THIRTY-SEVENTH

ANNUAL REPORT

MONSANTO CHEMICAL COMPANY

1938

DSW 331254

STLCOPCB4056034



You are looking through Monsanto Vue-Pak, the new transparent plastic packaging material. Durable and tough, it can be shaped, drawn or folded into any practical form, giving each product a showcase of its own.

THIRTY-SEVENTH

ANNUAL REPORT

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DSW 331255

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THIRTY-SEVENTH
ANNUAL REPORT

TO THE STOCKHOLDERS OF MONSANTO CHEMICAL COMPANY

FOR SEVERAL YEARS it has been my privilege to report to you a steady increase in the sales and earnings of our company. I regret that I am unable to report a continuance while the depression that started in the last quarter of 1937 ran its course.

Nineteen hundred and thirty-eight was not a good year. Sales dipped to low levels and net earnings were only $3,290,519, which is equivalent after minority interests and preferred dividend requirements to $2.35 a share on the common stock.

Earnings reflected not only a decrease in sales but an increase in unit costs resulting from greater fixed charges on a declining output. Our gross profit suffered also approximately $865,000 as a result of lower prices on several important products while compensatory declines did not take place in raw materials. Further, the operations of our Plastics Division, which was organized upon our absorption of The Fiberloid Corporation on April 1, were unprofitable through September.

In the following comparison of sales and earnings by quarters, the first and second columns include the operations of Plastics Division from April 1 of each year, and the last column contains the 1937 operations of Monsanto as then constituted.

	1938	1937	1937
Net Sales:			
First Quarter	$ 6,551,326	$ 8,368,905	$ 8,368,905
Second Quarter	7,221,965	10,842,186	8,933,742
Third Quarter	8,449,526	10,242,838	8,327,043
Fourth Quarter	9,712,574	9,074,548	7,572,666
Total	$31,935,391	$38,528,477	$33,202,356
Net Income:			
First Quarter	$ 669,311	$ 1,368,608	$ 1,368,608
Second Quarter	555,424	1,776,216	1,483,480
Third Quarter	731,353	1,495,156	1,268,843
Fourth Quarter	1,334,431	1,081,157	1,041,580
Total	$ 3,290,519	$ 5,721,137	$ 5,162,511
Minority Interest, Preferred Dividends	375,676	264,202	264,202
Earnings for Common Stock	$ 2,914,843	$ 5,456,935	$ 4,898,309

Liquidation of inventories by industries consuming our products apparently coincided with the general improvement in business that ushered in the fourth quarter. This general improvement is

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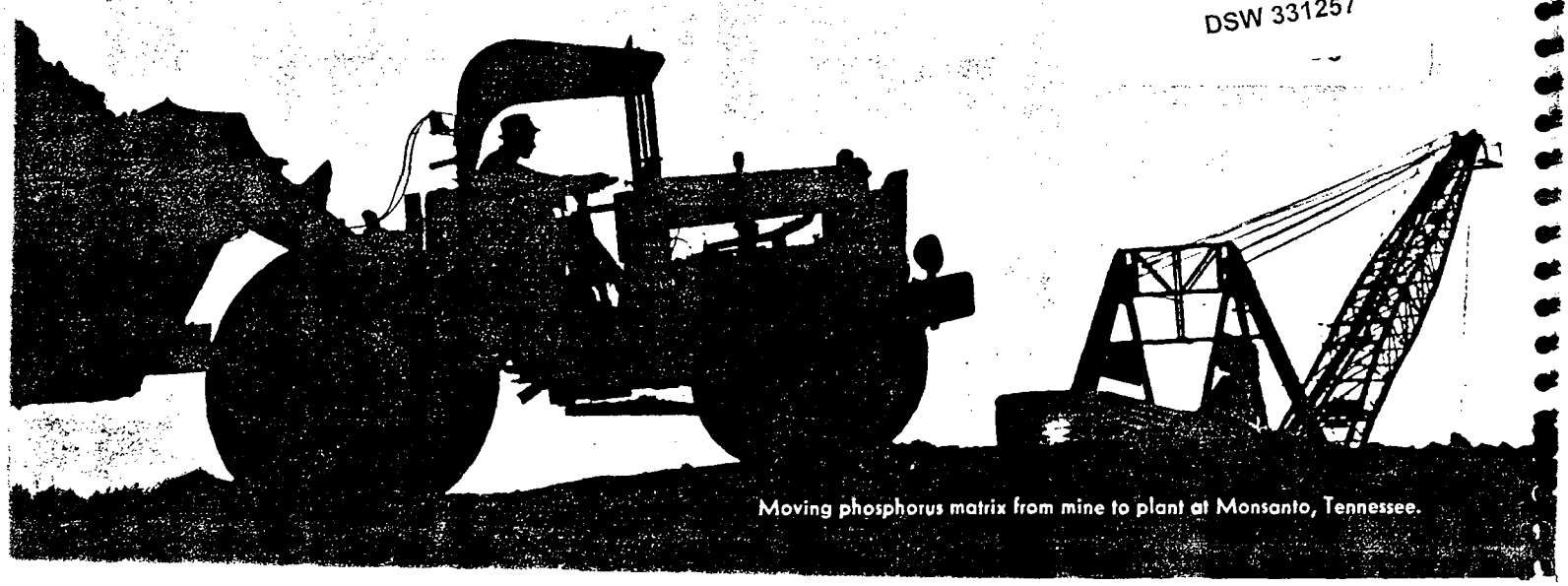
reflected in the more favorable operating results for this period. In constrast to operating results in the United States, our British associates, Monsanto Chemicals Limited, had relatively good sales and earnings in the early periods of the year, but, reflecting the general unsettlement following the crisis, operations in the last half were less satisfactory.

The following comparison of income items also include in the first two columns those of the Plastics Division from April 1 of each year, and the last column 1937 items of our company as it was then constituted:

	1938	%	1937	%	1937	%
Gross profit	$ 8,432,327	26.4	$11,522,738	29.9	$10,194,284	30.7
Selling, administration	$ 3,301,169	10.4	$ 3,535,330	9.2	$ 3,140,793	9.5
Research	1,221,623	3.8	1,234,604	3.2	1,011,629	3.0
Total	$ 4,522,792	14.2	$ 4,769,934	12.4	$ 4,152,422	12.5
Profit from operations	$ 3,909,535	12.2	$ 6,752,804	17.5	$ 6,041,862	18.2
Other income	685,968	2.1	528,559	1.4	509,381	1.5
Income charges	*451,107*	*1.4*	*407,644*	*1.1*	*359,227*	*1.1*
Estimated income taxes	*853,877*	*2.6*	*1,152,582*	*3.0*	*1,029,505*	*3.1*
Net income	$ 3,290,519	10.3	$ 5,721,137	14.8	$ 5,162,511	15.5

The larger items of Other Income and Income Charges were:

	1938	1937	1937
Other Income:			
Royalty income	$321,539	$235,666	$235,666
Dividends received	48,013	163,266	163,266
Non-recurring profit on containers	105,308		
Profit on securities	46,730		
Income Charges:			
Provision for doubtful accounts	38,893	87,823	84,966
Federal capital stock tax	84,701	88,252	81,452
Financial expense	19,998	39,142	38,854
Purchased process written off	75,000	58,336	58,336
Write-down of investment	76,760		
Pilot plant written off	97,357		



Moving phosphorus matrix from mine to plant at Monsanto, Tennessee.

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3 years.

Our experience indicates that under capacity production schedules, we must have approximately $1 in gross plant investment and approximately 25 cents in net current assets, exclusive of cash, for every $1 of annual sales. Due to this relatively low turnover, new products and expanding demands for some older products result in a constant requirement of additional capital for new plant and working assets.

To provide for our needs from January 1, 1936, through 1938, funds were obtained as follows:

Net earnings retained in business	$ 3,311,391
Depreciation provided	6,080,140
Working capital of The Fiberloid Corporation amounted to	2,150,018
From sale of 101,310 shares of common stock in 1936	5,890,930
From sale of 50,000 shares of $4.50 preferred stock in 1937	4,921,045
Other sources—Net	1,199,646
Total	$23,553,170

And they were employed as follows:

1936 plant additions and replacements	$ 5,253,771
1937 plant additions and replacements	7,187,181
1938 plant additions and replacements	3,409,457
Inventories and accounts receivable increased	5,153,550
Cash and marketable securities increased	2,549,211
Total	$23,553,170

As market conditions toward the end of the year seemed propitious to obtain capital for our future program, 50,000 shares of our authorized preferred stock were sold in December, which provided the company with approximately $5,450,000 of permanent capital at a net rate of 4.1 per cent.

