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1978 Annual Report

Report of the Board of Directors for the Year Ended December 31, 1978 of American Cyanamid Company, Wayne, N.J. 07470

Research and Development

An aggressive, well-financed and productive research and development program is vital to the growth and progress of any multinational corporation in today's highly competitive marketplace.

Over the past five years we have been transforming our R&D program into a dynamic search for those "breakthrough" products which will have the greatest possible effect on the company's future sales and profits.

The first results in our search for tomorrow's products began to emerge in 1978. Many of the promising new products are in the medical area, but we are also developing new compounds which can have a major effect on our other business segments: agriculture, specialty chemicals, consumer products and Formica® brand products.

A special report on Cyanamid's R&D program, with details on some of those new products which hold the most promise, begins on page 4 of this report.

Contents

Annual Meeting of Stockholders

The 1979 annual meeting of stockholders of American Cyanamid Company will be held at 11 a.m. on Monday, April 16, in the Phoenix Room of the Canal National Bank Building, 1 Canal Plaza, Portland, Maine.

Form 10-K available to stockholders

A copy of the company's 1978 annual report on Form 10-K, including financial statements and schedules, as filed with the Securities and Exchange Commission, will be made available free of charge to Cyanamid stockholders. Copies of exhibits attached to the Form 10-K will also be made available at a charge. Requests should be addressed to the Secretary of the company.

Financial Highlights

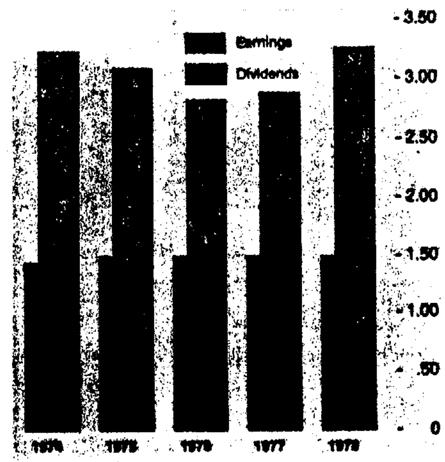
American Cyanamid Company and Subsidiaries

Financial Highlights

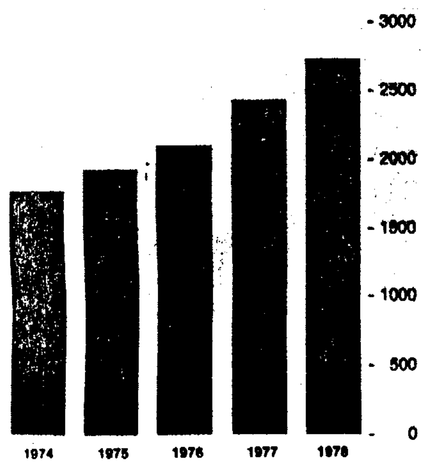
(Dollars in thousands except per share amounts)

Operating Results	1978	1977
Net sales	**$2,745,745**	$2,412,311
Earnings of consolidated companies before taxes on income	**239,075**	216,371
Taxes on income	**90,000**	84,100
Equity in net earnings of associated companies	**6,868**	7,129
Net earnings	**155,943**	139,400
Dividends	**71,422**	71,347
Per share of common stock		
Net earnings	**3.26**	2.92
Dividends	**1.50**	1.50
Depreciation and depletion	**120,150**	104,370
Additions to plants, equipment and facilities	**251,034**	235,451
Year-end Position		
Total assets	**$2,526,149**	$2,222,251
Funded debt	**520,184**	442,420
Stockholders' equity	**1,254,507**	1,168,891
Per share of common stock	**26.24**	24.47
Shares outstanding at end of year	**47,814,582**	47,771,594
Number of stockholders	**92,733**	99,294
Number of employees	**43,968**	43,750

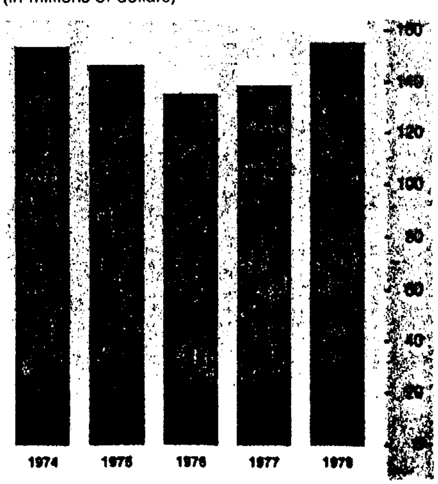
Earnings & Dividends Per Share
(in dollars)



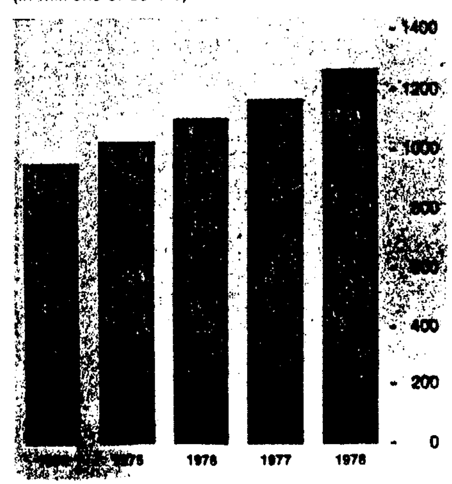
Net Sales
(in millions of dollars)



Net Earnings
(in millions of dollars)



Stockholders' Equity
(in millions of dollars)



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To Our Stockholders

James G. Affleck,
Chairman of the Board, President and Chief Executive Officer

To Our Stockholders:

I am pleased to report that your company achieved record sales and earnings in 1978 and increased the dividend for the first quarter of 1979.

