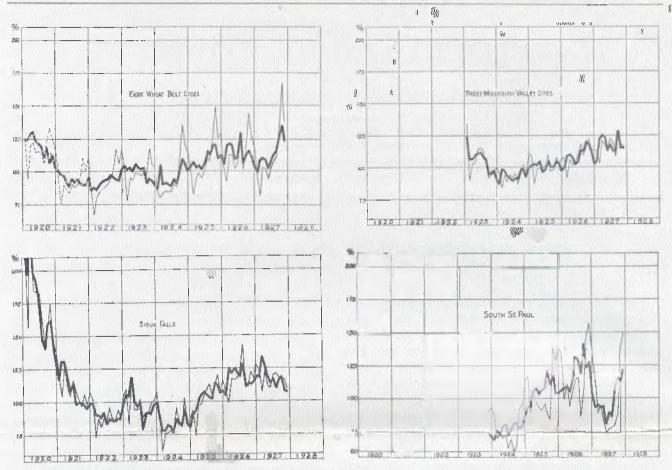
The 1927 cash crops benefited the western part of the district more than the eastern portion. The largest increases in the resources of our rural communities since the crops began to move, occurred in a broad belt reaching from northwestern Montana to eastern South Dakota, and extending in its broadest part from the Canadian border to southwestern South Dakota. The best evidence of the location of the crop benefits is the increase between August and November in deposits at member banks (excluding Minneapolis, St. Paul and Duluth). The map at the foot of this page shows the picture very clearly. Deposit increases of 10 percent, or more, occurred in the counties shaded black or with heavy bars. Smaller increases occurred in the counties

lightly shaded. Decreases occurred in the counties having minus signs.

It should be noted that while the cash crops furnish the major portion of farm income over most of our district, there are sections in the southern and eastern portion where hog, cattle feeding and dairying income are most important. In these sections, the cash crops, even if the yield per acre were large, could not be expected to cause as pronounced deposit increases as in the grain farming region. Hog marketing and the cattle movement from feed lots reach a peak later in the year than grain marketing. Consequently, bank deposits in the hog and cattle feeding territory increase about ninety days after the increase in the grain farming region.



The black areas in the map above show the counties where member bank deposits increased 20 per cent or more between August 24, 1927 and November 9, 1927, which is the principal crop marketing period. Lighter shadings denote smaller increases and minus signs denote decreases in member bank deposits during this period. The white areas represent counties in which no member banks are located.



Debits to Individual Accounts at Banks in the Smaller Reporting Cities of the Ninth Federal Reserve District. Heavy curves represent figures adjusted to eliminate seasonal changes; light curves represent unadjusted figures as percentages of the average month.

#### DISTRICT SUMMARY OF BUSINESS

The November volume of business did not maintain the level established in September and October. This development was expected in view of the early marketing of the crop. The daily average volume of debits to individual accounts declined 7 percent between October and November, although there is usually an increase varying from 4 to 11 percent. The return of money from circulation in this district exceeded the issue of money by this bank during November. This event has not happened during November since 1921. In 1921, it was attributed to business depression. In 1927, it may be attributed to the early crop movement which caused an unusual outflow of currency in September and October.

In spite of the lower level of business during November, the volume continued to exceed the 1926 volume. Debits to individual accounts were 18 percent larger in November, 1927 than in the corresponding month last year. A small part of this increase was due to the fact that the month had one more business day this year. Of the non-agricultural industries of the district, building and iron mining reported smaller volumes in November than

in the corresponding month a year ago and flour mills and linseed mills increased their shipments as compared with last year.

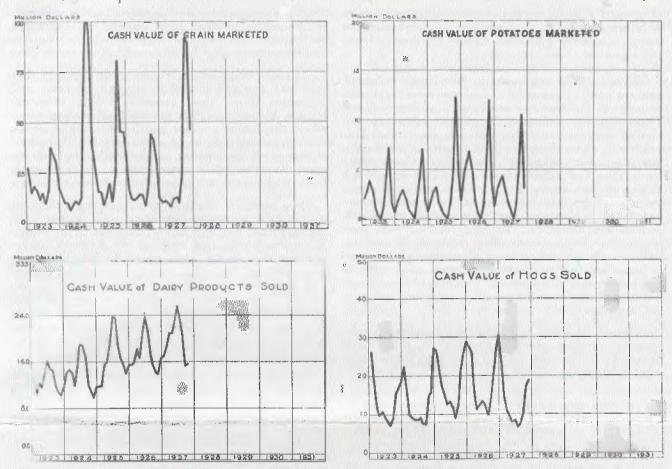
Wholesale trade continued to be larger than a year ago. Department store sales were larger at St. Paul but smaller at Minneapolis and Duluth-Superior as compared with November, 1926.

