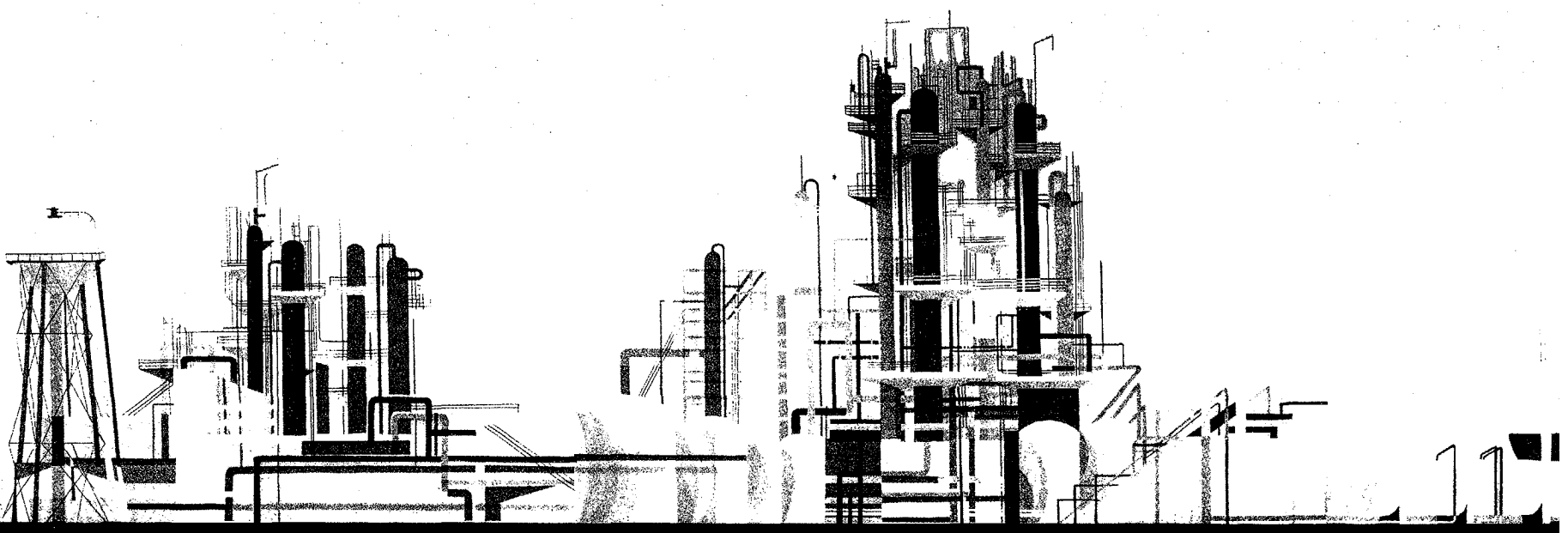
CYANAMID



AMERICAN CYANAMID COMPANY **1959** ANNUAL REPORT

AMERICAN CYANAMID COMPANY AND SUBSIDIARIES

PRINCIPAL DOMESTIC SALES OFFICES

Akron, Ohio
Atlanta, Ga.
Baltimore, Md.
Birmingham, Ala.
Bluefield, W. Va.
Boston, Mass.
Bound Brook, N. J.
Brewster, Fla.
Buffalo, N. Y.
Charlotte, N. C.
Chicago, Ill.
Cincinnati, Ohio
Cleveland, Ohio
Columbus, Ohio
Dallas, Tex.
Danbury, Conn.
Denver, Colo.
Detroit, Mich.
East Orange, N. J.
Grand Rapids, Mich.
Houston, Tex.
Indianapolis, Ind.
Jacksonville, Fla.
Kalamazoo, Mich.
Kansas City, Mo.
Latrobe, Pa.
Los Angeles, Calif.
Louisville, Ky.
Maynard, Mass.
Miami, Fla.
Milwaukee, Wisc.
Minneapolis, Minn.
Mobile, Ala.
Nashville, Tenn.
New Orleans, La.
New York, N. Y.
Oakland, Calif.
Pearl River, N. Y.
Philadelphia, Pa.
Pittsburgh, Pa.
Portland, Ore.
Pottsville, Pa.
Providence, R. I.
Richmond, Va.
Rochester, N. Y.
St. Louis, Mo.
Salt Lake City, Utah
San Diego, Calif.
San Francisco, Calif.
Seattle, Wash.
Silver Spring, Md.
South Bend, Ind.
Syracuse, N. Y.
Tampa, Fla.
Toledo, Ohio
Tulsa, Okla.
Washington, D. C.
West Hartford, Conn.

PRINCIPAL FOREIGN SALES OFFICES

Bogota, Colombia
Bombay, India
Brussels, Belgium
Buenos Aires, Argentina
Catania, Italy
Copenhagen, Denmark
Guatemala City, Guatemala
Havana, Cuba
Hurstville, Australia
Johannesburg, South Africa
Karachi, Pakistan
Leopoldville, Belgian Congo
London, England
Melbourne, Australia
Mexico D.F., Mexico
Montreal, Canada
Munich, Germany
Rio de Janeiro, Brazil
Rome, Italy
San Juan, Puerto Rico
Sao Paulo, Brazil
Tokyo, Japan
Toronto, Canada
Vancouver, Canada
Zurich, Switzerland

DOMESTIC PLANTS

Adairsville, Ga.
Azusa, Calif.
Benton, Ark.
Bound Brook, N. J.
Brewster, Fla.
Bridgeville, Pa.
Charlotte, N. C.
Chattanooga, Tenn.
Cincinnati, Ohio
Cloquet, Minn.
Damascus, Va.
Danbury, Conn.
Evendale, Ohio
Farmville, N. C.
Fitzwilliam, N. H.
Fortier, La.
Fort Worth, Tex.
Georgetown, S. C.
Grafton, Ill.
Hamilton, Ohio
Joliet, Ill.
Kalamazoo, Mich.
Latrobe, Pa.
Marietta, Ohio
Michigan City, Ind.
Mobile, Ala.
Needham, Mass.
New Castle, Pa.
Pearl River, N. Y.
Piney River, Va.
Plymouth, N. C.
Princeton, N. J.
Pensacola, Fla.
Savannah, Ga.
South St. Joseph, Mo.
Springville, Utah
Valdosta, Ga.
Wallingford, Conn.
Warners, N. J.
Willow Island, W. Va.
Woodbridge, N. J.

FOREIGN PLANTS

Buenos Aires, Argentina
Bulsar, India
Catania, Italy
Gosport, England
Hamilton, Canada
Hurstville, Australia
Ingersoll, Canada
Mexico D.F., Mexico
Montreal, Canada
Niagara Falls, Canada
Port Robinson, Canada
Rezende, Brazil
St. Jean, Canada
Witbank, South Africa

RESEARCH LABORATORIES

Bound Brook, N. J.
Pearl River, N. Y.
Stamford, Conn.
Geneva, Switzerland

ASSOCIATED COMPANIES
(40% to 50% Owned)

Arizona Chemical Company
Cyanamid-Ketjen N.V.
Formica International Limited
Jefferson Chemical Company, Inc.
Lederle (Japan) Ltd.
Southern Minerals Corporation
Southern Petroleum Corporation
Southern Pipe Line Corporation

The paper on which this Annual Report is printed is made whiter and more opaque by Cyanamid's Calcofluor white dye and Unitane titanium dioxide pigment.