BALANCE SHEET COMMENTS

THE first of the following columns are Balance Sheet items of our consolidated statement as of December 31, 1938, of Monsanto Chemical Company and its subsidiaries, Monsanto Chemicals Limited, New England Alcohol Company and Merrimac Chemical Transportation Company. For comparison the second column is a consolidation, as of December 31, 1937, of Monsanto Chemical Company and subsidiaries and The Fiberloid Corporation which was acquired during the year. The third column contains actual items as of December 31, 1937.

WORKING CAPITAL

	December 31, 1938	December 31, 1937	December 31, 1937
Current Assets:			
Cash	$ 5,229,116.64	$ 3,854,626.95	$ 3,056,127.56
Marketable securities	1,005,177.05	4,583,445.11	4,027,805.36
Receivables	3,913,992.14	3,434,553.71	2,885,546.56
Inventories	9,171,997.61	8,474,619.26	7,577,190.12
Total	$19,320,283.44	$20,347,245.03	$17,546,669.60

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Current Liabilities:	December 31, 1938	December 31, 1937	December 31, 1937
Accounts payable	$ 2,997,745.76	$ 2,842,110.37	$ 2,600,653.64
Estimated income taxes	889,024.24	1,240,328.66	1,042,328.66
Dividends payable	217,000.00	112,500.00	112,500.00
Container deposits	408,471.54	564,414.52	553,679.52
Total	$ 4,512,241.54	$ 4,759,353.55	$ 4,309,161.82
Net Working Capital	$14,808,041.90	$15,587,891.48	$13,237,507.78
Current asset ratio	4.28 to 1	4.28 to 1	4.07 to 1

Marketable securities consist of 2⅛% United States Treasury Notes which mature June 15, 1939. They have a par value of $1,000,000 and at year-end a market value of $1,019,375.

Receivables are stated as usual after adequate reserves for notes and accounts doubtful of collection. It has been the policy of our Independent Accountants to verify our receivables at the end of the year by confirmation directly from our customers. This year receivables were so verified as of September 30, during the course of an audit that was made in connection with the preferred stock issue. In view of the verification at such a recent date, only a few large receivable balances were confirmed as of December 31.

A summary of inventories follows:

	December 31, 1938	December 31, 1937	December 31, 1937
Finished goods	$ 4,871,729.42	$ 3,463,900.97	$ 2,904,585.45
Goods in process	1,498,851.49	2,231,116.56	2,231,116.56
Raw materials	1,951,245.07	1,941,209.57	1,639,885.44
Stores and supplies	850,171.63	838,392.16	801,602.67
Total	$ 9,171,997.61	$ 8,474,619.26	$ 7,577,190.12

We maintain perpetual inventory records by plant departments showing quantities and dollar values. Physical inventories are taken periodically and always at the close of the fiscal year. Such physical inventories at December 31, 1938, substantiated the quantities called for by our perpetual inventory records. Inventories are valued at the lower of cost or market. Our inventories remain larger than necessary for current volumes of sales.

Accounts payable represent amounts due trade creditors in the ordinary course of business. Provision has been made for all known liabilities.

Semi-annual dividends were declared on both Series A and B Preferred Stocks, payable June 1, 1939. These dividends were charged to earned surplus in 1938, although $187,500 is applicable to 1939.

The liability for container deposits results from the sale of goods in containers which are paid for by customers and which are returnable by them for credit after the contents are used. Previously, this item was carried as a reserve. This account was recently cleared of deposits for containers which we believed would not be returned and the remaining amount included in current liabilities.

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To reflect the intended use the directors have earmarked the proceeds from the sale of 50,000 shares of Series B Preferred Stock for capital additions. They are therefore excluded from cash and stated separately in the balance sheet.

OTHER ASSETS

	December 31, 1938	December 31, 1937	December 31, 1937
Due from officers, employes	$ 113,853.94	$ 174,410.28	$ 171,494.32
Invested in associated companies	702,223.77	302,324.19	2,324.19
Miscellaneous investments	350,452.64	444,086.63	661,499.95
Total	$ 1,166,530.35	$ 920,821.10	$ 835,318.46

Amounts due from officers and employes include $86,248 and $147,209 in 1938 and 1937, respectively, representing balances receivable under our Employe Stock Purchase Plan, which has been described from time to time. The remainder of this receivable consists of travel advances and other balances of relatively small amounts.

Investments in associated companies include $700,000 which is the cost of our 50% interest in Shawinigan Resins Corporation of Springfield, Massachusetts. Miscellaneous investments consist of $283,050 of deposits in mutual insurance companies, which cover us against losses by fire, tornado, and compensation of injured employes, and $67,403 of investments and loans. Included in the 1937 amount was our investment of $267,769 in The Fiberloid Corporation which was eliminated upon the acquisition of the assets of that company.

PROPERTY

	December 31, 1938	December 31, 1937	December 31, 1937
Land	$ 1,782,079.18	$ 1,781,444.85	$ 1,731,398.48
Buildings	9,586,993.77	9,182,711.52	7,661,284.17
Machinery and equipment	28,826,444.72	26,771,390.26	24,336,903.52
Phosphate deposits	396,371.15	417,794.65	417,794.65
Total	$40,591,888.82	$38,153,341.28	$34,147,380.82

The valuation of land, buildings and machinery and equipment shown above represents reduced valuations established December 31, 1932, by our engineers, plus additions since that date at cost. Phosphate deposits are valued at cost, less a reserve for depletion. The increase in property accounts is explained in the operating review.

RESERVES

	December 31, 1938	December 31, 1937	December 31, 1937
Depreciation and obsolescence	$14,534,682.78	$12,752,878.11	$10,368,861.78
Fluctuations of exchange	140,258.75	234,298.05	234,298.05
Contingencies	238,123.47	270,460.26	257,115.72
Total	$14,913,065.00	$13,257,636.42	$10,860,275.55

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The increase in the Reserve for Depreciation and Obsolescence is the net of $2,525,320 provided out of 1938 income less $799,560 representing charges for retirement of plant and $2,440,061 of reserve for depreciation applicable to the property acquired from The Fiberloid Corporation. Depreciation and obsolescence rates are based on the estimated life of individual units of property as determined by our engineers. The 1938 composite rate was 7.3% compared with a rate of 7.5% for 1937. The lower ratio does not reflect a lowering of rates but the changed character of our properties since the inclusion of those of The Fiberloid Corporation.

Due to the decline in dollar value of the pound sterling, the net working assets, including deferred charges, of our British subsidiary, are carried at the reduced exchange rate of $4.64 a £ which prevailed at the year end. The difference of $94,039.30 resulting from the conversion at the lower rate of exchange was charged to the Reserve for Fluctuations of Exchange which was created several years ago out of an exchange profit.

The decrease in the Reserve for Contingencies results principally from charges for additional income taxes applicable to prior years.

CAPITAL

MINORITY INTEREST IN SUBSIDIARY COMPANIES

	December 31, 1938	December 31, 1937	December 31, 1937
Preference Shares			
British Subsidiary	$ 1,940,000.00	$ 1,940,000.00	$ 1,940,000.00
Interest in American Subsidiary	362,215.55	353,476.73	353,476.73
Total	$ 2,302,215.55	$ 2,293,476.73	$ 2,293,476.73

CAPITAL STOCK AND SURPLUS

	December 31, 1938	December 31, 1937	December 31, 1937
Capital Stock:			
Preferred—Series A	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00
Preferred—Series B	5,000,000.00		
Common	12,418,160.00	12,418,165.83	11,143,880.00
Surplus:			
Paid-in	11,322,147.87	11,048,347.86	8,266,338.44
Earned	11,270,073.14	10,868,786.74	10,868,786.74
Total	$45,010,381.01	$39,335,300.43	$35,279,005.18

The American subsidiary is the New England Alcohol Company, in which a 45% interest is held by Central Aguirre Associates.