Sales of securities to the general investing public, exclusive of banks, reached a volume nearly as large as the October, 1927 volume, which established a new high record.

Farm income from cash grains and potatoes declined sharply to \$50,000,000 during November, which was only one-half as large as the income from this source during October, but exceeded the November income in 1926 and 1925. For the first four months of the crop year the cash value of wheat, rye, flax and potatoes sold amounted to \$270,000,000, as compared with \$156,000,000 in this portion of the 1926 crop year and \$289,000,000 in the corresponding portion of the 1924 crop year, which established a new peace-time record.

Other forms of farm income showed divergent trends. The income from dairy products during

## NINTH FEDERAL RESERVE DISTRICT



Estimated Income to Northwestern Farmers, By Months, from the Sale of Cash Grains, Potatoes, Dairy Products and Hogs, 1923-1927. The prices used are terminal market prices for representative grades.

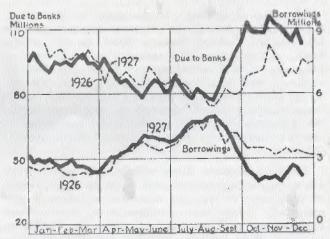
October (the latest month estimated) and the first ten months of the calendar year was about 10 percent larger than in the corresponding portions of 1926. Income from hogs during November, on the other hand, was only fair. The value of hogs marketed was estimated to be 29 percent smaller than in November, 1926, and smaller also than the total for November, 1925, but it exceeded the totals of November, 1923 and November, 1924. Smaller market receipts of cattle, calves and sheep probably offset the higher prices for these classes. The feeder movement to the country during November was much larger than in November, 1926. Feeder steers were bought at the highest prices since September, 1920.

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#### DISTRICT SUMMARY OF BANKING

Country member banks increased their borrowings from this bank slightly during the latter part of November, but this increase was cancelled during the first two weeks of December. Apparently, borrowings by country banks are following the customary seasonal trend, which will be generally downward until the end of March. It also appears that an investment program by country banks is

occurring similar to that of the winter of 1924 and 1925, for deposits carried by country banks with city banks reporting to this office declined from 116 million dollars on November 2 to 103 million dollars on December 14. In the absence of any evidence



Country Bank Conditions in the Northwest, as indicated by borrowings from this Federal Reserve Bank and by deposits with city correspondent banks.

of unusual demand for funds from customers, it is to be inferred that the investments of country banks are being increased with the funds withdrawn from correspondent bank accounts.

The reports of city banks in this district reflected country bank changes by a decrease in net demand deposits in the last five weeks of 9 million dollars. Time deposits increased 2 million dollars to the highest figure on record, which was reached on December 7. The character of the assets of city banks has also been changing seasonally. Commercial loans (the "all other" classification) decreased 13 million dollars during the five weeks ending December 14 and on that date were at the lowest December level during the five year period for which records are available. Balances carried with correspondent banks were also reduced 13 million dollars. On the other hand, there was an increase in loans secured by stocks and bonds of 7 millions and an increase in investment holdings of 6 millions. Both of these latter items made new high records in December.

Sales of securities to banks by representative investment dealers reached the highest total since February, 1926, and were 73 percent larger than sales in November, 1926.

## CURRENCY FLOW—A NEW INDEX OF BUSINESS

The small purchases made with pocket money constitute a large part of the nation's business. Owing to the great number of individual transactions and the relative unimportance of each transaction there are few indexes reflecting in satisfactory manner the changes in volume of this mass of business. With the hope of throwing some light upon this important subject, we are presenting the flow of currency in the northwest as an interesting index of this phase of business.

The flow of currency, as measured by this index, constitutes the movement of paper currency into the Minneapolis Federal Reserve Bank or out of this bank, according to the seasonal requirements of business. The Federal reserve bank provides all currency and coin for the district except new national bank notes. The demand for currency arises from two sources; withdrawals of cash from checking accounts by persons who have purchases of goods or services to make and withdrawals of cash by firms on payroll account.