Printed in U. S. A.

CYANAMID

AMERICAN CYANAMID COMPANY
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

TRANSFER AGENT, The Chase Manhattan Bank, New York

REGISTRAR, Morgan Guaranty Trust Company of New York

GENERAL COUNSEL, Perkins, Daniels, McCormack & Collins

INDEPENDENT PUBLIC ACCOUNTANTS, Peat, Marwick, Mitchell & Co.

CYANAMID

The following table gives the generic or common names of the Cyanamid products designated herein by their appropriate trademarks.

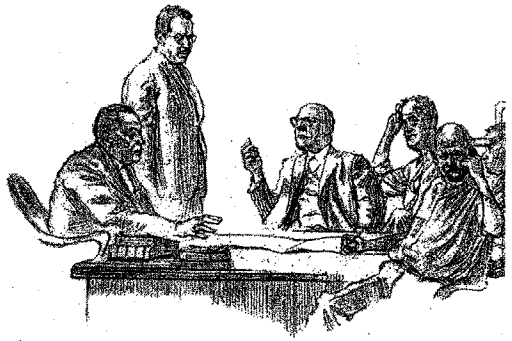
ACCOSTRENGTH® 2386	paper resin
ACHROMYCIN®	tetracycline
AM-9	chemical grout
ARISTOCORT®	triamcinolone
AUREOMYCIN®	chlortetracycline
CALCOFLUOR®	white dyes
CRESLAN®	acrylic fiber
CYPREX® 65-W	dodine
DECLOMYCIN®	demethylchlortetracycline
DIAMOX®	acetazolamide
FILIBON®	prenatal capsules
FORMICA®	laminated plastic
GEVRAL®	vitamin-mineral supplement
KYNEX®	sulfamethoxypyridazine
LAMINAC®	polyester resins
MELAQUA 600	melamine acrylic coating resin
MELMAC®	quality melamine dinnerware
ORIMUNE®	poliomyelitis vaccine
SUPERFLOC 16®	flocculating agent
THIMET®	phorate insecticide
UNITANE®	pigments
VARIDASE®	streptokinase-streptodornase
VIM®	hypodermic needles and syringes

HIGHLIGHTS

	1959	1958
Sales		
Earnings before income taxes		
Income taxes		
Net earnings		
Cash dividends		
Earnings per share Common Stock		
Dividends per share Common Stock		
Depreciation, amortization and depletion		
Expenditures for capital additions		
Funded debt		
Shareholders' equity		
Shares outstanding at end of year:		
Preferred Stock		
Common Stock (excluding treasury shares)		
Number of shareholders:		
Preferred		
Common		
Total (excluding duplications)		
Number of employees		

*Including income of a non-recurring nature equivalent to 16¢ per share.

TO THE SHAREHOLDERS:



The year 1959 was a good one for Cyanamid. Sales were higher than in any previous year, not only in the United States but in Canada and in our expanding overseas markets. Benefiting from this increase in volume, and also from a Company-wide profit-improvement program, earnings were substantially increased over the previous year when the recession had affected both sales and earnings. Investment in new plants and expanded facilities was moderate following the very sizeable expenditures of the two preceding years.

SALES VOLUME

Consolidated sales for 1959 were $583,574,569, about 11% better than the $525,075,577 recorded in 1958. Sales were up in all Company operating divisions. Antibiotics sales showed a significant increase, as did titanium dioxide, decorative laminates, melamine and triple superphosphate. On the other hand, sales of Diamox, a non-mercurial diuretic, declined materially during the year.

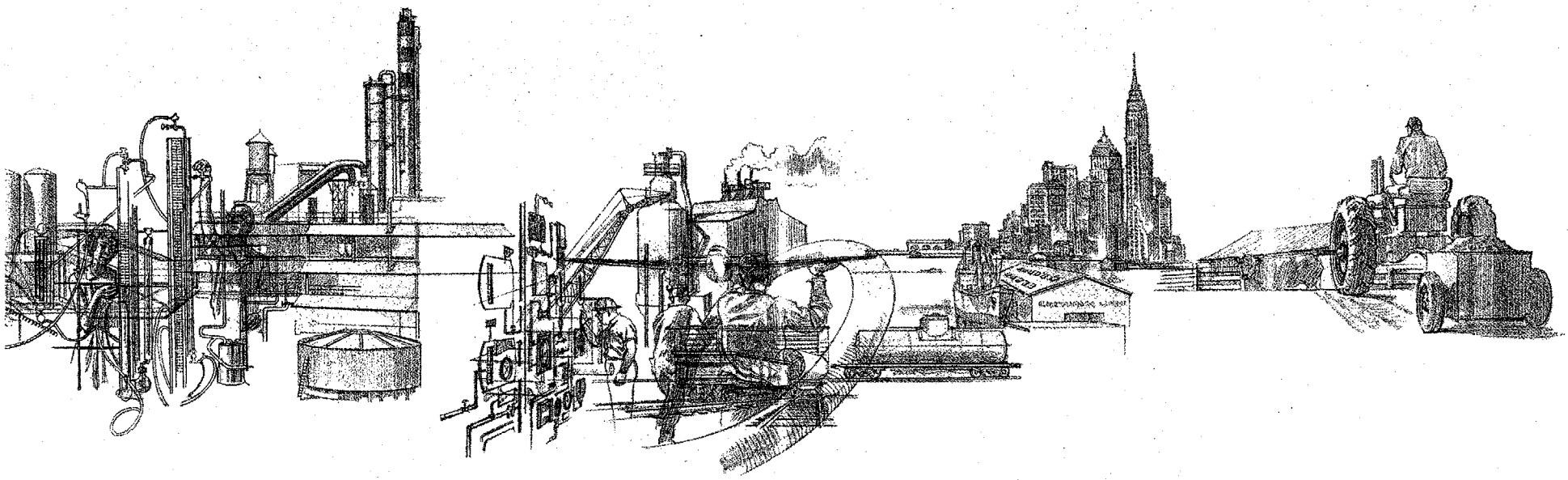
Sales to customers outside the United States and Canada were ahead of last year and represented about 14% of the total sales volume.

Comparative quarterly sales for 1959 and 1958 are as follows:

QUARTER	1959	1958
First	$145,859,631	$132,541,019
Second	151,637,962	124,843,265
Third	144,509,790	130,944,755
Fourth	141,567,186	136,746,538
	$583,574,569	$525,075,577

EARNINGS

Before Federal and foreign taxes on income, earnings in 1959 were $103,484,191, compared with $82,341,042 in 1958. After taxes of $51,200,000, Consolidated Net Earnings for 1959 were $52,284,191, compared with earnings of $43,841,042 in the previous year after taxes amounting to $38,500,000. Net Earnings available for the Common Stock came to $2.46 per share on the 21,243,916 shares outstanding (excluding treasury shares) at the year end. Earnings per share in the preceding year were $2.07 including dividend income of a non-recurring nature equivalent to 16¢ per share.