Credited to Paid-in Surplus was the difference between the net proceeds from the sale of 50,000 shares of Series B Preferred Stock and its liquidating value of $100 a share, amounting to $453,025 and the excess of the value of the assets of The Fiberloid Corporation over the par value of the common shares issued in exchange for them.

The Series B Preferred Stock is similar to the Series A Preferred in every respect excepting call price. Series B is callable at $115 a share, Series A at $110. Series A is lower by reason of the lower price at which it was issued. Both call prices decrease progressively to $107.50.

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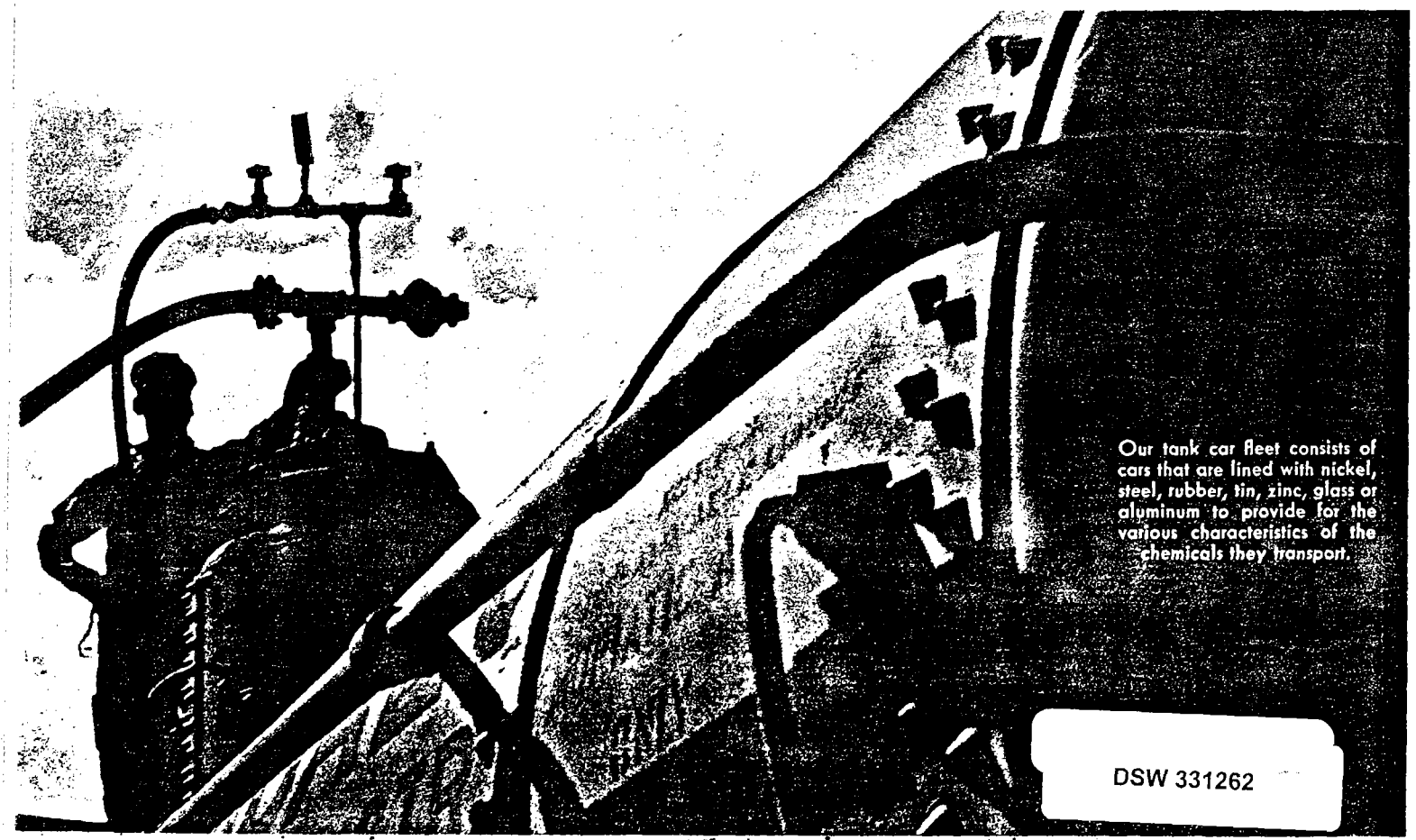
Outstanding Common Stock increased by the number of shares issued in exchange for the assets of The Fiberloid Corporation. The book value of each outstanding share of common stock increased from $27.17 to $28.19.

During the year dividends were paid as follows:

	Date	Per Share	Amount	
Monsanto Chemical Company				
Common	March 15	$ .50	$557,194.00	
	June 15	.50	620,857.50	
	Sept. 15	.50	620,872.50	
	Dec. 15	.50	620,882.50	$2,419,806.50
Preferred Series A. . .	June 1	2.25	$112,500.00	
	Dec. 1	2.25	112,500.00	225,000.00
Monsanto Chemicals Limited				
Preference Shares . . .	March 31		$ 40,012.50	
	Sept. 30		38,678.75	78,691.25
Total				$2,723,497.75

OPERATING REVIEW

IN spite of the unfavorable outlook prevailing during most of the year, company activity did not diminish. Our organization was maintained essentially intact, salaries and wage rates of the staff were not reduced, many new plants and improvements that had been scheduled were erected and installed, and new sales promotional efforts were launched.



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In the report for 1937, your attention was called to the difficulties we were experiencing in establishing our Monsanto, Tennessee, plant on a satisfactory basis and the penalties suffered in the early days of its operation. Midyear of 1938, this project veered from an unsatisfactory to a profitable basis, and is proving a wise development.

The Plastics Division now engages our attention as an operation, the absorption of which brought many problems. With its success relying on the purchases of only a few consuming industries, it has been in a position where marked declines force its operating schedules to levels below those of our other divisions. At the expense of immediate profits the management of Plastics Division, assisted by the executives of all of our other divisions, is making progress in broadening the foundation so that its products will go into many instead of relatively few manufacturing fields.

Expenditures in 1938 for new plants include many minor items, which were necessary for improved operations, and new construction principally at Monsanto, Illinois, and Monsanto, Tennessee:

At the beginning of the year our Property Account was	$34,147,380.82
Acquisition of The Fiberloid Corporation's plants added	4,034,883.69
And we expended for new construction	3,409,457.14
	$41,591,721.65
Plant property retired and adjustments amounted to	999,832.83
Leaving a year end balance of	$40,591,888.82

At Monsanto, Illinois, we built a phosphorus-burning plant and a tetrasodium pyrophosphate plant. The former embodied new principles of construction developed in our laboratories, which permit the direct production of high strength phosphoric acid.

At Monsanto, Tennessee, our effort was directed toward completion and refinement of the processes involved in the production of elemental phosphorus.

At Springfield, Massachusetts, in partnership with Shawinigan Chemicals, Ltd., of Montreal, the Shawinigan Resins plant for the production of vinyl acetals was completed. Difficulties and operating losses which attended the initial operations of this unit are being eliminated. A substantial market for vinyl acetal resins seems assured in safety glass and wire insulation, and other applications appear promising.

The British company improved its position industrywise in a year of problems other than those normally a part of operation. Because of the crisis that developed overseas, much attention of management was diverted from routine to the planning of protection of personnel and property.

Under existing conditions a review of operations would be incomplete if it did not include that which has been done to establish better working conditions for the company's personnel.

An effort to maintain employment at constant level caused us to allow production to continue well beyond normal sales demand during the early months of the year. Reduction in operations, with consequent layoffs, were delayed in as great a degree as possible to coincide with vacations in the summer months. Maintenance programs that might have been postponed were in most instances carried on in order that men not needed in the production departments might be given work on such assignments. Our payroll amounted to about $9,500,000; the average number of employes was 5,737 rising to 6,229 at the year end. At its lowest point our staff numbered 5,324.