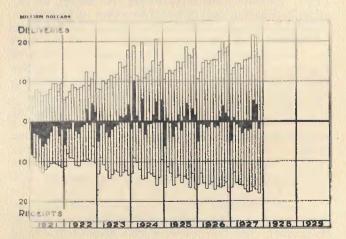
Banks anticipate these withdrawals where they are a regular occurrence and build up their supply of vault cash on the day when the withdrawals are expected. Sometimes withdrawals are heavier than expectations and it is necessary for the banks to replenish their ordinary supply of vault cash after the withdrawals have taken place. Banks which are not members of the Federal Reserve System draw cash from their correspondent banks which

usually are members and member banks ordinarily draw cash from their local Federal reserve bank, so that the full effect of the currency demand is finally evidenced in the reserve bank currency flow.

At other times banks receive more currency than they pay out and find their supplies of vault cash becoming larger than necessary. The observant banker keeps his funds invested in earning assets when the funds are not needed as cash reserves. An over-supply of vault cash calls for immediate shipment of the surplus, either to the Federal Reserve Bank to build up reserves or to some other bank to be used in the purchase of earning assets.

As a result of the practice of keeping vault cash supply at a minimum consistent with proper bank management, the flow of currency out of the Federal reserve banks and back to the Federal reserve banks is very elastic, and accurately reflects changes in the demand for pocket money and payroll money. The only form of currency which is not supplied by the Federal reserve bank is new national bank notes which are issued by the banks for which they are printed. After newly printed national bank notes are put into circulation they are treated by all banks like other forms of currency.

The demand for money fluctuates with changes in the individual spending power, with changes in prices and with changes in the seasons. The accompanying chart shows the currency flow experienced by the Federal Reserve Bank of Minneapolis during the seven year period from 1921 to 1927, inclusive, and reflects changes in spending done in the district. The columns above the zero line represent the monthly volume of currency payments by this Federal Reserve Bank to other banks in the district. The columns below the zero line represent receipts of currency from banks in the district. The solid black portions of the columns represent the net outflow or inflow of currency, by months.



Monthly Outflow and Inflow of Currency at the Minneapolis Federal Reserve Bank and Helena Branch Combined. Shipments to and from commercial banks only are included in the chart. The black portions of the bars represent the NET outflow or inflow of currency. Throughout the whole of 1921 and during the first three months of 1922 more currency was received by the Federal Reserve Bank than was shipped. No pronounced outward movement occurred until 1924. During 1925 and 1926 the outflow and inflow practically balanced. During most of 1927 the inflow exceeded the outflow.

Seasonal changes in spending are very marked. The year begins with a rapid return flow of currency which is no longer needed after the cessation of the Christmas buying rush and the completion of year-end payments. Intermediate movements with the net return of currency predominating, occur during the next six months of the year. In August, if the crop is early, as in 1925, the net currency movement is outward. September and October are the main crop moving months and the usual currency movement is rapidly outward. This outward movement was especially pronounced in 1927, owing to the exceedingly rapid marketing of the cash crops. The November movement of currency is also outward in most years, although in November, 1927 more currency was returned to the Federal reserve banks than was issued. December is the month of Christmas buying and as might be expected, there is a net outward movement of currency, the volume of which depends on the volume of trade to be done and the amount of currency which has been put into circulation in the earlier months of the fall.

### **Daily Currency Movement**

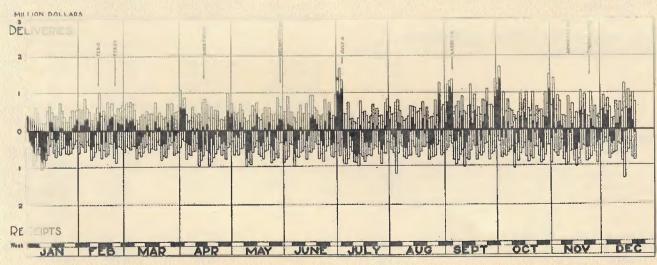
The daily movement of currency into the Federal Reserve Bank of Minneapolis and out of this bank and the net inward or outward movement is shown in the chart at the foot of page 93. These records have only been maintained through the year 1927 and December, 1926, and do not include the volume of the Helena branch. These daily records

are presented to show in more detail the currency flow in response to conditions which the banks are forced to meet in their daily operations.

Weekly movements are most in evidence in this chart. The usual movement is a net outflow on Friday, Saturday and Monday. This is probably caused by payroll and holiday demands for currency at the end of the week and the replenishment of depleted cash supplies by the banks on Monday. Tuesday, Wednesday and Thursday are days of net inflow of currency to the Federal Reserve Bank, probably caused by the spending of payroll and holiday money, which is deposited by stores and other firms with their banks and returned by these banks to the Federal Reserve Bank.