As previously stated, the improvement in earnings resulted principally from higher volume but also from intensified efforts to effect operating economies wherever possible. Nevertheless earnings continued to reflect the burden of start-up costs, limited initial output and depreciation charges related to the Creslan and other new facilities, as well as sizeable outlays necessary for the merchandising and promotion of Creslan acrylic fiber.

The impact on earnings of the abandonment of the methylstyrene thermoplastic unit at the Fortier plant was offset by capital gains of a non-recurring nature.

CASH DIVIDENDS

Dividends of $33,939,568 were paid to holders of Common Stock at the quarterly rate of 40¢ per share—a total of $1.60 for the year, the same as in 1958.

Regular quarterly dividends declared on the Preferred Stock totaled $3,518.

CAPITAL STOCK

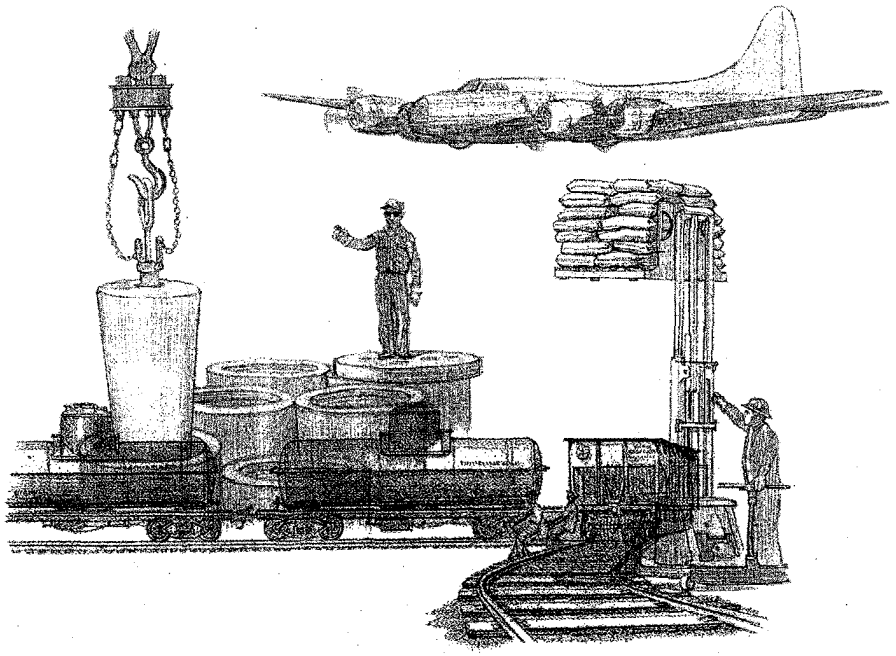
At the year end there were 21,352,556 shares of Common Stock outstanding, compared with 21,298,391 at the close of 1958. These amounts included treasury shares totaling 108,640 and 96,400, respectively. During the year 13,160 shares of Common Stock were issued through conversions of Preferred Stock.

By action of the Board of Directors under a 1957 authorization by the shareholders, 418,545 shares of Common Stock were offered to 3,976 Company employees on June 19, 1959 at a price of $49.50 per share, which was 90% of the then market value. In setting the eligibility requirements for participation, the Directors designated salaried employees whose compensation amounted to $7,500 or more annually, but excluded most of the officers, including the President. Nearly 91% of those to whom the stock was offered, a total of 3,617 employees, exercised their options and subscribed for 329,100 shares to be paid for in installments over a five-year period. This represented approximately 80% of the total shares offered. The stock is being issued as it is paid for and 41,005 shares were issued during 1959.

At Bound Brook, New Jersey, workmen are busy on a new anthraquinone manufacturing facility which will utilize a unique Cyanamid-developed process. This unit will replace and increase existing capacity and will also produce naphthoquinone, a new product for Cyanamid. The completed unit is expected to be in production by the summer of 1960.

Development of the Company's 640-acre Agricultural Center near Princeton, New Jersey, is proceeding. The previously limited operations there are being expanded with the erection of additional farm buildings and service facilities. The principal research-and-development buildings will be ready for occupancy in late 1961.

A new facility utilizing an improved process for the production of melamine is being constructed at Wallingford, Connecticut, next to the Company's molding-compound plant. When completed during the latter part of 1960, it will augment present melamine production capacity at the Willow Island, West Virginia, plant.



Formica Corporation, a wholly-owned subsidiary, is expanding facilities for the production of decorative laminates in its Evendale, Ohio, plant. At the same location Formica is constructing a new laboratory which will centralize its research and product development under one roof. These projects should be completed during 1960.

Another Formica expansion is being carried out at the factory in St. Jean, Quebec, which was acquired in 1958 by Cyanamid of Canada Limited. The conversion of some of the facilities and the installation of additional equipment provide for Canadian production and marketing of the full range of sizes and types of Formica decorative laminates.

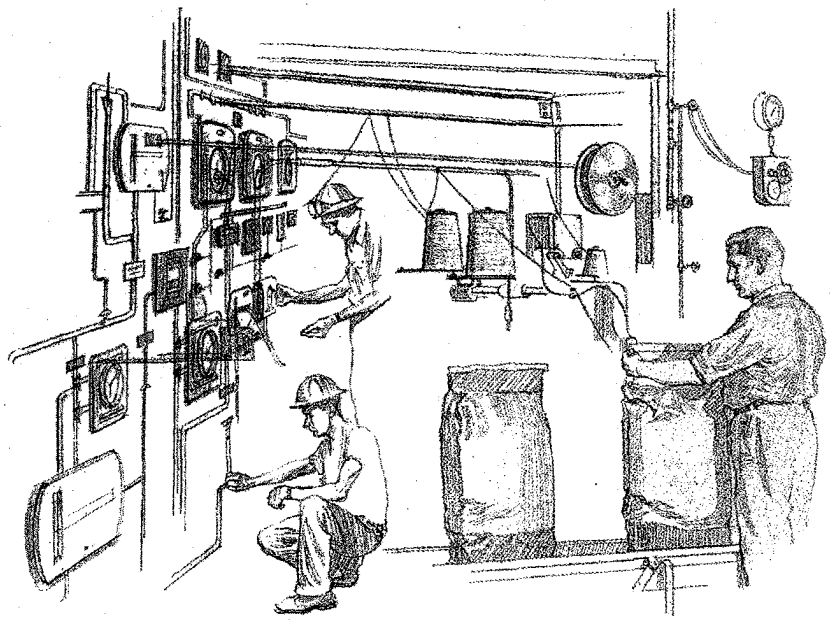
At Hamilton, Ontario, the first urea plant to be built in Canada was completed this past summer. It has an annual capacity of 66,000 tons. With the initial start-up problems largely solved, this plant is now producing urea for farm and industrial markets and also for Company use in plastic manufacture.