Net earnings rose 11.9% from the previous year on a 13.8% increase in worldwide sales, which reached $2.7 billion. Net earnings were $155.9 million or $3.26 per share.

All of our five businesses contributed to the sales increase. Sales of Formica® brand products, which had the benefit of a full year's operation of Formica International Limited as a 100%-owned subsidiary, were up 25%. Medical sales were up 16%; agricultural 10%; specialty chemicals 12%, and consumer products 11%.

Our foreign operations were exceptionally strong, with sales increasing by 19% over the previous year. The most significant increases were achieved in medical and agricultural products in Europe and in Formica brand products in Latin America. Toiletries and fine fragrances registered important gains in Europe and Latin America.

Operating earnings were $310 million, up 12.3% for the year. Four of our businesses contributed to the increase, with specialty chemicals and medical showing the largest percentage gains. Earnings from our consumer products were lower, reflecting increased competition in the shampoo business and the costs of important business-building programs for new and existing products undertaken during the year.

In consideration of increased earnings in 1978, the board of directors increased the dividend for the first

To Our Stockholders

quarter of 1979 from 37½¢ to 40¢ per share.

We are particularly encouraged by the progress of our research efforts. During 1978, we began clinical testing of three promising medical compounds, including cetaben sodium, our anti-atherosclerosis drug. The other compounds are an anti-anxiety agent without the usual sedative effect of tranquilizers and an analgesic with the effectiveness of codeine but without codeine's addictive characteristics. We continued animal testing of our two new anti-cancer agents, and results to date are favorable.

Our research expenditures were $108 million, up 12% from 1977. (A detailed report on research operations begins on page 4.)

Our efforts to build for the future were further strengthened by the largest capital spending program in our history. Capital investment was $251 million, bringing our total capital expenditures over the past five years to $1.1 billion. During this period, we increased our total plant investment by almost 80%. With near-term capacity needs now satisfied, our capital expenditures will be lower in 1979.

It should be noted that not all of this capital has been invested in productive units. In 1978, for example, $19 million was spent for new pollution control facilities. Since the beginning of 1974, we have invested a total of $121 million in facilities to control pollution, and we expect to spend another $27 million in 1979. Operating costs of these facilities are now running at about $54 million per year, representing 6% of our total operating costs.

Our 1978 capital expansion program was supported by borrowing $150 million, of which $50 million was used to refinance existing funded debt. Even with this added long-term debt, we are maintaining a prudent debt ratio of about 30% of total capitalization.

We continue to put heavy emphasis on improving productivity throughout Cyanamid. In 1978, we instituted a cost reduction system which offers promise of significant profit improvement. Energy conservation is another area of major effort.

During the year various activities were initiated or expanded to help insure the continuity of managerial talent. Supervisory training programs were started at some locations and expanded at others. We continued to fulfill our affirmative action obligations, and at year-end, minorities and women were a larger percentage of our domestic employee population than a year ago. More importantly, these employees are moving into the mainstream of management activities.

There were some significant changes in Cyanamid's corporate management during the year. Dr. Nolan B. Sommer, a senior vice president and director, retired in July after 33 years of distinguished service. W. Perry Brown joined the company as vice president and director of personnel in June. In October, John K. Bangs was elected secretary of the company. Lloyd N. Cutler, a partner in the law firm of Wilmer, Cutler & Pickering, was elected to our board in February, 1979.

There also have been important divisional changes. We established separate research divisions with worldwide responsibilities for agricultural, medical, consumer and Formica brand products. This follows the pattern set by the formation of our global chemical research division several years ago. We also reorganized our consumer products business, creating four operating divisions to meet our growth requirements.

Looking to the future, we believe that our programs to enhance the development of employees and our increased support for research, manufacturing and marketing are providing us with a firm base for excellent progress in the years ahead.

I would like to extend the appreciation of the board of directors to our employees, customers and suppliers for their support during the year. Together, we can expect to set new records in 1979.

For the Board of Directors

J. G. Affleck

Chairman and President

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Research & Development

A $100-million-a-year quest for tomorrow's products.

Over the past five years, we have achieved a major transformation in our research effort.

We have redirected our emphasis to seek radical new routes to innovation, to search out strikingly new products that will ensure significant growth and success for the company.

We have targeted our efforts on those scientific areas where our particular expertise can be brought to bear on the largest market opportunities.

In 1978 we saw the first results of this effort emerge from our laboratories.

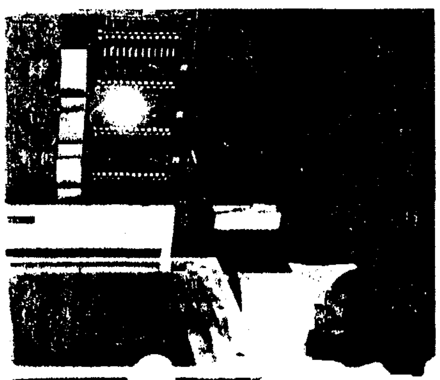
In the pharmaceutical field, we began clinical testing of three drugs and we anticipate that another seven will be ready for clinical trials in 1979.