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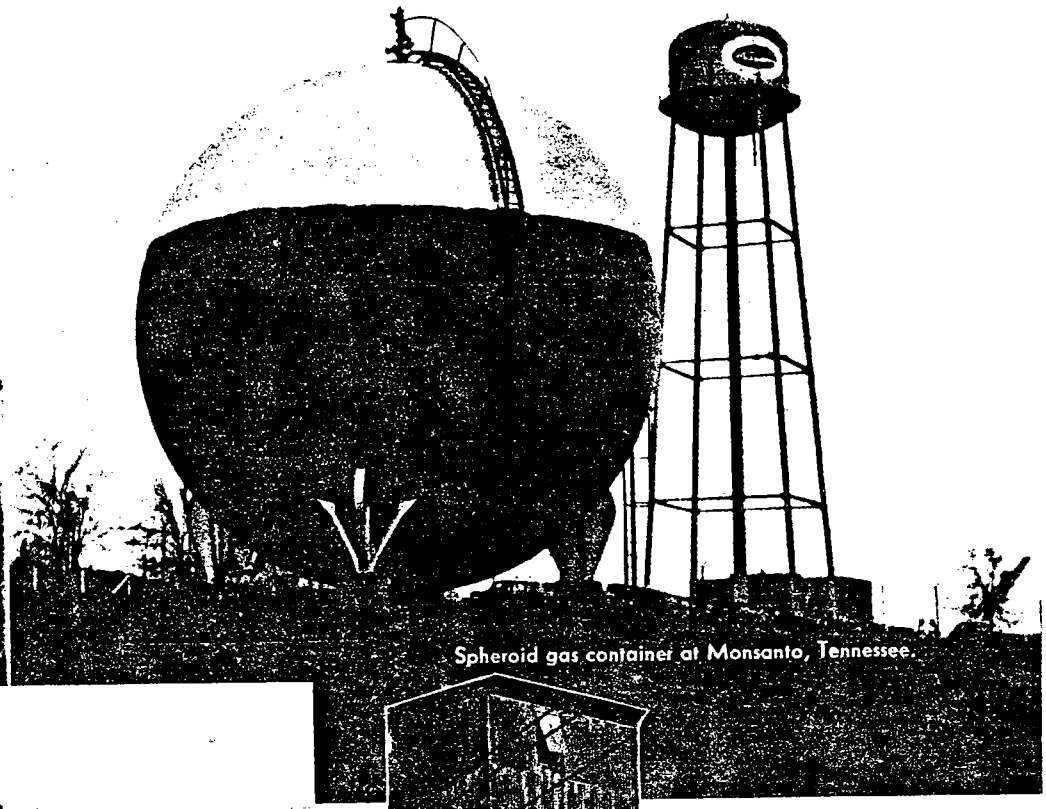
CONSTRUCTION IN 1938



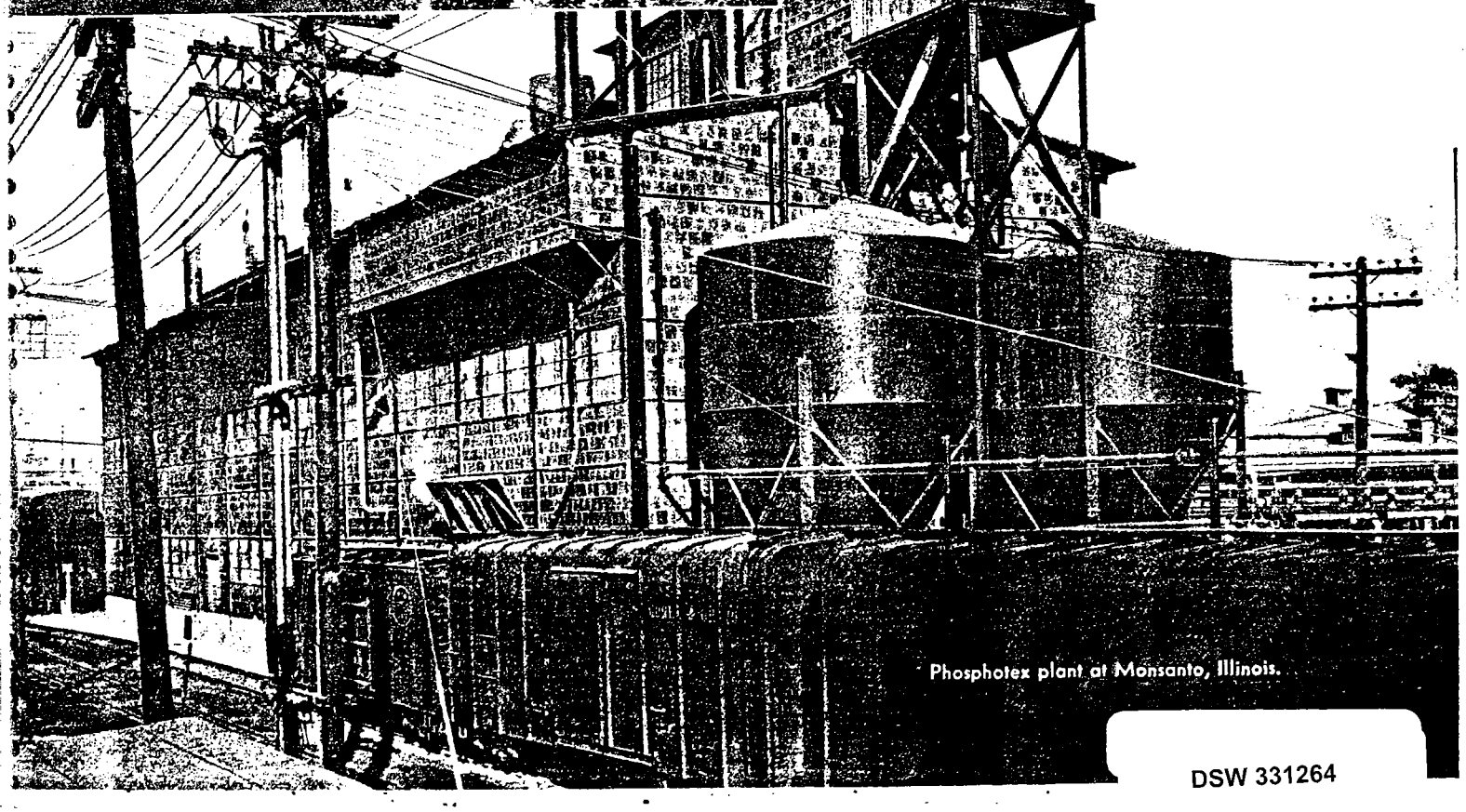
Alcohol recovery stills at the vinyl resin plant, Springfield, Massachusetts.



Spheroid gas container at Monsanto, Tennessee.



Shawinigan Resins Plant Springfield, Massachusetts.



Phosphotex plant at Monsanto, Illinois.