Two related projects are under way at the Welland plant in Ontario: the first for the conversion of facilities to permit use of natural gas as a raw material, replacing imported coal, and the second for the construction of a 190-ton-per-day nitric-acid unit. When complete, these two projects together will provide higher capacity and increased flexibility in the production of ammonia and ammonium nitrate. The units should be available for use by the fall of 1960.

Another Welland project, a unit for the fermentation of Aureomycin which will eventually replace imports of this product, was completed and started up late in 1959. First production will supply Canadian needs for use in animal feedstuffs. Later production will include pharmaceutical-grade antibiotics.

Work is proceeding on the installation of antibiotic-fermentation facilities at the plant in Gosport, England, operated by Cyanamid of Great Britain Limited, a wholly-owned subsidiary. This addition, to be completed in 1961, will supplement the existing finishing-and-packaging operations.

The Company last year joined in the formation of a subsidiary, Cyanamid Italia, S.p.A., in which Cyanamid holds a 70% interest.



Preferred Stock transactions included the issuance of 2,480 shares under stock-purchase contracts made with employees in 1955 and the conversion of 3,290 shares into Common Stock. There were 1,055 shares of Preferred Stock outstanding at the year end as compared with 1,865 shares at the close of the previous year.

WORKING CAPITAL

Working capital at year end was $161,577,737 as compared with $130,569,838 at December 31, 1958.

Cash and marketable securities increased to $92,608,997 from $67,700,704 in 1958; accounts receivable increased to $69,859,850 from $64,608,547; and inventories rose to $99,597,877 from $87,210,408. Liabilities for income taxes were $49,999,001 at December 31, 1959 as against $47,507,977 at the close of 1958.

ASSOCIATED COMPANIES

Total earnings of jointly owned (40% to 50%) companies both in the United States and abroad were higher than in the preceding year. Cyanamid's equity in these earnings amounted to $3,115,930 against $1,936,195 in 1958. Dividends from such associated companies amounted to $2,860,156 compared with $2,483,468 for 1958 (excluding a special dividend of $3,773,000 in 1958 from Southern Minerals Corporation).

Virtually all the expansion program planned for the Port Neches plant of Jefferson Chemical Company, Inc. (jointly owned—50%—with Texaco Inc.) was completed by August 1st, and all units were in successful operation before the end of the year. This program substantially enlarged the capacities for ethylene and propylene-derived chemicals and provided new production facilities for chlorine and caustic soda.

Arizona Chemical Company (jointly owned—50%—with International Paper Company) broke ground in July for its new tall-oil refinery at Springhill, Louisiana. The new facility, which will greatly increase Arizona's annual processing capacity for crude tall oil, should be in production during the summer of 1960.

During 1959, Cyanamid increased by approximately $2,500,000 its investment in Formica International Limited (formerly Formica Limited), a British company owned 40% by Cyanamid and 60% by The De La Rue Company Limited. The purpose of the increase was to finance the extension of operations in Australia, France, West Germany and New Zealand.

INVESTMENT IN NEW AND EXPANDED FACILITIES

In 1959 outlays for new and expanded plants and related capital assets came to $35,496,080. Following the completion of most of the large projects under way during 1957 and 1958, the major portion of the investment in 1959 related to a variety of smaller ones.

The more important projects for 1959 were:

At Bridgeville, Pennsylvania, the recently installed maleic anhydride production unit with an annual capacity of 14 million pounds is now being enlarged to provide annual volume of 20 million pounds. A large part of this capacity will be used to supply Cyanamid's increasing captive requirements for the product. The expansion should be completed by mid-1960.

The new company acquired by purchase the principal assets of Azienda Laboratori Farmaceutici, S.p.A., including pharmaceutical manufacturing facilities in Catania, Sicily. This action was in line with the Company's desire to develop local manufacture in order to participate more effectively in the opportunities within the European Common Market.

MARKETING

The new antibiotic, Declomycin, with higher blood levels and longer-lasting action, was introduced to the medical profession in the fall of 1959 after years of development work. The product has been very well accepted by physicians.

The year marked the beginning of commercial production of Creslan acrylic fiber in the plant in Santa Rosa County, Florida, near Pensacola. As with most new products in the textile field, it will be some time before important sales volume is achieved. However, an increasing number of the nation's leading designers and mills are now working with Creslan fiber in apparel and home-furnishings lines. By marketing Creslan through the nation's best-known clothing and home-furnishings manufacturers, the Creslan trademark will be identified with quality finished products. A large-scale promotional campaign to build consumer awareness and acceptance of the product is being intensified.

In a different market area, Formica Corporation this year introduced new designs and methods of application for decorative laminates to stimulate their use in bathrooms and living and dining rooms, in addition to their widely accepted use in kitchens.

Following initial tests of the pressed wood-chip board produced at the new flakeboard plant in Farmville, North Carolina, a decision was made to change from the original homogeneous board to a three-layer type, a superior product. The plant is being modified to produce the new material for use as an underlayment for laminated plastics and in a number of other applications. Customer acceptance has been good and output of the new board is increasing.



From acrylamide, a versatile chemical derived from acrylonitrile, several new commercial products have been formulated. Two of these products are gaining increasing acceptance in their respective industries: Superfloc 16 flocculating agent, used to separate ore fines in mining operations, and Accostrength 2386 wet-strength resin for paper. Another acrylamide derivative, a chemical grout, is discussed under "Research and Process Development."

A description of the various markets served by Cyanamid's broad product lines begins on page 9.

RESEARCH AND PROCESS DEVELOPMENT

Additional large-scale clinical trials with Cyanamid's oral polio vaccine have continued to demonstrate its safety and effectiveness. More than one million persons have now been immunized, with no adverse reactions attributable to the vaccine. In September, 1959, the Company applied to the National Institutes of Health for a license to produce the vaccine for commercial distribution and since that time has completed the installation of production facilities. It is expected that the additional clinical trials now under way in the United States,

employing the Lederle single-dose oral vaccine, will supply evidence to fully substantiate the Company's claims for it. Of course, a decision to issue a license rests with government authorities.

Field trials held during the year continued to show good results for AM-9 chemical grout, a soil stabilizer derived from acrylamide. When a solution containing AM-9 is injected into wet, sandy soil, it effectively prevents water seepage through submerged tunnel excavations, building foundations, dams, mine shafts and similar projects.

Another development of Cyanamid research was a water-soluble baking-enamel resin that reduces fire hazard during application, speeds and simplifies enamel preparation and creates a lasting and beautiful finish. Known as Melaqua 600, it will be marketed for use by manufacturers of automobiles, major appliances, building equipment, business machines and lighting equipment. It is the first of a series of water-soluble resins being developed by Cyanamid for use in many types of surface coatings.