Our heart drug candidate, cetaben sodium, exemplifies our research strategy. It is designed to treat atherosclerosis, the most prevalent form of heart disease, through a new concept of what it is that causes plaque to form on the walls of arteries and block passage of the blood. The concept — called a model — has not yet been proven. Therefore, the clinical trials which are currently underway are a test for both the drug and the model. Present indications are that this product would prevent plaque buildup and possibly reverse this condition where it has already begun. It might also treat senility caused by atherosclerosis. The results of the cetaben trials, to date, remain favorable, although we still have to demonstrate its effectiveness in man.

During 1978, clinical trials were begun on an anxiolytic, or anti-anxiety

Clockwise from top left: Lederle scientists use an ultrasonic scanner to learn how to measure the effects of cetaben sodium on atherosclerosis; A plant physiologist at Princeton, N.J., checks results of a plant growth regulant on soybeans; Research on swine nutrition is conducted at a Cyanamid farm on Taiwan; Rats are tested for reaction to anti-anxiety compounds at Lederle's Pearl River, N.Y., laboratories.

Research & Development



agent, which, in animals, appears to eliminate the sedative and other undesirable side effects of existing tranquilizers. This, and a number of other experimental products, are based on new models of the basic causes of the target diseases.

Obviously, the risks are higher for this sort of path-breaking research; but, on the other hand, the rewards are likely to eclipse less ambitious, "me-too" research.

Other new product candidates have not required new models. We began clinical trials in 1978 on an analgesic we believe will prove to be as effective as codeine without its addictive characteristics.

Among other products in the early stages of development are two new anti-cancer agents, both active against leukemia and solid tumors. One of the compounds, an anthraquinone, is undergoing evaluation by the National Cancer Institute.

Our first major new pharmaceutical to reach the market will probably be piperacillin, a semi-synthetic antibiotic effective against difficult-to-control gram-negative and anaerobic infections. The compound was developed by Toyama Chemical Company of Japan, and we hold the option to acquire an exclusive license for all markets outside of Japan. Now in the concluding phase of clinical testing, piperacillin was the subject of 18 studies reported at the 18th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy, held in Atlanta last fall. We expect to obtain approval to market piperacillin in some foreign countries late in 1979, and in the United States in 1981.

Our agricultural research also has generated encouraging product leads. We entered the two-billon-dollar herbicide field during the past few years with two products, Prowl® and Avenge®, both of which have gained excellent acceptance. We now are developing Combat* herbicide to complement uses of Prowl in corn and soybeans. Combat is expected to be introduced in the United States in 1981.

Our agricultural scientists are now developing a number of new insecticides. One of these products is expected to help control imported fire ants which currently infest 190 million acres in the southern United States. Results of U.S. Department of Agriculture field tests conducted during 1978 demonstrated this compound's effectiveness. Other products used for the control of the fire ant either have been banned by the Environmental Protection Agency or approved with severe restrictions.

We are doing research on plant growth regulants which may some day lead to dramatic boosts in the yields of major food crops. It is still too early to appraise the prospects of our leads in this area.

We devote a significant portion of

*Trademark

Research & Development

our agricultural research effort to animal health. A new anthelmintic product, Tramisol® hog wormer mix, to control major intestinal parasites in swine, was introduced last fall, and a new implant for lamb growth promotion, Vigozoo*, began its initial sales in Europe late in 1978. We have in development two new antibiotic candidates for health and growth promotion and a cattle tickicide, all of which should be ready for marketing in the early 1980's.

In the field of specialty chemicals, we are working on a number of new products and more efficient processes.

Our chemists are experimenting with a new group of polyacrylamide flocculants for ores and concentrates that will also speed solidification of slurry waste in mined areas for use in land reclamation. Other polyacrylamide and polyamine flocculants are under test for tertiary oil recovery.

We are working to develop chemicals known as phosphate boosters. These would substantially increase phosphate recovery for fertilizer and industrial use and could thus extend the life of world phosphate reserves.

Our chemists are now testing a phosphine-derived promoter to be used by the mining industry as a flotation reagent in the recovery of metallic ores.

In the specialty elastomer field, we are introducing two new products. Norsorex®, which we have licensed from CdF Chimie of France, is a synthetic elastomer having unusual toughness in soft formulations, making it useful in gaskets and automobile door and trunk seals. The other product, Cytor®, is a new thermoplastic elastomer with outstanding flexibility, abrasion resistance and tolerance for lubricants that make it especially useful in automotive applications such as front wheel drive assemblies.

Cyanamid's consumer products research covers a gamut of products, with emphasis on hair preparations, fragrances and household products. This effort is being expanded rapidly. Three fragrances were developed within the past five years, of which two — men's and women's products bearing the Pierre Cardin name — have been notable successes. The third, our new lifestyle fragrance called CIE®, is starting out equally well.

Today, our technology is also focused on personal cleanliness, the control of body odors, and household cleaning and disinfecting. Lemon-Sol®, our new liquid cleaner, is doing well in test markets. In hair sprays, where Breck® products lead the field, good hair holding has always been accompanied by some degree of tackiness. Our goal is to develop a super-hold product which will eliminate this problem.