Month-end and quarterly demands for currency are also clearly evidenced in the months of March, April, June, August, September and October.

The national holidays cause some demand for This is especially notable in the days preceding Independence Day and Labor Day. Christmas spending causes a sustained outward flow of currency, beginning with the 16th of December and continuing through the day before Christmas. At the time of writing, we are forced to depend on the records of 1926 for evidence of the effect of the Christmas demand. Records are available only through December 15, 1927. During the first 15 days of December, 1927, receipts of currency and payments of currency by this bank had practically balanced, which was exactly the occurrence during the first 15 days of December, 1926. Beginning with December 16, 1926, however, the net outflow of currency during the next eight business days amounted to 21/2 million dollars. It is almost needless to say that a return flow of currency set in during the week following Christmas.



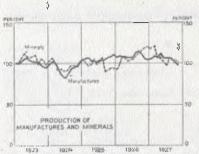
Daily Outflow and Inflow of Currency at the Federal Reserve Bank of Minneapolis during 1927. The chart does not include the records of the Helena branch and represents only shipments to and from commercial banks.

## COMPARATIVE STATISTICS OF BUSINESS IN THE NINTH FEDERAL RESERVE DISTRICT

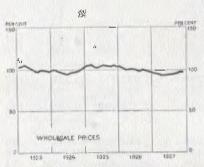
COM ANATIVE STATISTICS OF BOSINE		TEDEN	AL NEJEKVE	% Nov. 1927 of	1927 of
Debits to Individual Accounts—  17 Cities . Minneapolis St. Paul Duluth-Superior 8 Wheat Belt Cities 3 Mississippi Valley Cities South St. Paul Sioux Falls		October, 1927 \$1,119,304.000 550,833,000 201,547,000 193,193,000 86,572,000 21,172,000 47,052,000 18,935,000	November, 1926 \$817,920,000 397,575,000 161,100,000 99,932,000 65,379,000 20,413,000 54,612,000 18,909,000	Oct. 1927 86 82 100 76 83 98 111	Nov. 1926 118 114 125 147 110 102 96
Carloadings-Northwestern District—					
Total Cars Grains and Grain Products Cars Livestock Cars Coal Cars Coke Cars Forest Products Cars Ore Cars Merchandise—L. C. L. Cars Miscellaneous Cars	537,656 59,357 40,146 44,977 5,083 65,333 23,738 144,002 155,020	738,426 86,070 43,938 44,738 5,163 72,437 123,009 154,132 208,939	582,922 45,410 45,077 51,475 6,818 72,632 62,084 140,263 159,163	73 69 91 101 98 90 19 93 74	92 131 89 87 75 90 38 103 60
Building Permits—					
Number—18 Cities Value—18 Cities Minneapolis St. Paul Duluth-Superior 4 Wheat Belt Cities 6 Mixed Farming Cities 4 Mining Cities	\$ 2,928,900 1,132,300 722,700 300,900 206,900 373,900 192,200	\$ 3,252,800 1,304,800 711,900 236,900 255,300 625,100 118,800	\$ 3,939,100 1,437,200 1,523,700 358,200 237,000 361,300 21,700	73 90 87 102 127 81 60 162	116 74 79 47 84 87 103 886
Building Contracts Awarded—		- mrx			
Total Residential Commercial and Industrial Public Works and Utilities Educational All Other	4,976,700 2,474,000 613,300 1,695,300 63,000 131,100	7,063,100 3,343,400 1,360,500 835,500 196,200 1,327,500	5,281,300 3,628,000 571,000 208,200 495,600 378,500	70 74 45 203 32 10	94 68 107 814 13 35
Cash Value of Farm Products Sold-					
Bread Wheat Durum Wheat Rye Flax Potatoes Fluid Milk Hogs	27,537,000 7,924,000 3,092,000 7,956,000 3,064,000 1,301,000 18,989,000	50,821,000 18,432,000 5,835,000 14,823,000 10,534,000 1,309,000 4,7,282,000	16,726,000 6,685,000 1,399,000 6,152,000 3,467,000 1,203,000 26,741,000	54 43 53 54 29 99	165 119 221 129 88 108
Grain Stocks at End of Month at Minneapolis					
and Duluth-Superior—  Wheat Bu. Corn Bu. Oats Bu. Barley Bu. Rye Bu. Flax Bu.	34,144,369 1,704,821 8,747,236 1,046,880 977,502 4,794,315	26,040,650 2,044,461 8 18,819,044 1,355,575 4,844,870 4,680,753	19,383,214 647,408 26,680,056 3,892,629 8,570,797 3,181,670	131 83 46 77 20 102	176 263 33 27 11
Median Cash Grain Prices-					
Wheat—No. 1 Dark Northern       Bu.         Durum—No. 2 Amber       Bu.         Corn—No. 3 Yellow       Bu.         Oats—No. 3 White       Bu.         Barley—No. 3       Bu.         Rye—No. 2       Bu.         Flax—No. 1       Bu.	\$1.317/ <sub>6</sub> 1.253/ <sub>4</sub> .82 .461/ <sub>2</sub> .78 1.00 2.133/ <sub>4</sub>	\$1.3 I ½ 1.21 .79 3/6 .44 7/6 .72 .91 3/4 2.11 3/4	\$1.4834 {.64 .73 .415/8 .62 .931/2 2.22	100 104 103 104 108 109	89 77 112 112 126 107 96
Wholesale Produce Prices—		451/	A 7	101	0.0
Butter Lb. Milk Cwt. Hens—4½ Pounds Lb. Eggs Doz. Potatoes Bu.	.46 2.63 .18 .371/ <sub>2</sub> 1.05	.45½ 2.60 .19 .32½ 1.05	.47 2.50 .171/ <sub>2</sub> .45 1.58	101 101 95 115 100	98 105 103 83 66