At Geneva, Switzerland, progress has been made on the scientific-research center which is being developed by Cyanamid European Research Institute, a new subsidiary. Remodeling of the existing building on the eight-acre tract is now complete, and the recruiting of a permanent staff of European scientists is well under way. The laboratory will be devoted to long-range research in the chemical and related sciences and will provide valuable liaison with the European scientific community.

FEDERAL TRADE COMMISSION COMPLAINT AND KEFAUVER INVESTIGATION

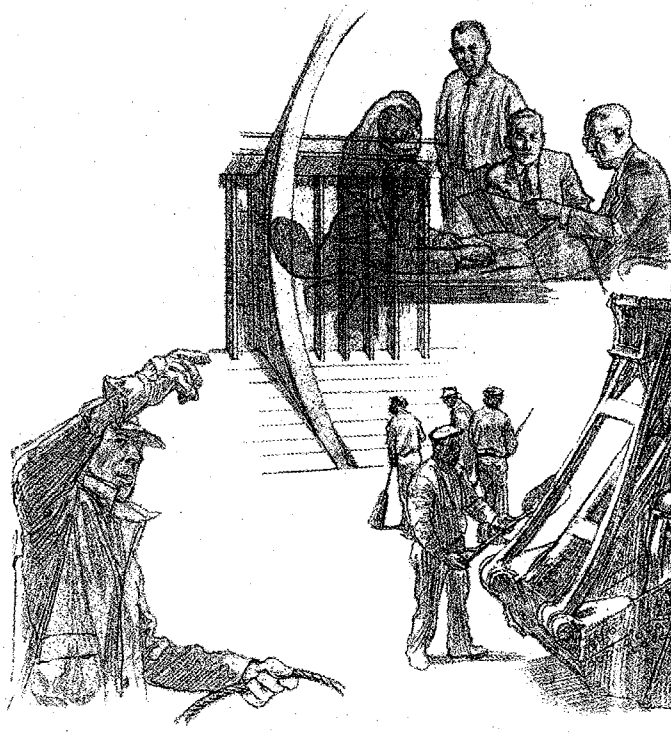
The Federal Trade Commission in January of 1959 commenced hearings under the complaint issued in July of 1958 against six companies, including Cyanamid, alleging illegal monopoly and price fixing in the field of antibiotics. Hearings were held during six of the months of 1959 and have continued in 1960. It seems unlikely that there will be a final disposition of this proceeding for some time to come.

The Antitrust and Monopoly Subcommittee of the Senate Judiciary Committee announced in 1959 plans for an extensive investigation of the pharmaceutical industry. Although by th
Cyanamid had not been invited to appear, the
quested to supply extensive information, and it m
sentatives of the Company will be asked to testify b
are concluded.

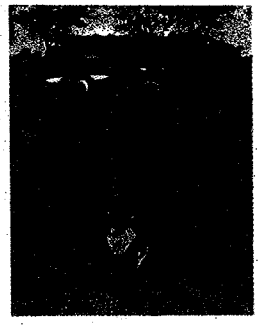
EMPLOYEE RELATIONS

A partial work stoppage of one week's duration
January, 1959, at the two Ohio plants of Formica
strike at the Mobile, Alabama plant, which began in
lasted until February, 1959.

Under the Company's Suggestion Plan, 16,425
received from employees during the year, an aver
eligible employees, considerably higher than the m
reported by the National Association of Suggesti
awards totaling $90,233 were paid for 4,488 sug
Estimated savings to the Company resulting from
exceeded $437,000.

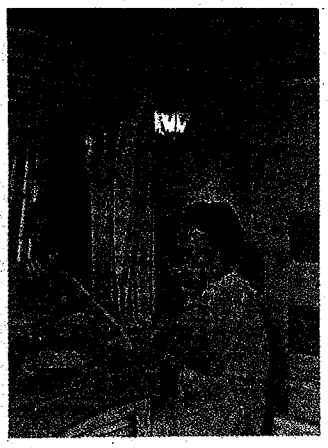


THE MARKETS



FOOD

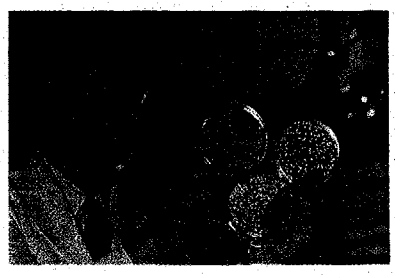
SHELTER

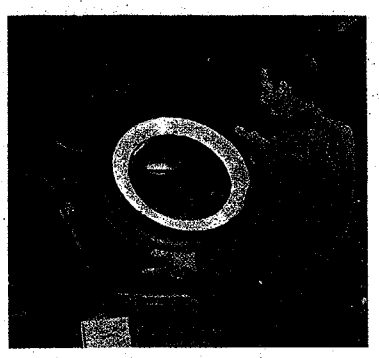




CLOTHING

HEALTH





TRANSPORTATION

Cyanamid serves many ma
From capsules of antibiotic
to tankcars of chemicals, th
6,000 products help to fill e
basic human need. On the f
pages, the broad scope of
this product range is depict



RECREATION



COMMUNICATION

SAFETY

Although Cyanamid had two work fatalities during 1959, the frequency of disabling injuries for every million man-hours worked was only 1.18. This compared to the National Safety Council frequency of 6.17 for all industry and the Manufacturing Chemists' Association frequency of 2.98 for the chemical industry during 1958.

During 1959, 26 Cyanamid plants received recognition from the Manufacturing Chemists' Association for their safety performances. The Company's highest Safety Award was presented to the Bound Brook, Cincinnati, and Damascus plants and to the Panama City plant of Arizona Chemical Company.

Cyanamid was one of two companies which received a special citation from the National Fire Protection Association for its efforts in fire prevention.

AID TO EDUCATION

The Company's 1959 expenditures in support of education were maintained at about the level of recent years. The forms of assistance provided under the program included scholarships, fellowships, faculty-salary subsidies and unrestricted grants.

In recognition of the nation's serious need to strengthen and expand medical education, support in this field was somewhat increased. As in the past, aid was given for the purpose of improving the quality of science instruction at both college and secondary-school levels. Approximately 150 colleges and universities in the United States and Canada benefited from these programs.

The Company also continued its special program of science assistance for teachers and students in the secondary schools in our plant communities.

NEW ADMINISTRATIVE OFFICE LOCATION

On September 15, 1959, the Company announced plans to move its administrative offices from New York City to rural Wayne Township, Passaic County, New Jersey, some 25 miles away. Increasingly congested conditions and high operating costs in the metropolitan area, as well as other considerations, have made the move advisable. Plans have been drawn for new office buildings on the 180-acre tract at Wayne. It is expected that the project when completed in the first half of 1962 will involve a minimum of 1500 employees.