Cyanamid's research in Formica® brand products emphasizes the development of new technology to support innovation in design and application. Our designers are also working on methods to improve print pattern fidelity and to provide unique surface textures and finishes. Much of our longer-range research in the laminates field is geared to raw material and energy conservation.

Research is of vital importance to the future of our company, and we are

*Trademark

Clockwise from top left: Improvements in auto exhaust catalysts are studied in this scanning electron microscope at our chemical research labs at Stamford, Conn.; Formica Corporation's color computer at Cincinnati color-matches inks; Consumer products research includes analysis of after-shave lotion in the fragrance lab at Clifton, N.J.; A chemist at Stamford measures effect of new flocculants on sewage.

Research & Development

proud of the accomplishments of our 1,500 scientists. These talented men and women work in 19 Cyanamid laboratories located in the United States, Canada, England, Egypt, Italy, the Netherlands, Brazil, the Philippines and Taiwan. Although our research expenses have been increasing rapidly in recent years and were $108 million in 1978, we continue to believe that they are fully justified by the results that are being achieved.

Science and technology are rapidly developing new products that prolong human life and make living healthier and more enjoyable for everyone. To that attainable goal, Cyanamid's research is firmly committed.

Agriculture

($ in millions)

	Worldwide Sales	% Total Sales	Operating Earnings	% Total Operating Earnings
1978	**$611**	**22**	**$ 83**	**27**
1977	$555	23	$ 79	29
1976	$492	24	$ 83	34
1975	$524	27	$162	61
1974	$425	24	$129	48

Agricultural sales rose 10% and operating earnings were up 4% in 1978.

Pesticides continued to set the pace for Cyanamid's advances in agricultural sales and operating earnings. Three research developments of recent years played major roles in our sales progress during 1978. These are Counter® soil insecticide and Prowl® and Avenge® herbicides.

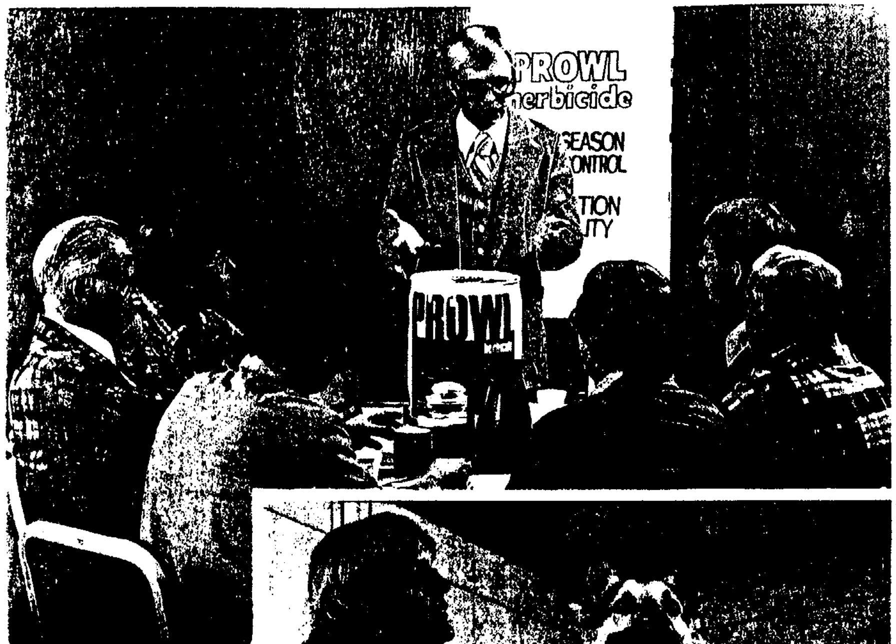
Counter sales increased significantly in its major market, the United States. This product has been among the U.S. market leaders since 1977 for the control of corn rootworms. This year, combined sales of Counter and Thimet® soil and systemic insecticide gave Cyanamid the largest share of this important segment of the domestic pesticide market.

Prowl, which controls weeds infesting corn, cotton, soybeans, barley, rice and a number of other crops, showed strong sales gains worldwide, particularly in the United States, West Germany and Brazil. As a result of the October, 1977 explosion in the Prowl plant at Hannibal, Missouri, operating profits were depressed. Reconstruction should be complete in early 1980, and we expect that Prowl profitability will add significantly to our agricultural earnings the following year.

Avenge, which protects small grains such as wheat, barley and rye from wild oat weeds, continued to generate excellent sales gains, increasing its market share in England, Scandinavia, Canada and the United States.

Sales of animal feed and health products were significantly higher in 1978, with improved performance in the United States and continued progress in Europe and Latin America. Aureomycin® chlortetracycline product

Agriculture



Clockwise from top left: A farmer checks the effect of Counter 15-G on corn rootworms; A salesman reviews with farmers the advantages of Prowl herbicide in soybean weed control; The Agricultural Division's Animal Industry Department markets a wide range of health products for large and small animals; Cytrolane™ insecticide helps to protect this Egyptian cotton crop.

sales were particularly strong, primarily because of greater livestock and poultry consumption in the United States. In October, the U.S. Food and Drug Administration advised that requests by the industry and agricultural organizations for hearings on the safety of penicillin and tetracycline antibiotics in animal feeds will be granted. Although we do not anticipate a final resolution of this matter until 1981 at the earliest, we are optimistic as to its outcome. We believe that 27 years of safe usage without evidence of hazards sustains our position that these products are safe, and they clearly are of considerable economic benefit to producers, and hence to consumers. The extent of this benefit has been documented by the FDA itself, which estimates that without any antibiotics in animal feeds, consumers would pay an additional $1.9 billion per year for meat.