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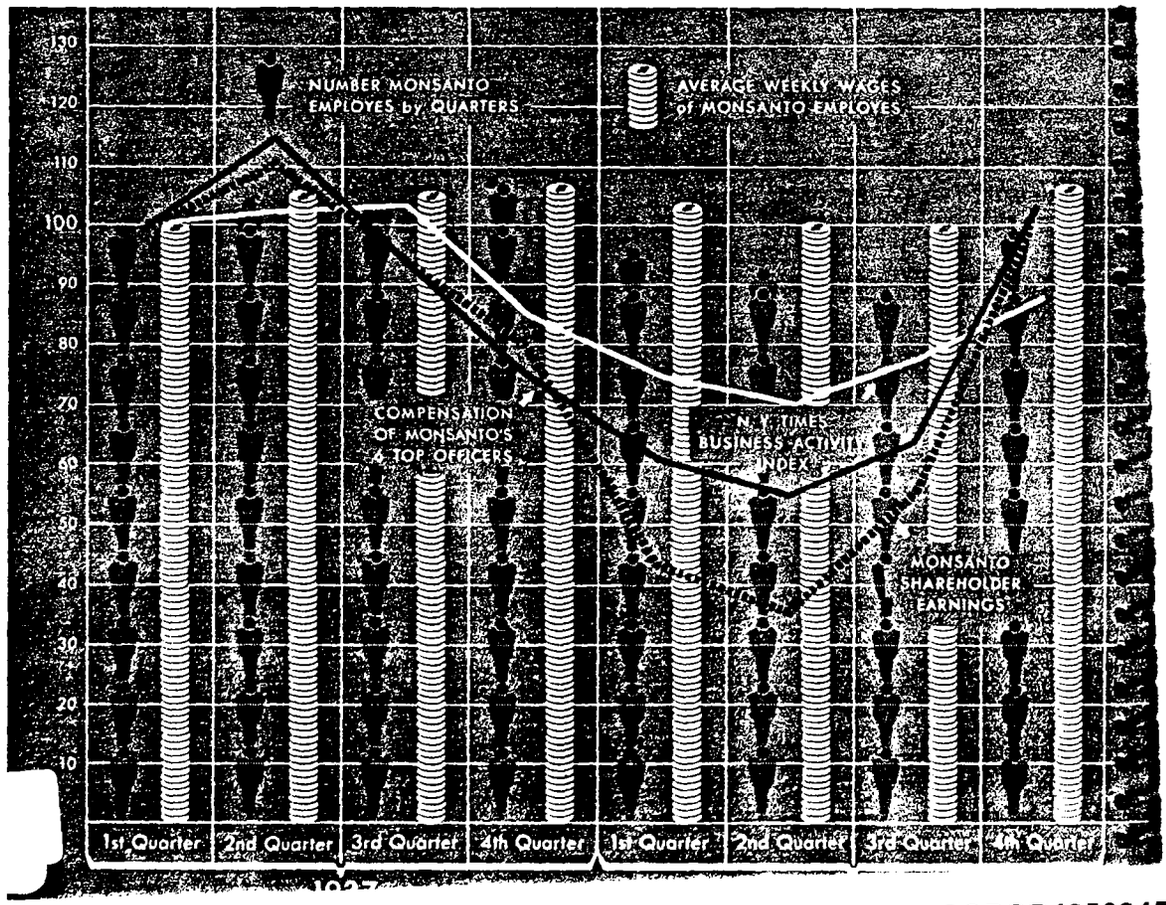
Our investment for the year in the health of workers through employment of staff physicians and nurses, and toxicological research to determine safe working conditions was $61,563. For added protection we spent substantial amounts for changes in equipment and safety devices to eliminate potential or suspected hazards. In comparison with 1937 there was a reduction of 44 per cent in frequency of lost-time accidents on a man-hour basis. In spite of the hazardous nature of many of the products handled by our men, the chemical industry is today among the safest industries in which a man can work.

Our organization is kept cognizant of the necessity of "good housekeeping." Only through constant vigilance can our plants be maintained on the plane necessary to safeguard the investment of stockholders and the health and safety of employes. To this end, annual competitions determine the best maintained and best appearing plants. Monsanto, Tennessee, won the award for the larger operations, and Carondelet, Missouri, for the smaller works.

Through periodic reports and special articles in our company magazine, which is mailed to our employes' homes, we have for several years been giving our employes facts that might otherwise be unavailable to them, facts that bear relationship to their work and their future, facts for their consideration in their own estimation of the American economy. For it is our belief that American industry composed as it is of individuals has its proportion of human faults, but that as a whole it does not need apology — only explanation.

There is an identity of interest in industry among shareholders, management and employes. The accompanying graph shows clearly good profits and good wages and greater employment are possible only when industry is thriving and expanding. As Monsanto management receives a substantial share of its compensation from bonuses that are dependent upon company earnings, it too shares promptly the fortunes of shareholders and employes.



COMPOSITE CHART OF THE EARNING RELATIONSHIP OF SHAREHOLDERS, MANAGEMENT AND EMPLOYES OF MONSANTO TO THE ACTIVITY OF AMERICAN INDUSTRY.

***Operation of new Monsanto, Tennessee, plant offset otherwise declining payrolls and employment.**

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DEVELOPMENT

FROM our laboratories this year have flowed many minor improvements and new products — none of magnitude, yet all contributing to a steady progress. Among them are:

A new process for vanillin which will soon offset to some extent the severe break in selling prices occasioned by new competition. More rugged catalysts have been devised for hydrogenation to be reflected in better insecticides and rubber chemicals. The large scale production of new wetting agents and detergents and detailed information for their application and use has been brought into being. An ultra accelerator for rubber latex will prevent hindrance of developments tied down by scarcity of raw materials. Sun-checking or cracking of rubber goods exposed to light is now prevented by Santowax and soap can be preserved from rancidity by Sopanox. A new extreme pressure lubricant enables petroleum oils to perform more efficiently their function of preventing wear under heavy duty conditions.

Ferrisul improved the cleaning of chromium steels and sodium aluminate decreased waste of fiber and filler in the paper industry; a new synthetic tanning material makes leather of greater fastness to light, thus adding to the possible color varieties of leather; wool is being lubricated in spinning by new phosphates which are removed easily by simple washing; alkyl phosphates have been produced for lubricants and humectants; tetrapotassium pyrophosphate has been introduced to the soap industry to serve where the less soluble sodium salts were ineffective.

A new plastic, vastly improving the effectiveness of safety glass, has been brought into being on large scale by the solution of sheeting problems of resin manufacture and of plasticizer. A process for Vue-Pak, a transparent plastic packaging material, was perfected.

Because men thought of these things, because men worked over these things, and because men were able to bring these things to completion, people enjoy better living. The road is long and often discouraging, and at times the end achieved is not the one visualized in the beginning.

In 1923, for instance, tetrasodium pyrophosphate was produced commercially in this country for the first time. It was introduced in fur dyeing and gradually into the boiling off of silk and other textile uses. Continuous study of its properties by both chemical and soap manufacturers led, in the early thirties, to its incorporation in soap because it helped soap function. Chemical manufacturers worked to lower costs. Soap manufacturers worked and improved their formulas and another industry — a small industry, but still another — came into being.

A new material to serve mankind better brings many benefits. Because tetrasodium pyrophosphate is being used, more machinery has been produced and more workmen are needed in processing raw materials and finished product. New sales opportunities require more salesmen and more accountants are necessary to keep costs. More men have made packages and been employed in transporting the products to the consumer. The development of tetrasodium pyrophosphate is traced in the accompanying chart as typical of the way chemical research by chemical companies, and application research by alert consuming industries, provide new comforts, new jobs and better living at lower costs.

Our research expenditures for 1938 were $1,221,622.49.

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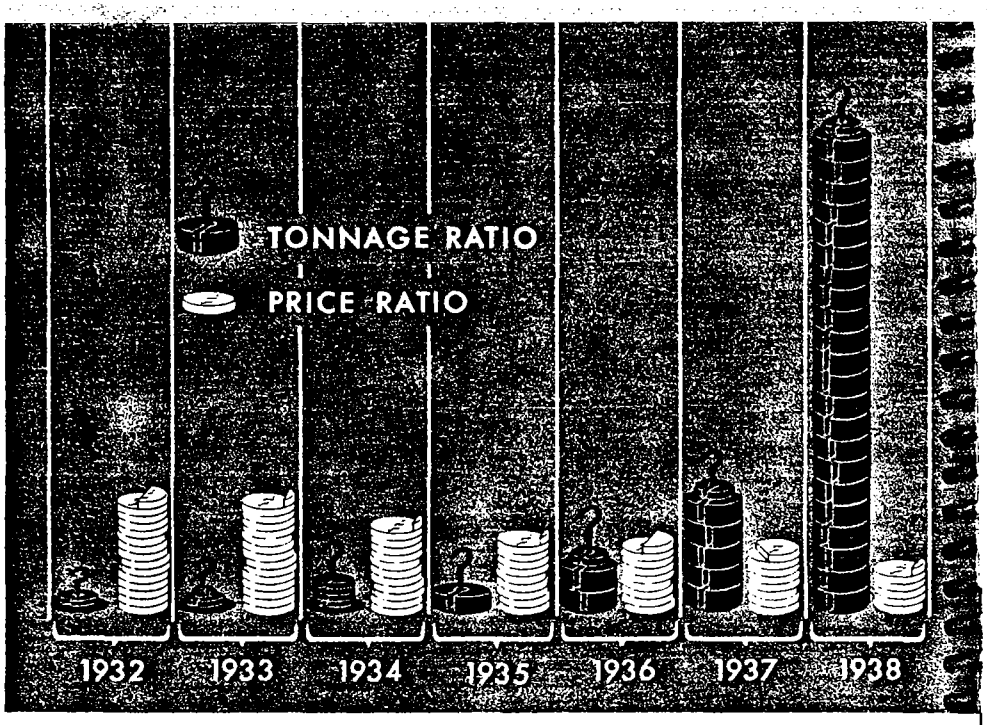


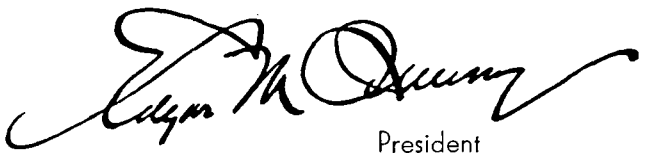
TETRASODIUM PYROPHOSPHATE TYPIFIES HOW RESEARCH AND DEVELOPMENT BY INDUSTRY PRODUCE BETTER PRODUCTS AT LOWER COSTS TO THE CONSUMER.