# COMPARATIVE STATISTICS OF BUSINESS IN THE NINTH FEDERAL RESERVE DISTRICT (Continued)

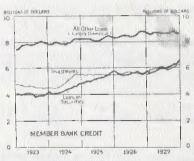
	Continued)				
				% Nov. 1927 of Oct.	% Nov. 1927 of Nov.
Livestock Receipts at South St. Paul-	November, 1927	October, 1927	November, 1926	1927	1926
Cattle Head Calves Head Hogs Head Sheep Head	132,887 54,886 424,007 136,098	163,570 51,747 286,594 205,004	154,648 65,619 486,099 150,450	81 106 148 66	86 84 87 90
Median Livestock Prices at South St. Paul-					
Butcher Cows  Butcher Steers  Cwt. Prime Butcher Steers  Stocker and Feeder Steers  Cwt. Veal Calves  Cwt. Hogs  Cwt. Heavy Hogs  Cwt. Lambs  Cwt.  Cwt.	\$ 7.00 10.00 14.00 8.00 11.00 8.50 7.75 13.50 6.00	\$ 6.75 9.50 14.00 7.50 12.00 10.25 9.75 13.00 6.00	\$ 5.25 7.25 10.00 6.00 9.50 11.25 9.75 13.00 6.00	104 105 100 107 92 83 79 104 100	133 138 140 133 116 76 79 104 100
Production—Twin Cities & Duluth-SuperiorBbls.	1,253,356	1,409,248	1,072,714	89	117
Shipments from Minneapolis	1,113,165	1,374,333	960,835	81	116
Linseed Products Shipments from Minneapolis. Lbs.	44,109,810	44,693,978	32,533,338	99	136
Retail Sales—  Department Stores Furniture Stores	\$ 2,582,830 524,420 12,428,000	\$ 2,795,400 616,680 16,247,000	\$ 2,604,000 532,930 12,001,000	92 85 76	99 98 104
Retail Merchandise Stocks-					
Department Stores	\$ 6,991,340 2,921,130 74,658,000	\$ 7,006,140 2,949,040 80,397,000	\$ 7,217,220 3,059,120 73,666,000	99 93	97 95 101
Life Insurance Sales (4 States)	\$ 23,255,000	\$ 23,085,000	\$ 22,898,000	101	102
Wholesale Trade					
Farm Implements Hardware Shoes Groceries	171,110 2,179,160 459,690 5,454,850	261,920 2,286,960 622,600 5,467,460	160,030 1,967,370 552,760 4,891,870	65 95 74 100	107 111 83 112
Business Failures—		0.0	0.2	2.7	0.0
Number Liabilities Securities Sold—	\$ 1,153,335	\$ 660,024	\$ 721,000	77 175	82 160
To Banks	4,199,600	3,956,500	2,425,900	106	173
To Insurance Companies	1,414,000 9,122,400	1,462,000 9,608,800	2,056,100	97 95	69 219
				% Dec. 1927	% Dec. 1927
Ninth Federal Reserve District Member Banks— In Cities under 15,000 Population Net Demand Deposits Time Deposits	Dec. 7, 1927 \$195,763,000 260,242,000	Nov. 9, 1927 \$199,152,000 257,261,000	Dec. 29, 1926 \$183,588,000 265,656,000	of Nov. 1927 98 101	of Dec. 1926 107 98
In Cities over 15,000 Population Net Demand Deposits Time Deposits	284,800,000 188,472,000 Dec. 14, 1927	290,718,000 185,631,000 Nov. 16, 1927	168,268,000	98 101	118 112
24 City Member Banks—  Loans Secured by Stocks and Bonds All Other Loans Securities Net Demand Deposits Subject to Reserve Time Deposits Borrowings at Federal Reserve Bank	\$ 96,154,000 168,013,000 129,493,000 247,743,000 133,679,000 1,250,000	Nov. 16, 1927 \$ 93,926,000 173,102,000 127,188,000 253,059,000 132,755,000	220,657,000 126,473,000	1927 102 97 102 98 101	1926 133 94 117 112 106 179
Minneapolis Federal Reserve Bank—  Loans to Member Banks	3,541,935	2,024,054	3,996,704	175	90
Federal Reserve Notes in Circulation	61,263,955	62,681,600		175 98	89 90