Avotan® avoparcin, an animal growth promoter introduced in England two years ago, has done exceptionally well. This product of Cyanamid research is now widely used in the European swine and poultry markets and we hope to introduce it in the United States in the early 1980's to improve growth and feed efficiency in cattle.

Fertilizer volume was ahead of last year, but because of price declines, we were able to achieve only a modest gain in dollar sales. Since costs continued to escalate, operating earnings were significantly lower for the year. Our new ammonia plant at Fortier, Louisiana, was completed on schedule toward the end of 1978, adding to our profit potential in 1979 and thereafter.

Medical

($ in millions)

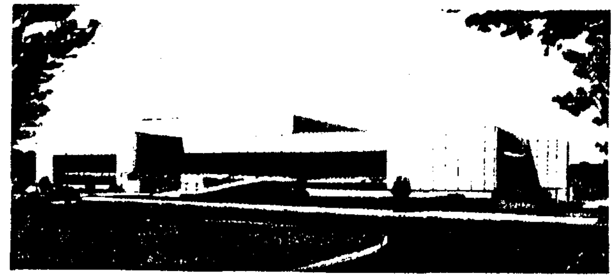
	Worldwide Sales	% Total Sales	Operating Earnings	% Total Operating Earnings
1978	**$560**	**20**	**$ 85**	**27**
1977	$484	20	$ 70	25
1976	$426	20	$ 54	22
1975	$400	21	$ 46	17
1974	$351	20	$ 47	18

Medical sales increased 16% and operating earnings were 22% above 1977.

Antibiotic sales, paced by Minocin® minocycline, were higher in 1978. This fourth generation Lederle antibiotic has proven effective against numerous troublesome conditions, including respiratory infections associated with chronic bronchitis, acne and non-gonococcal urethritis, which is receiving increasing attention as today's most prevalent form of venereal disease.

Also substantially higher were sales of Dexon®, the first synthetic absorbable suture. Since we introduced this product eight years ago, we have developed numerous new forms, the latest being a fine filament braid with improved handling qualities. As a result of such innovations, the use of Dexon has become widespread and its share of the total sutures market has increased rapidly.

Our anticancer agents made significant advances in worldwide sales in 1978. The use of these products has increased because of modern cancer treatment techniques.



Orimune®, the first oral polio vaccine in trivalent form, had sharply higher sales as a result of government mass immunization programs throughout the United States. Health authorities have placed new emphasis on such campaigns to combat public apathy and lower levels of immunization in recent years.

During 1978, we continued to experience growth in sales of Stresstabs® 600 and Stresstabs® with Iron vitamin formulations, and we also added a third member to this line, Stresstabs® with Zinc. A major new multivitamin and multimineral supplement, Centrum*, was introduced late in the year. Centrum is formulated with 21 essential vitamins and minerals — more than other leading brands. Centrum contains each vitamin and mineral for which a U.S. recommended daily allowance has been established, plus manganese and potassium. Sales to date have been excellent. We are now mounting aggressive marketing campaigns for both Centrum and Stresstabs, and expect to increase our vitamin sales and profit contributions significantly over the next few years.

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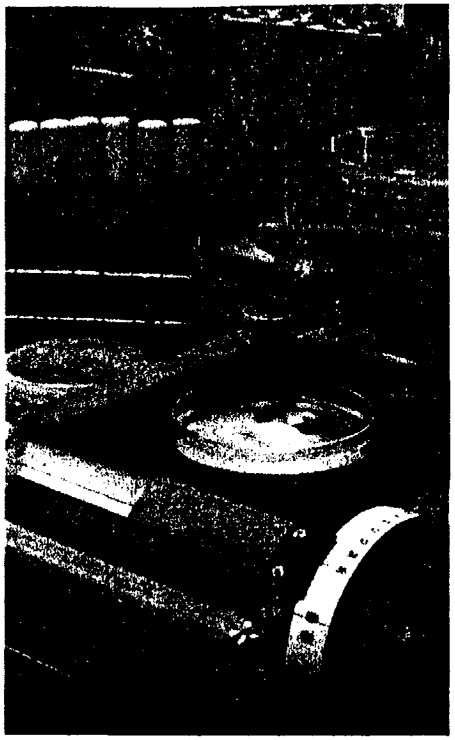
Medical



Sales of Lederle's standard products were up substantially during the year. Our success with these products, which are dispensed generically, is based upon Lederle's excellent reputation for quality.

While marketing programs for our vitamins and standard products will continue to be important to the company, the main thrust of our medical business is the pursuit of significant therapy advances and profit opportunities through research. We look for major additional profit contributions from our medical research in the early to mid-1980's when a number of our unique new products should begin to enter the marketplace.