ANY opinion as to 1939 must give consideration to so many unpredictable factors that almost any prediction might prove correct. Although we are faced with reduced margins on many products, I hope the year will bring improved operating results. Thus far sales and earnings have been materially better than in the corresponding period of 1938.

Events of recent months also give considerable encouragement to the thought that there is now a better understanding of industry's problems. If this results in a modification of recent legislation to give capital a sporting chance, I believe that many of our chronic problems will be on the way to solution and that work will be available again to those who want to put in an honest day.

The Monsanto management believe themselves fortunate to be in an industry wherein the vision of other scientists and the resourcefulness of other merchants provide always a healthy competition—an industry that offers, even under conditions that have prevailed, opportunities to provide new jobs; to employ new capital; to serve American industry better that it may in turn be of greater service to mankind. We hope our efforts will meet the requirements of our responsibilities for the well-being of the several thousand people with whom we work, the communities wherein we operate and at the same time, provide a fair return on the capital entrusted to us.

Respectfully,



President

For the Board of Directors,
St. Louis, Missouri,
March 6, 1939.

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HASKINS & SELLS
CERTIFIED PUBLIC ACCOUNTANTS

416 OLIVE STREET
SAINT LOUIS

ACCOUNTANTS' CERTIFICATE

Monsanto Chemical Company:

We have made an examination of the consolidated balance sheet of Monsanto Chemical Company and its subsidiary companies as of December 31, 1938, and of the related statements of consolidated income and surplus for the year ended that date. In connection therewith, we examined or tested accounting records of the Companies and other supporting evidence; we also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions. As to inventories, the records were examined, the related procedure was reviewed, and the prices and computations were tested; the scope of the examination did not include physical tests of quantities.

In our opinion, based upon such examination, the accompanying balance sheet and related statements of income and surplus fairly present, in accordance with accepted principles of accounting consistently followed by the Companies, their consolidated financial condition as of December 31, 1938, and the consolidated results of their operations for the year ended that date.

Haskins & Sells

February 15, 1939.

DSW 331268

STLCOPCB4056048

MONSANTO CHEMICAL COMPANY

PARENT COMPANY

Consolidated Balance

ASSETS

CURRENT ASSETS:		
Cash	$ 5,229,116.64	
United States Treasury Notes—at approximate market value	1,005,177.05	
Receivables, less reserves	3,913,992.14	
Inventories—at the lower of cost or market	9,171,997.61	$19,320,283.44
CASH APPROPRIATED FOR PROPERTY ADDITIONS		5,450,000.00
OTHER ASSETS:		
Due from officers and employes on purchases of capital stock, etc.	$ 113,853.94	
Investments in associated companies—at cost or less	702,223.77	
Miscellaneous investments, deposits, etc.	350,452.64	1,166,530.35
PROPERTY:		
Land	$ 1,782,079.18	
Buildings	9,586,993.77	
Machinery and equipment	28,826,444.72	
Phosphate deposits, less depletion	396,371.15	40,591,888.82
PATENTS AND PROCESSES		1.00
DEFERRED CHARGES		209,199.49
TOTAL		$ 66,737,903.10

NOTES: The net current assets, investments and deferred
the rate of $4.64 to £1, and the remaining items at not more
(50% owned) has decreased approximately $68,000.00
cash appropriated for property additions, $5,450,000.00,
in December, 1938, of the

DSW 331269

STLCOPCB4056049

AND SUBSIDIARY COMPANIES

INCORPORATED IN DELAWARE

Sheet, December 31, 1938

LIABILITIES

CURRENT LIABILITIES:

Accounts payable and accruals	$ 2,997,745.76	
Estimated income taxes	889,024.24	
Dividends on preferred capital stock payable June 1, 1939	217,000.00	
Deposits for returnable containers	408,471.54	$ 4,512,241.54

RESERVES:

Depreciation and obsolescence	$14,534,682.78	
Fluctuations of exchange	140,258.75	
Contingencies	238,123.47	14,913,065.00

MINORITY INTEREST IN SUBSIDIARY COMPANIES:

Preference shares of British subsidiary — 5½%, cumulative and redeemable — authorized, 500,000 shares of £1 each; outstanding, 400,000 shares	$ 1,940,000.00	
Beneficial shares and surplus of American subsidiary	362,215.55	2,302,215.55

CAPITAL STOCK AND SURPLUS:

Preferred stock — authorized, 275,000 shares without par value, issuable in series by Board of Directors; outstanding, 100,000 shares, $4.50 cumulative dividend — at $100.00 a share:		
Series A	$ 5,000,000.00	
Series B	5,000,000.00	
Common stock — authorized 1,725,000 shares, par value $10.00 each; issued, 1,262,957 shares, less 21,141 shares in treasury; outstanding, 1,241,816 shares	12,418,160.00	
Surplus:		
Paid-in	11,322,147.87	
Earned	11,270,073.14	45,010,381.01
TOTAL		$66,737,903.10

charges of the British subsidiary have been converted at than $4.85 to £1. The equity in associated companies since the dates of acquisition of their capital stocks. The represents the approximate net proceeds from the sale Series B preferred stock.

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STLCOPCB4056050

STATEMENT OF CONSOLIDATED INCOME

For the Year Ended December 31, 1938

NET SALES		$31,935,390.73
COST OF GOODS SOLD		23,503,063.42
GROSS PROFIT		$ 8,432,327.31
DEDUCT:		
Selling and administrative expenses	$ 3,301,169.36	
Research expenses	1,221,622.49	4,522,791.85
NET PROFIT FROM OPERATIONS		$ 3,909,535.46
OTHER INCOME		685,967.78
GROSS INCOME		$ 4,595,503.24
INCOME CHARGES		451,107.46
NET INCOME BEFORE PROVISION FOR INCOME TAXES		$ 4,144,395.78
PROVISION FOR INCOME TAXES — ESTIMATED		853,877.07
NET INCOME		$ 3,290,518.71
DEDUCT:		
Portion of net income applicable to minority interest in American subsidiary	$ 62,738.82	
Provision for dividends on preference shares of British subsidiary	77,186.99	139,925.81
NET INCOME TRANSFERRED TO EARNED SURPLUS		$ 3,150,592.90

NOTES: The net income of the British subsidiary has been converted at the rate of $4.85 to £1 for the first nine months and for the last three months at $4.64 to £1, except the provision for depreciation and obsolescence which was converted at $4.85 to £1. The loss of $94,039.30 from the conversion of net current assets, etc., at the current rate was charged to the reserve for fluctuations of exchange created in a prior year.

The company's portion of the combined net losses for the year 1938 of associated companies (50% owned and not consolidated) is approximately $104,000.00.

The provision for depreciation and obsolescence during the year amounted to $2,525,319.63.