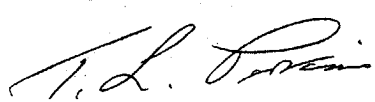
DIRECTORS AND OFFICERS

In June, 1959, R. B. Fiske, Vice President, was invited to serve as Assistant Secretary-General for Production and Logistics of the North Atlantic Treaty Organization (NATO). In order to accept the post, he resigned as a Director of the Company and was granted a two-year leave of absence.

To fill the vacancy created by the resignation of Mr. Fiske, A. C. McAuliffe was elected a Director in February, 1960, by the Board of Directors.

In October, 1959, R. O. Roblin was elected a Vice President.

For the Board of Directors



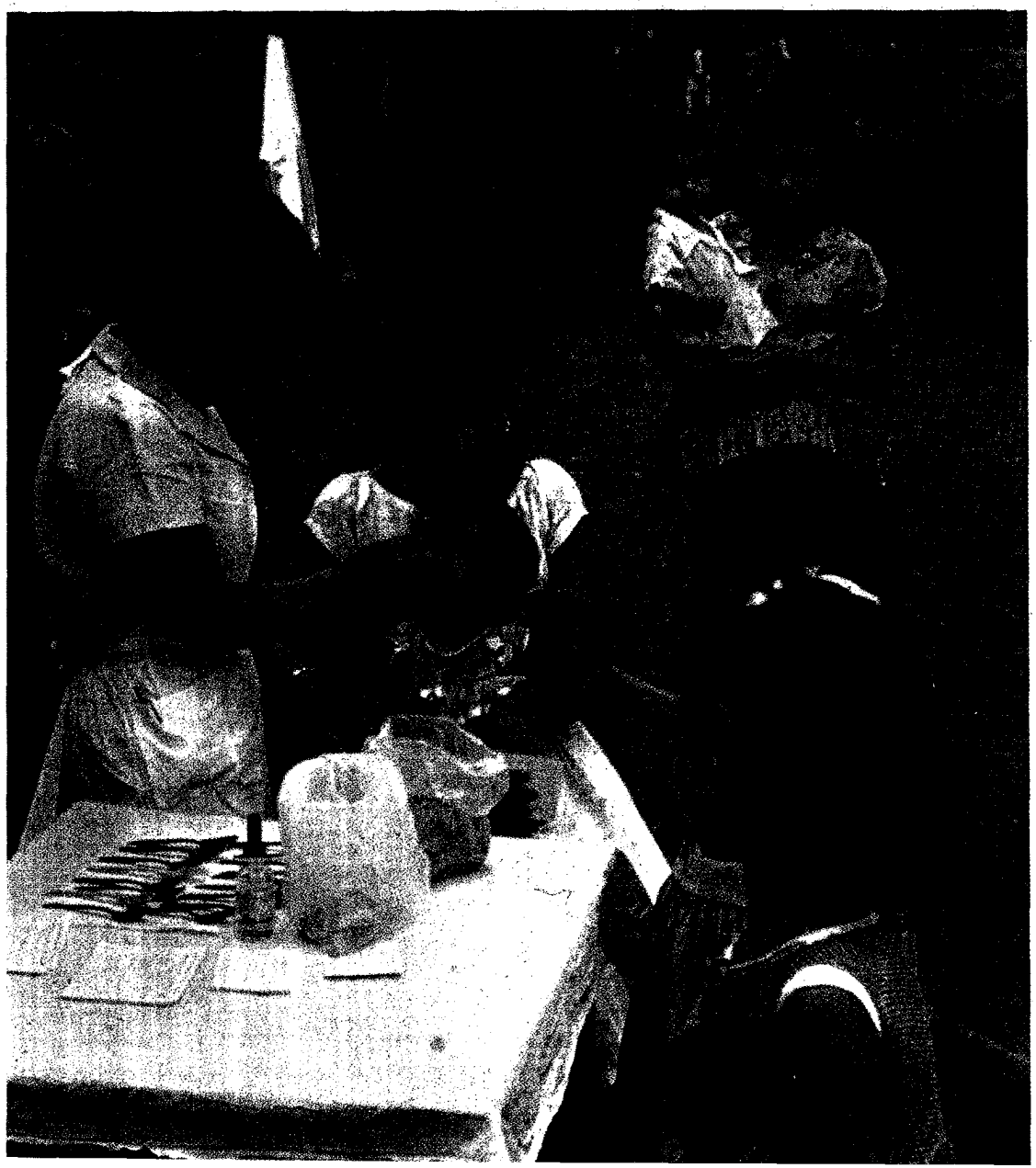
CHAIRMAN



PRESIDENT

New York, New York
February 9, 1960

are food and health





The new antibiotic, Declomycin, has proved to be a longer-lasting, more effective weapon in the fight against disease.

The business of Cyanamid's Agricultural Division is to help the farmer improve the volume and quality of his yield and to increase the efficiency of his operation —through products such as Aureomycin animal feed supplements, nitrogen and phosphate fertilizers, veterinary products for the prevention and treatment of a large number of livestock and poultry diseases, insecticides such as malathion and Thimet phorate, and, more recently, a new fungicide, Cyprex, which is proving effective against orchard diseases. Other agricultural chemicals include defoliants, fumigants and other specialties.

From Cyanamid's research laboratories have come Lederle products in many major drug fields: *antibiotics* —Aureomycin, Achromycin and the recently introduced Declomycin; *biologicals*—Varidase and a variety of vaccines; *nutrition products*—Gevral and Filibon; and *steroids*—Aristocort. Among other important Lederle products are the sulfa drugs such as Kynex, and the diuretic, Diamox.