In the meantime, we are introducing a number of products with lesser, but still significant, prospects. One example is Cinopal® fenbufen, a nonsteroid agent for the treatment of arthritis and related conditions. This product was approved for sale in some countries overseas as early as 1976 and should be marketed in the United States in 1981.

Clockwise from top left: New $23 million toxicology lab at Pearl River, N.Y., will be completed in early 1980; Lederle's successful line of vitamins is broadened by Centrum, a new multivitamin and multimineral supplement; Piperacillin's activity against resistant bacteria is monitored as advanced clinical trials of the new antibiotic continue in the U.S. and Europe; A film on TB control produced by Cyanamid is shown to these Pakistani villagers; A Davis & Geck worker uses a microscope to attach Dexon S sutures to surgical needles.

Specialty Chemicals

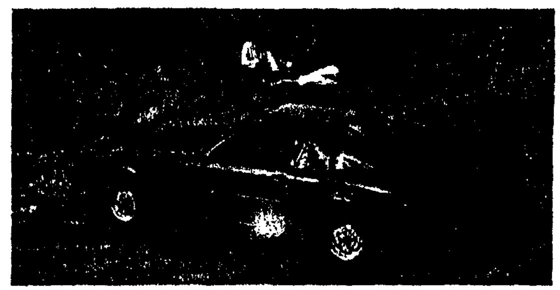
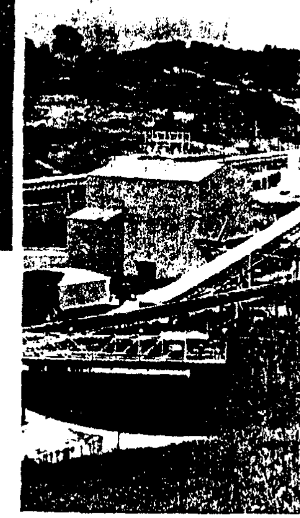
	Worldwide Sales	% Total Sales	[illegible]	% Total Operating Earnings
1978	$822	30	[illegible]	26
1977	$735	31	$66	24
1976	$666	33	$69	28
1975	$586	30	$42	16
1974	$610	34	$75	28

Sales of specialty chemicals were up 12%, and operating earnings advanced 21%.

Recent products and processes developed by Cyanamid research sparked our progress during 1978. Our expanding lines of organic flocculants have experienced brisk worldwide demand to meet pollution-control, mining and paper industry needs.

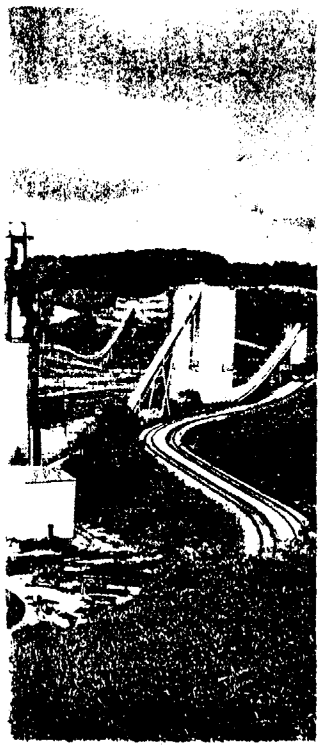
Nearly every commercial and military aircraft uses Cyanamid's structural adhesives, primers or honeycomb core. Sales of these products reached record levels in 1978, and Cyanamid is well positioned to participate in the resurgence of the commercial aircraft market into the 1980's. Diversification into high-performance industrial adhesives is underway with several new products for automotive and appliance markets introduced in 1978.

Cyanamid's refinery and auto-exhaust catalysts also achieved record sales for the year, and we now plan to build three plants to bolster our global position. During 1978, we developed a faster acting catalyst

Clockwise from top left: A Cyanamid technical serviceman prepares our paper chemicals for use at a customer's mill in Holland; Creslan acrylic fibers went into this fashionable line of jogging suits; Cyanamid pigments provide color to inks used to print everything from food packaging to magazines; Improved strength and wear properties for tires of all sizes are made possible by Cyanamid's rubber processing chemicals; Cyanamid water soluble polymers are used to improve liquid and coal solids separation at this coal processing plant in Pennsylvania; Cyanamid resins are used by auto paint makers for a higher quality finish.

Specialty Chemicals



which will be used initially with 1980 model cars. Also, in cooperation with Japan Catalytic International, Inc., our partner in the auto-exhaust catalyst field, we perfected a three-way catalyst which will be used beginning with the 1981 model year. In addition to carbon monoxide and hydrocarbons which are removed by our current two-way catalyst, the new product also reduces emissions of nitrogen oxide.

Sales of titanium dioxide also were higher for the year. This, coupled with manufacturing cost improvements, led to better operating performance for this white pigment that is used in paint, paper, printing ink and plastics.

Cyanamid's chemicals business includes fibers, a field long affected by overproduction. New marketing programs brought 1978 sales of Creslan® acrylic fiber to the highest level in the past five years, with increasing receptivity in apparel and home furnishings applications. At the same time, production cost improvement programs have enabled us to increase profitability.

New plants, with modern, efficient production processes, are vital to our progress. During 1978 we benefited from a unique, low-cost process for glyoxal, which is used in textile chemicals, and a continuous process to make beta naphthol, a basic ingredient of dyes and color pigments.