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STLCOPCB4056051

STATEMENT OF CONSOLIDATED SURPLUS ACCOUNTS

For the Year Ended December 31, 1938

	EARNED SURPLUS	PAID-IN SURPLUS
BALANCES, JANUARY 1, 1938	$10,868,786.74	$ 8,266,338.44
ADDITIONS:		
Net income for the year as shown by the accompanying statement of consolidated income	3,150,592.90	
Excess of valuation of tangible assets acquired from The Fiberloid Corporation over the par value of net shares of common capital stock issued, after deducting the cost of former investment in that company		2,602,784.43
Excess of net proceeds from sale to underwriters of Series B preferred capital stock over involuntary liquidating value, less expenses of $46,975.00 in connection with its issuance		453,025.00
Total	$14,019,379.64	$11,322,147.87
DEDUCTIONS:		
Dividends on capital stock of parent company:		
Preferred:		
Paid December 1, 1938	$ 112,500.00	
Declared payable June 1, 1939— $187,500 applicable to 1939	217,000.00	
Common — at the rate of $2.00 a share	2,419,806.50	
Total	$ 2,749,306.50	
BALANCES, DECEMBER 31, 1938	$11,270,073.14	$11,322,147.87

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STLCOPCB4056052

MONSANTO CHEMICAL COMPANY

Condensed Consolidated Balance Sheets as of December 31, 1929 to 1938, inclusive

ASSETS

	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929
Current Assets:										
Cash and Marketable Securities	$ 6,234,293.69	$ 7,083,932.92	$ 7,308,301.90	$ 3,685,082.53	$ 3,538,659.97	$ 2,305,643.10	$ 2,566,954.43	$ 2,206,111.88	$ 2,080,830.47	$ 1,638,913.43
Receivables, less reserve	3,913,992.14	2,885,546.56	2,959,815.21	2,794,105.75	1,697,459.39	1,677,961.58	1,118,329.64	1,038,311.28	1,091,615.19	1,320,118.58
Inventories	9,171,997.61	7,577,190.12	5,876,557.92	5,165,088.61	4,110,022.98	3,227,824.03	2,738,482.01	2,651,082.07	3,298,230.98	3,873,059.96
Total	$19,320,283.44	$17,546,669.60	$16,144,675.03	$11,644,276.89	$ 9,346,142.34	$ 7,211,428.71	$ 6,423,766.08	$ 5,895,505.23	$ 6,470,676.64	$ 6,832,091.97
Cash for Property Additions	$ 5,450,000.00									
Other Assets:										
Due on Employes Purchases of Stock, Etc.	$ 113,853.94	$ 171,494.32	a$ 213,532.19	$ 128,062.00	$ 82,012.47	$ 73,025.21				
Miscellaneous Investments, Deposits	1,052,676.41	663,825.14	664,942.53	877,897.36	1,631,458.28	1,269,956.30	$ 323,141.88	$ 263,859.86	$ 86,111.69	$ 73,267.53
Total	$ 1,166,530.35	$ 835,319.46	$ 878,474.72	$ 1,005,959.36	$ 1,713,470.75	$ 1,342,981.51	$ 323,141.88	$ 263,859.86	$ 86,111.69	$ 73,267.53
Property:										
Land	$ 1,782,079.18	$ 1,731,398.48	$ 1,658,018.52	$ 1,512,204.83	$ 1,303,198.07	$ 1,249,972.48	$ 1,183,994.96	$ 1,060,134.25	$ 1,061,890.30	$ 1,096,391.91
Buildings	9,586,993.77	7,661,284.17	6,699,461.53	5,638,157.39	3,640,351.62	3,250,652.33	3,227,336.70	3,656,232.43	3,858,089.58	3,678,942.10
Machinery and Equipment	28,826,444.72	24,336,903.52	18,948,390.02	15,833,477.41	10,702,924.00	9,630,431.71	8,972,938.62	10,987,247.63	12,163,192.47	12,353,275.92
Phosphate Deposits, less depletion	396,371.15	417,794.65	411,513.55	62,397.01						
Total	$40,591,888.82	$34,147,380.82	$27,717,383.62	$23,046,236.64	$15,646,473.69	$14,131,056.52	b$13,384,270.28	c$15,703,614.31	$17,083,172.35	$17,128,609.93
Deferred Charges	$ 209,200.49	$ 212,549.40	$ 206,706.88	$ 143,199.02	$ 197,803.00	$ 134,587.83	$ 149,661.27	$ 218,632.41	$ 303,819.98	$ 299,194.86
Total	$66,737,903.10	$52,741,919.28	$44,947,240.25	$35,839,664.91	$26,903,889.78	$22,820,054.57	$20,280,839.51	$22,081,611.81	$23,943,780.66	$24,333,164.29

LIABILITIES

Current Liabilities:										
Accounts Payable and Accruals	$ 3,214,745.76	$ 2,713,153.64	$ 2,572,575.14	$ 1,798,832.90	$ 1,403,861.89	$ 1,321,476.17	$ 878,311.75	$ 840,254.80	$ 826,481.13	$ 1,088,137.37
Estimated Income Taxes	889,024.24	1,042,328.66	1,170,561.79	814,159.20	616,387.30	553,286.07	239,279.22	100,000.00	205,246.30	291,205.17
Deposits for Returnable Containers	408,471.54	553,679.52	575,047.40	548,677.39	523,879.23	552,219.50	581,649.11	600,816.85	664,702.23	721,990.82
Total	$ 4,512,241.54	$ 4,309,161.82	$ 4,318,184.33	$ 3,161,669.49	$ 2,544,128.42	$ 2,426,981.74	$ 1,699,240.08	$ 1,541,071.65	$ 1,696,429.66	$ 2,101,333.36
Funded Debt					$ 954,500.00	$ 1,030,500.00	$ 1,544,500.00	$ 1,631,000.00	d$ 2,050,622.05	d$ 2,167,550.80
Reserves:										
Depreciation and Obsolescence	$14,534,682.78	$10,368,861.78	$ 8,998,099.61	$ 7,785,573.78	$ 5,312,807.77	$ 4,893,846.75	b$ 4,316,499.56	$ 4,464,907.04	$ 5,578,554.10	$ 5,817,780.92
Contingencies, Etc.	378,382.22	491,413.77	572,585.57	1,181,687.18	497,942.20	438,536.53	232,829.39	517,378.69	1,920,404.30	1,926,739.00
Total	$14,913,065.00	$10,860,275.55	$ 9,570,685.18	$ 8,967,260.96	$ 5,810,749.97	$ 5,332,383.28	$ 4,549,328.95	$ 4,982,285.73	$ 7,498,958.40	$ 7,744,519.92
Capital Stock and Surplus:										
Minority Interest	$ 362,215.55	$ 353,476.73	$ 345,982.65	$ 342,085.34						
Preference Shares of Subsidiary	1,940,000.00	1,940,000.00	1,940,000.00	1,940,000.00	$ 1,940,000.00					
Preferred Stock	10,000,000.00	5,000,000.00								
Common Stock	12,418,160.00	11,143,880.00	11,144,090.00	9,991,230.00	8,640,000.00	e$ 4,320,000.00	$ 7,119,950.00	$ 7,150,000.00	$ 7,150,000.00	$ 6,638,104.58
Paid-in Surplus	11,322,147.87	8,266,338.44	8,345,293.10	3,388,291.83	1,152,292.75	e 5,389,206.04	b 2,368,568.78	4,124,242.72	3,405,969.92	3,193,833.88
Earned Surplus	11,270,073.14	10,868,786.74	9,283,004.99	8,049,127.29	5,862,218.64	4,320,983.51	2,999,251.70	2,653,011.71	2,141,800.63	2,487,821.75
Total	$47,312,596.56	$37,572,481.91	$31,058,370.74	$23,710,734.46	$17,594,511.39	$14,030,189.55	$12,487,770.48	$13,927,254.43	$12,697,770.55	$12,319,760.21
Total	$66,737,903.10	$52,741,919.28	$44,947,240.25	$35,839,664.91	$26,903,889.78	$22,820,054.57	$20,280,839.51	$22,081,611.81	$23,943,780.66	$24,333,164.29
Net Working Capital	$14,808,041.90	$13,237,507.78	$11,826,490.70	$ 8,482,607.40	$ 6,802,013.92	$ 4,784,446.97	$ 4,724,526.00	$ 4,354,433.58	$ 4,774,246.98	$ 4,730,758.61

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STLCOPCB4056053

Statements of Consolidated Income for Years Ended December 31, 1929 to 1938, inclusive