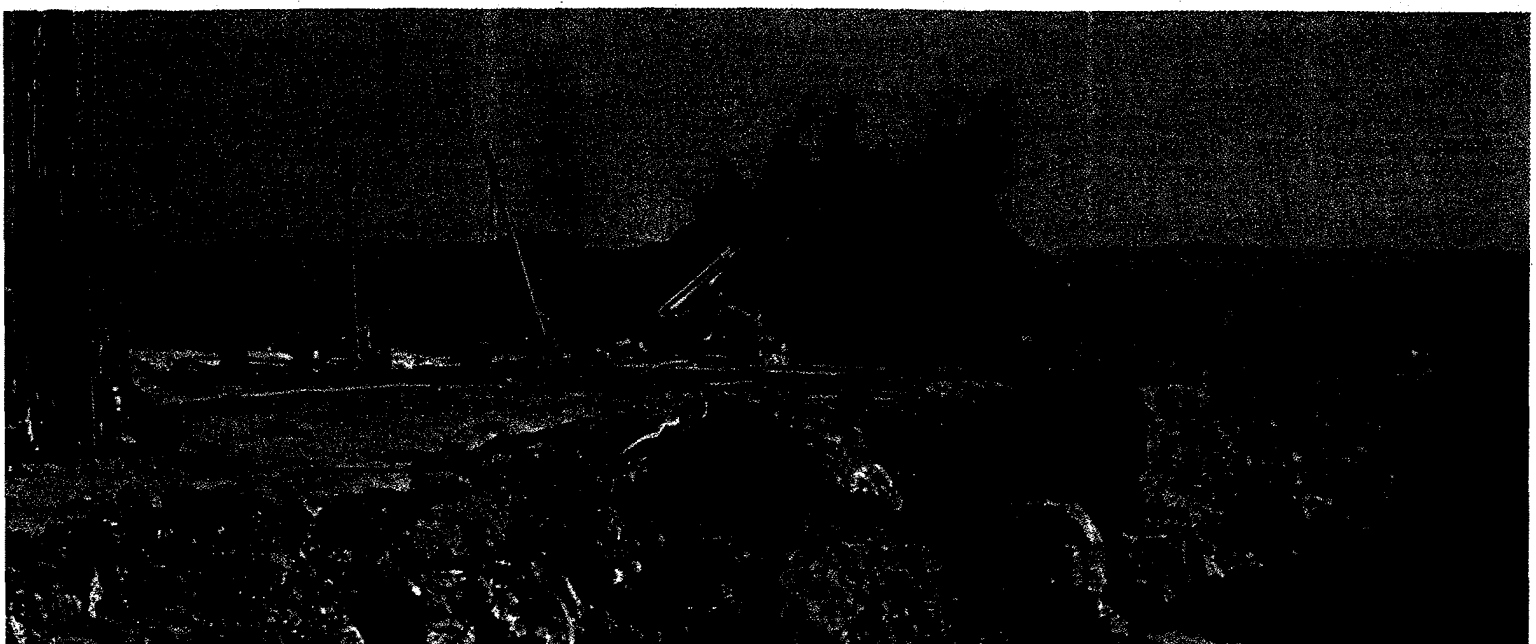
Cyanamid also produces Davis & Geck surgical sutures, Vim syringes and needles and a variety of other surgical materials for professional use.

Chemicals marketed by Cyanamid play important and often unseen parts in n

Transportation, communication, recreation—these are other basic human needs which Cyanamid products fill indirectly by serving a wide variety of industries. For the oil industry, there are cracking and reforming catalysts important in upgrading the quality of the nation's gasoline supply, as well as chemicals for crude-oil production; for the rubber industry, accelerators, anti-oxidants and other specialties; for the paper industry, rosin and wax sizes, alum, titanium dioxide and colored pigments, wetting and softening agents, and wet and dry-strength resins.

Cyanamid pigments also impart life-l
Cyanamid explosives are widely used in c
mining; to the mining industry also, Cya
chemicals for mineral refining and soil stal

There are extensive industrial applicatio
cals as aniline, melamine and phthalic anh
growing field of petrochemicals, Cyanamid
producers of the versatile intermediate, ac



Among the important end uses for Cyanamid explosives are road-building projects (above), as well as mining and quarrying operations.

More efficient operations of oil refinery (right) are made possible by Cyanamid's improved catalysts.

CAPITAL SURPLUS

	1959	1958
Balance at beginning of year	$ 4,187,666	$ 4,004,516
Excess of par value of shares of Cumulative Preferred Stock converted over par value of shares of Common Stock issued upon conversion	197,400	157,500
Premium ($9.00 per share) on shares of Cumulative Preferred Stock, Series D, issued under employees' stock purchase contracts	22,320	25,650
Premium ($39.50 per share) on shares of Common Stock issued under employees' stock purchase contracts	1,619,698	—
	6,027,084	4,187,666
Deduct expenses in connection with offering of Common Stock to employees	31,686	—
Balance at end of year	$ 5,995,398	$ 4,187,666

EARNINGS EMPLOYED IN THE BUSINESS

Balance at beginning of year	$182,787,033	$172,866,249
Net earnings for the year	52,284,191	43,841,042
	235,071,224	216,707,291
Deduct dividends:		
Cumulative Preferred Stock	3,518	4,498
Common Stock—$1.60 per share	33,939,568	33,915,760
	33,943,086	33,920,258
Balance at end of year (Notes 2 and 6)	$201,128,138	$182,787,033

	1959	1958
NET SALES	$583,574,569	$525,075,577
Dividends from associated companies, 40% to 50% owned	2,860,156	6,256,468
Interest and sundry dividends	1,360,789	1,238,614
Royalties and licenses	7,136,378	6,395,193
Other income—net	403,096	194,036
	595,334,988	539,159,888
Deduct:		
Cost of sales	288,190,412	271,667,856
Selling, administrative and general expenses	121,197,508	112,994,746
Depreciation, amortization and depletion (including amortization of certified facilities $8,451,863; 1958, $9,137,810)	43,981,314	36,991,258
Research and process development expenses	26,112,614	23,357,426
Patents and processes, etc. written off	318,705	560,190
Interest charges on funded and other debt	3,502,817	3,563,603
Employees' pension funds	8,547,427	7,683,767
	491,850,797	456,818,846
EARNINGS BEFORE TAXES ON INCOME	103,484,191	82,341,042
Provision for Federal and foreign taxes on income	51,200,000	38,500,000
NET EARNINGS	52,284,191	43,841,042
Dividends on Preferred Stock	3,518	4,498
NET EARNINGS APPLICABLE TO COMMON STOCK	$ 52,280,673	$ 43,836,544
Net Earnings per share of Common Stock (based on the shares outstanding at the end of each year)	$2.46	$2.07

ASSETS

	1959	1958
CURRENT ASSETS:		
Cash in banks and on hand	$ 52,888,367	$ 50,644,467
Marketable securities—U. S. Government and other short-term notes, at cost and accrued interest	39,720,630	17,056,237
Accounts receivable, less provision for doubtful accounts, $2,000,000	69,859,850	64,608,547
Inventories (Note 1)	99,597,877	87,210,408
TOTAL CURRENT ASSETS (Note 2)	262,066,724	219,519,659
EMPLOYEES' STOCK PURCHASE CONTRACTS, DUE 1960 TO 1964	13,756,019	315,314
INVESTMENTS AND ADVANCES:		
Associated companies, 40% to 50% owned—at cost (equity in net assets $29,973,757; 1958, $29,148,917)	20,537,333	20,051,936
Common stock in treasury (Note 7)	4,167,970	3,543,980
Other investments and advances	2,506,604	2,304,766
TOTAL INVESTMENTS AND ADVANCES	27,211,907	25,900,682
PLANTS, EQUIPMENT AND FACILITIES, including mine properties, at cost	607,143,871	585,087,274
Less depreciation, amortization and depletion	296,601,898	262,933,611
	310,541,973	322,153,663
LAND, other than mine properties	6,939,300	6,777,607
NET PLANT INVESTMENT	317,481,273	328,931,270
PREPAID EXPENSES AND DEFERRED CHARGES (Note 3)	9,566,421	9,656,364
	$630,082,344	$584,323,289