Our future in specialty chemicals will be aided by new plants valued at about $100 million which began production in 1978 or early 1979. These include U.S. facilities for sulfuric acid, acrylamide, aniline, mononitrobenzene, nigrosine, and Tobias acid, and a unit for acrylamide in Holland.

Consumer Products

	Worldwide Sales	% Total Sales	Operating Earnings	% Total Operating Earnings
1978	$357	13	$ 30	10
1977	$321	13	$ 33	12
1976	$301	14	$ 30	12
1975	$288	14	$ 21	8
1974	$241	13	$ 14	5

Sales of consumer products rose 11%, but operating earnings declined 10%.

Our consumer products include Shulton's Old Spice® toiletries and Breck® hair preparations; Nina Ricci®, Pierre Cardin*, Cardin de Pierre Cardin* and CIE® fine fragrances, and Pine-Sol® liquid cleaner.

During the year, we invested in a number of major new-product programs, building for our future. CIE, our new lifestyle fragrance, was aggressively promoted. We began market tests for Lemon-Sol® liquid cleaner, our latest household product, and reformulated Breck hair-care products were introduced. While these programs are expected to improve the profitability of our consumer products in the years ahead, their costs served to depress 1978 operating earnings.

Old Spice men's toiletries generated significant global sales gains in 1978, particularly in the United States, England and Japan. Miss Breck®

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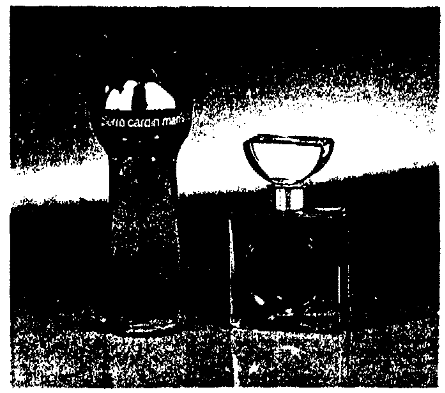

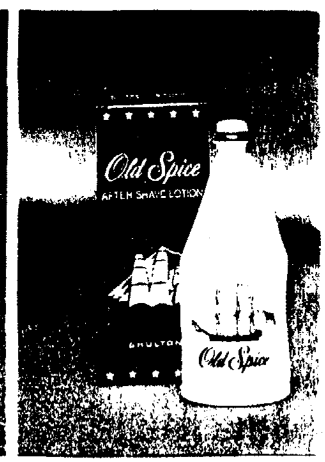

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Consumer Products

Cyanamid's consumer products include (counterclockwise from top left) L'Air du Temps by Nina Ricci, Pierre Cardin men's fragrance and Cardin de Pierre Cardin for women, CIE fine fragrances for women and Tabac Original for men, the Old Spice line of men's toiletries, Pine-Sol cleaner-disinfectant, and Breck preparations for care of the hair.

aerosol hair spray, with an evironmentally-safe, non-fluorocarbon propellant, continued to hold market leadership. Improved formulas enabled Breck® creme rinse to better its market position. However, Breck® shampoos lost ground in an extremely competitive market which saw the introduction of no less than seven major new brands.

The Jacqueline Cochran prestige fragrances showed significant sales progress in 1978. Nina Ricci's L'Air du Temps® strengthened its position as the leading French fragrance in the United States. Pierre Cardin men's fragrance generated an excellent sales gain, and the newer Cardin de Pierre Cardin for women moved ahead as well.

Jacqueline Cochran's newest fragrance, CIE, exceeded our expectations in its first year of national marketing. We recently acquired U.S. rights to a product for men, the European fragrance Tabac Original®. These, and related products now under development, should play an expanding role in our consumer products business in the years ahead.

In household products, sales of Pine-Sol, the number one liquid cleaner in the United States and Brazil, continued to increase throughout the Americas. Our new product, Lemon-Sol liquid cleaner, was successful in test markets in 1978, and is now being further tested in an enlarged market area.

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Formica® Brand Products

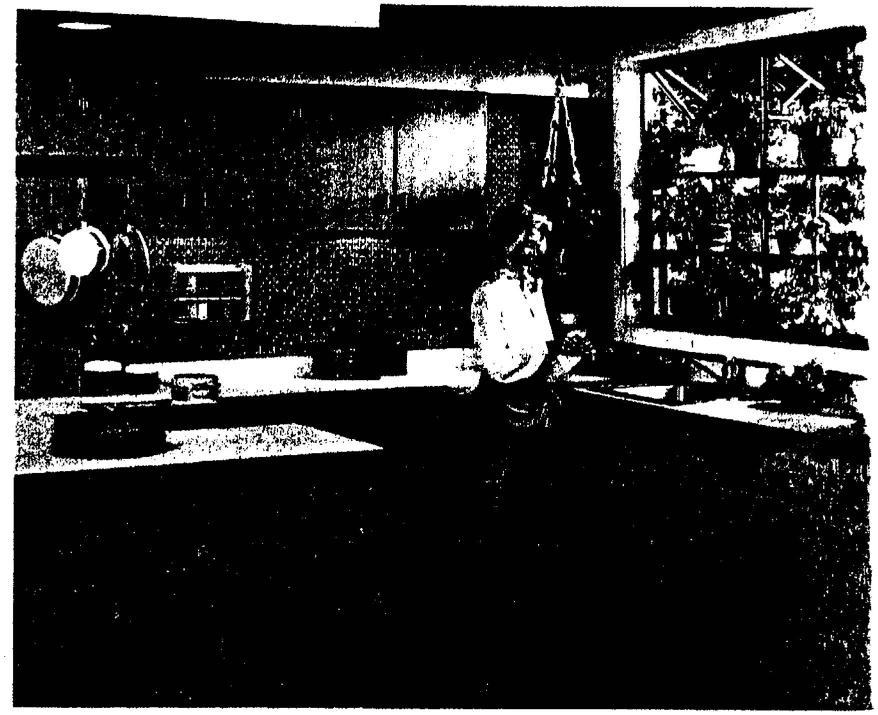
	Worldwide Sales	% Total Sales	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1977	$317	13	$ 25	10
1976	$189	9	$ 9	4
1975	$152	8	$ [illegible]	[illegible]
1974	$153	9	$ [illegible]	1