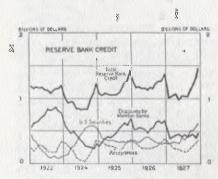
Index numbers of production of manufactures and minerals, adjusted for seasonal variations 1923-25 average=100). Latest figures, November, manufactures, 98, minerals 101.



Index of United States Bureau of Labor Statistics (1926=100, base adopted by bureau). Latest figure, November 96.7.



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures are averages for first three weekly report dates in December.



Monthly averages of daily figures for 12 Federal Reserve Banks. Latest figures are averages of first 22 days in December.

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# Summary of National Business Conditions (Compiled December 23 by Federal Reserve Board)

Industrial activity and freight carloadings declined further in November, while retail trade showed more than the usual seasonal increase. The general level of wholesale commodity prices, after advancing for four months, remained practically unchanged in October and November.

PRODUCTION: Output of manufactures and minerals was reduced in November, and the combined index of production, after adjustments for customary seasonal variations, fell below the 1923-1925 average for the first time since 1924. The largest decline was in the output of automobiles, owing largely to preparation for production of new models. Iron and steel production has also declined further and in November was the lowest since 1924. In December, however, inquiries for iron and steel increased. Textile mill activity was slightly curtailed in November but continued at a higher level than in previous years. There were decreases in the production of coal, building materials and leather and shoes. Building contract awards showed seasonal declines in November and the first two weeks of December, and were slightly smaller than in the corresponding period of last year.

The total value of about 50 crops in 1927 is estimated by the Department of Agriculture at \$8,430,000,000, an increase of \$635,000,000 over 1926. The greatest increases in value were shown for cotton, corn, barley and oats, while the largest decrease for any individual crop was shown for potatoes. The physical quantity of production of the 17 principal crops was about 2 per cent less than last year, but 3 per cent above the average of the last ten years.

TRADE: Retail trade increased slightly more than is usual in November. Compared with a year ago, retail trade of department stores, mail order houses and chain stores was larger, while wholesale trade continued in slightly smaller volume in nearly all reporting lines. Freight carloadings declined during November and in the early part of December were smaller than in the corresponding period for the past four years. There were large decreases in loadings of all classes of commodities.

PRICES: The general level of wholesale commodity prices, as measured by the index of the Bureau of Labor Statistics, after a continuous advance since early in the summer, remained at practically the same level in November as in October. Changes were relatively small in all groups, increases occurring in foods and hides and leather and decreases in farm products, textiles, fuels and building materials. In the first two weeks of December, prices of wheat, cattle, hogs, cotton, pig iron and soft wood lumber declined, while those of silk, woolen goods, hides and sole leather advanced.

BANK CREDIT: Between the middle of November and the middle of December total loans and investments of member banks in leading cities showed a considerable increase, reflecting continued growth in the volume of loans on securities and in the banks' investment holdings. In the same period, loans, chiefly for commercial purposes, which reached a seasonal peak in October, showed a further slight decline.

At Federal reserve banks the seasonal increase in currency requirements and the continued demand for gold for export during the four weeks ending December 21 were reflected in a growth in member bank borrowing. At the end of this period, the total volume of Reserve bank credit in use was larger than on any other date in the past six years.

Somewhat firmer conditions in the money market in December were reflected in increased rates on call money. Rates on prime commercial paper and bankers' acceptances remained unchanged during the month.