	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929
Net Sales	$31,935,390.73	$33,202,355.96	$28,848,438.37	$24,705,574.67	$17,543,750.32	$15,496,569.21	$11,406,392.05	$13,126,071.67	$13,486,920.74	$17,088,202.85
Cost of Goods Sold	21,102,802.88	21,086,005.08	18,120,219.81	15,285,182.46	11,493,697.99	10,110,307.24	7,604,119.97	8,830,069.61	9,809,149.67	12,362,321.08
Gross Profit	$10,832,587.85	$12,116,350.88	$10,728,218.56	$ 9,420,392.21	$ 6,050,052.33	$ 5,386,261.97	$ 3,802,272.08	$ 4,296,002.06	$ 3,677,771.07	$ 4,725,881.77
Deduct:										
Selling and Administrative Expenses	$ 3,259,153.17	$ 3,109,025.11	$ 2,927,319.58	$ 2,930,187.43	$ 1,798,659.65	$ 1,517,634.72	$ 1,217,636.81	$ 1,320,293.01	$ 1,484,595.84	$ 1,584,970.80
Depreciation and Obsolescence	2,525,319.63	1,993,201.61	1,561,618.84	1,280,552.35	898,612.10	849,696.28	943,186.43	977,008.28	947,615.64	815,536.76
Research Expenses	1,149,903.21	975,605.56	795,659.45	665,399.21	456,356.13	371,566.68	383,411.87	463,955.37	453,148.03	424,847.33
Total	$ 6,934,376.01	$ 6,077,832.28	$ 5,284,597.87	$ 4,876,138.99	$ 3,153,627.88	$ 2,738,897.68	$ 2,544,235.11	$ 2,761,256.66	$ 2,885,359.51	$ 2,825,354.89
Net Profit	$ 3,898,211.84	$ 6,038,518.60	$ 5,443,620.69	$ 4,544,253.22	$ 2,896,424.45	$ 2,647,364.29	$ 1,258,036.97	$ 1,534,745.40	$ 792,411.56	$ 1,900,526.88
Other Income	697,291.40	509,381.10	448,207.82	421,495.53	371,742.50	235,593.13	199,629.18	189,044.91	199,875.58	171,812.82
Gross Income	$ 4,595,503.24	$ 6,547,899.70	$ 5,891,828.51	$ 4,965,748.75	$ 3,268,166.95	$ 2,882,957.42	$ 1,457,666.15	$ 1,723,790.31	$ 992,287.14	$ 2,072,339.70
Income Charges	451,107.46	355,883.85	257,506.09	311,048.68	147,882.33	250,491.16	213,420.90	271,079.22	154,525.90	151,197.10
Net Income before Income Taxes	$ 4,144,395.78	$ 6,192,015.85	$ 5,634,322.42	$ 4,654,700.07	$ 3,120,284.62	$ 2,632,466.26	$ 1,244,245.25	$ 1,452,711.09	$ 837,761.24	$ 1,921,142.60
Provision for Income Taxes	853,877.07	1,029,504.50	1,028,729.22	644,827.24	482,244.45	411,259.27	231,546.75	171,928.51	105,076.98	229,804.54
Net Income	$ 3,290,518.71	$ 5,162,511.35	$ 4,605,593.20	$ 4,009,872.83	$ 2,638,040.17	$ 2,221,206.99	$ 1,012,698.50	$ 1,280,782.58	$ 732,684.26	$ 1,691,338.06
Less Minority Interests	139,925.81	163,452.52	136,889.50	166,482.07	18,575.32					
Transferred to Earned Surplus	$ 3,150,592.90	$ 4,999,058.83	$ 4,468,703.70	$ 3,843,390.76	$ 2,619,464.85	$ 2,221,206.99	$ 1,012,698.50	$ 1,280,782.58	$ 732,684.26	$ 1,691,338.06
Per Share of Common Stock	$ 2.35	$ 4.40	$ 4.01	$ 3.85	$ 3.03	$ f2.57	$ f1.19	$ f1.49	$ f.85	$ f2.12
Cash Dividends on Common Stock	$ 2,419,806.50	$ 3,343,160.50	$ 3,234,826.00	$ 1,445,007.25	$ 999,000.00	$ 867,810.68	$ 533,008.13	$ 535,273.45	$ 515,560.94	$ 382,938.13
Shares Outstanding Parent Company:										
Preferred—No Par Value	g100,000	h50,000								
Common	j1,241,816	1,114,388	k1,114,409	m999,123	n864,000	432,000	427,197	429,000	p429,000	q398,286
Book Value of Common	$28.19	$27.17	$25.82	$21.45	$18.12	f$16.24	f$14.62	f$16.23	f$14.80	f$15.47
Number of Shareholders:										
Common Stock	8,501	7,014	6,216	5,191	4,129	3,696	4,013	3,701	3,313	2,532
Preferred Stock	1,868	1,017								
Preference Shares of Subsidiary	917	932	941	957	964					
Total	11,286	8,963	7,157	6,148	5,093	3,696	4,013	3,701	3,313	2,532
Number of Employes at Year End	6,229	5,268	4,799	4,054	2,833	2,637	2,171	2,130	Not Available	Not Available

Principal changes are accounted for as follows:

aPrior to 1936, miscellaneous employes accounts are included in Receivables. bPlant written down by $2,854,846.45 to 1932 Replacement Costs, $794,587.43 charged to Depreciation Reserve, $2,060,259.02 to Paid in Surplus. cWoburn Plant abandoned. dIncludes Purchase Money Obligations. eShares changed from no par value (stated value $16⅔) to par value of $10.00, balance transferred to Paid-in Surplus. fAfter giving effect to 2 for 1 Stock Split in 1934. g50,000 shares Series B Preferred Stock sold to underwriters at $110.00 a share. h50,000 shares Series A Preferred Stock sold to underwriters at $99.00 a share. jAssets of The Fiberloid Corporation acquired for stock. k101,310 shares subscribed for and sold at $60.00 per share—Assets of Thomas & Hochwalt Laboratories acquired for stock. mThe Swann Corporation acquired for stock and 2½% Notes converted into stock. nStock split 2 for 1. p7½% stock dividend paid. qRubber Service Laboratories, Commonwealth Chemical Co. and Merrimac Chemical Co., acquired for stock—stock split 2 for 1—stock dividends totaling 13% paid.

DSW 331274

STLCOPCB4056054

MONSANTO CHEMICAL COMPANY

ST. LOUIS, U. S. A.

DISTRICT OFFICES

30 Rockefeller Plaza NEW YORK	Tribune Tower CHICAGO	Everett Station BOSTON	Brown Marx Building BIRMINGHAM	Johnston Building CHARLOTTE
Union Guardian Bldg. DETROIT	100 Bush Street SAN FRANCISCO	605 West Olympic Blvd. LOS ANGELES	Second National Bldg. AKRON	
378 St. Paul St., West MONTREAL	Victoria Station House LONDON	King's House, King's Street, West MANCHESTER	Hong Kong & Shanghai Bank Bldg. SHANGHAI	

WORKS

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EVERETT, MASS.	CAMDEN, N. J.	SUNDERLAND, ENGLAND

DAYTON, OHIO—Research Laboratories

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G. LEE CAMP	St. Louis	WILLIAM M. RAND	Boston
GASTON DUBOIS	St. Louis	THEODORE RASSIEUR	St. Louis
JOHN W. LIVINGSTON	St. Louis	WALTER W. SMITH	St. Louis

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WILLIAM I. WARREN	Assistant Comptroller	JOHN F. MARTIN	Assistant Treasurer

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TRANSFER AGENT
Common and Preferred Stocks
Guaranty Trust Company of New York

REGISTRAR
Common and Preferred Stocks
The Chase National Bank of New York

DSW 331275

PRINTED IN U. S. A.

STLCOPCB4056055

THIS annual report is spiral bound with a plastics coil developed in 1938 by Monsanto's new Plastics Division. Its use with this report is its first commercial application.

A sample of Vue-Pak is included with the title page to acquaint our stockholders with this new transparent packaging material. It is hoped new uses for the spiral coil and Vue-Pak may be suggested by stockholders to us or to prospective users.

The paper used in this report contains aluminum sulfate made by our Merrimac Division. The odor of the ink in this report is masked with Coumarin Monsanto.

DSW 331276

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