LIABILITIES AND SHAREHOLDERS' EQUITY

	1959	1958
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	$ 44,950,247	$ 38,343,077
Bank obligations in foreign currencies	4,076,739	1,760,767
Funded debt installments due within one year	1,463,000	1,338,000
Provision for Federal and foreign taxes on income	49,999,001	47,507,977
TOTAL CURRENT LIABILITIES (Note 2)	100,488,987	88,949,821
FUNDED DEBT NOT DUE WITHIN ONE YEAR:		
3% Purchase Money Obligations due 1961 to 1968	929,000	1,267,000
2¾% Sinking Fund Debentures, due 1965	15,625,000	16,750,000
3¾% Promissory Notes, due 1977 to 1987	75,000,000	75,000,000
TOTAL FUNDED DEBT NOT DUE WITHIN ONE YEAR	91,554,000	93,017,000
INCENTIVE COMPENSATION CONTINGENTLY PAYABLE—NET (Note 7)	2,206,869	1,830,952
MINORITY SHAREHOLDERS' EQUITY IN FOREIGN SUBSIDIARIES	707,103	—
COMMON AND CUMULATIVE PREFERRED STOCKS ISSUABLE TO EMPLOYEES UNDER PURCHASE CONTRACTS (Note 4)	14,370,792	380,410
SHAREHOLDERS' EQUITY:		
Cumulative Preferred Stock—par value $100 per share (Note 4):		
Authorized—650,000 shares		
Outstanding—1,055 shares (1958, 1,865 shares)	105,500	186,500
Common Stock—par value $10 per share (Note 4):		
Authorized, 30,000,000 shares		
Outstanding, 21,352,556 shares including treasury shares (1958, 21,298,391 shares)	213,525,557	212,983,907
Capital surplus	5,995,398	4,187,666
Earnings employed in the business (Notes 2 and 6)	201,128,138	182,787,033
TOTAL SHAREHOLDERS' EQUITY	420,754,593	400,145,106
	$630,082,344	$584,323,289

The inventories are stated on the basis of the lower of cost or market and consist of:

Finished stock	$45,638,648
Work in process	24,879,991
Raw materials and supplies	29,079,238
Total inventories	$99,597,877

In general, cost is determined by either the "first-in, first-out" or "average cost" method, apart from certain inventories aggregating approximately $8,460,000, the cost of which is computed in accordance with the "last-in, first-out" method.

Assets, other than plants and facilities, and liabilities of the foreign subsidiaries are included in the consolidated balance sheet on the basis of par for Canadian dollars and official or other appropriate exchange rates at December 31, 1959 for other currencies; foreign plants and facilities are included on the basis of exchange rates prevailing at time of acquisition. The amounts so included comprise net current assets of $20,890,000 and other assets, principally plants and facilities, less depreciation, of $43,000,000. The consolidated earnings employed in the business include the Company's equity in undistributed earnings of foreign subsidiaries (other than Canadian) amounting to $8,810,000, the distribution of which is subject to exchange regulations.

All past service credits under retirement plans for employees in the United States and Canada have been funded and the cost charged to prepaid expenses and deferred charges. The unamortized balance of $5,739,000 at December 31, 1959 is to be written off over approximately six years.

At December 31, 1959 employees' stock purchase contracts were in effect covering 288,095 shares of Common Stock, and 1,010 shares of Series D, 3½% Cumulative Preferred Stock Convertible Prior to July 1, 1965. A total of 296,355 shares of the authorized Common Stock has been reserved for issuance in connection with these stock purchase contracts and for conversion of the Cumulative Preferred Stock.

As of December 31, 1959 the Company was contingently liable as guarantor on loans outstanding of an associated company in the amount of $19,000,000.

	1959	1958
Net Sales	$583,575	$525,076
Earnings before Taxes on Income	103,484	82,341
Provision for Taxes on Income	51,200	38,500
Net Earnings	52,284	43,841
Dividends on Preferred Stocks	4	4
Earnings available for Common Stock	52,280	43,837
Dividends on Common Stock	33,939	33,916
Number of Common Shares at Dec. 31 (excl. treasury shares)	21,244	21,202
Earnings per share of Common Stock**	2.46	2.07
Dividends per share of Common Stock**	1.60	1.60
Provision for depreciation, amortization and depletion	43,981	36,991
Gross additions to plant facilities (incl. acquisitions)	35,496	85,567
Current Assets	262,067	219,520
Current Liabilities	100,489	88,950
Working Capital	161,578	130,570
Investment in Associated Companies	20,537	20,052
Plants, Equipment and Facilities	614,083	591,865
Less depreciation, amortization and depletion	296,602	262,934
Net Amount	317,481	328,931
Funded Debt not due within one year	91,554	93,017
Shareholders' Equity:		
Preferred Stocks	106	186
Common Stock	213,526	212,984
Capital Surplus	5,995	4,188
Earnings employed in the business	201,128	182,787
Total Shareholders' Equity	$420,755	$400,145

*Exclusive of extraordinary gains (less related Federal taxes).

**Based on the shares outstanding at the end of each year after giving effect to the issuance on July 16, 1952 and again on July 12, 1957 of one additional share for each share outstanding.

(Amounts are expressed in thousands)

1957	1956	1955	1954	1953	1952	1951	1950
$532,479	$500,651	$451,088	$397,592	$380,393	$368,408	$388,717	$322,338
102,348	85,247	74,714	51,050	52,473	46,612	83,288	69,739
51,000	41,000	36,000	24,000	25,000	20,000	48,500	36,000
51,348	44,247*	38,714	27,050	27,473	26,612	34,788*	33,739
12	886	2,144	1,310	238	386	1,114	1,375
51,336	43,361*	36,570	25,740	27,235	26,226	33,674*	32,364
33,823	27,373	22,096	17,401	17,233	16,940	15,723	12,140
21,225	10,288	8,994	8,723	8,646	8,538	4,168	3,597
2.42	2.11*	2.03	1.48	1.57	1.54	2.02*	2.25
1.60	1.37½	1.25	1.00	1.00	1.00	1.00	.87½
32,182	30,094	30,241	23,686	21,313	18,223	13,886	11,796
87,932	58,715	21,739	39,473	67,347	43,401	44,728	21,619
270,928	300,542	284,869	262,173	222,726	246,324	221,097	207,181
102,378	97,689	89,673	77,506	79,735	69,265	97,999	78,691
168,550	202,853	195,196	184,667	142,991	177,059	123,098	128,490
19,173	16,311	16,581	16,851	14,901	13,704	13,704	10,964
512,652	432,737	384,391	368,241	335,280	273,867	236,848	195,090
231,903	205,460	180,555	155,080	135,523	118,246	104,071	92,516
280,749	227,277	203,836	213,161	199,757	155,621	132,777	102,574
92,750	93,750	94,750	108,250	114,341	111,567	46,398	49,760
164	13,340	48,418	61,363	6,048	8,853	15,473	53,593
212,879	103,030	89,941	87,229	86,463	85,380	41,680	35,973
4,005	85,681	50,982	40,410	38,442	36,648	73,599	39,697
172,866	164,633	138,461	123,987	116,832	106,831	97,545	66,184
$389,914	$366,684	$327,802	$312,989	$247,785	$237,712	$228,297	$195,447