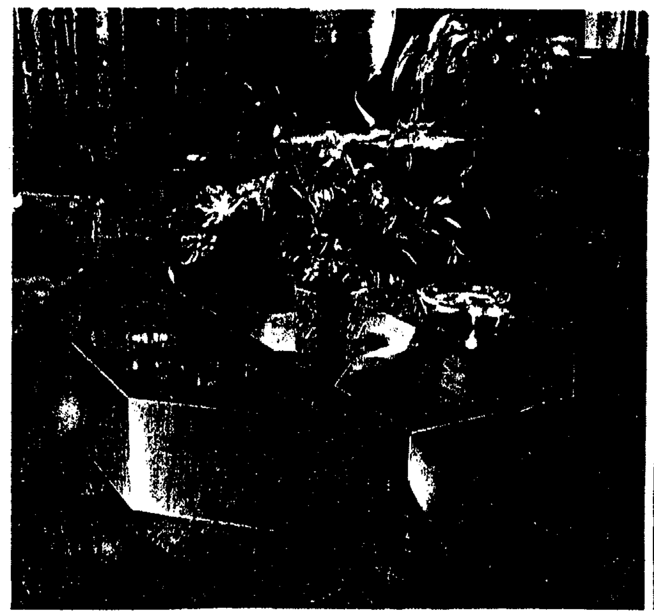
Sales of Formica® brand products rose 25% and operating earnings were up 18%.

The products in this group include Formica® brand decorative laminates, melamine component panels and coated wall coverings.

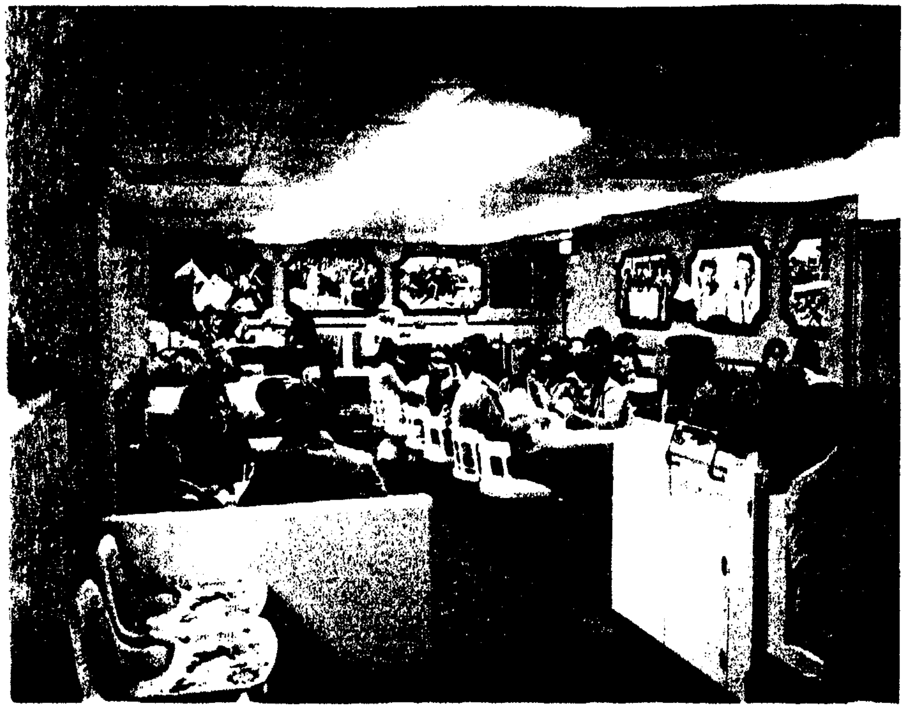
Our Latin American operations continued to set the sales pace in 1978, with excellent performances in Venezuela, Brazil and Mexico. To stay abreast of demand, in 1979 we will complete construction that will double the capacity of our Venezuelan plant. We plan to increase the capacities of our Brazilian and Mexican plants in the following year.

The Formica decorative laminates business in the Eastern Hemisphere was developed over many years by Formica International Limited (FIL) over which Cyanamid acquired full control in April, 1977. FIL's profitability was far from satisfactory at that time. Over the ensuing months, we began to modernize its operations, discontinuing unprofitable lines and improving pro-





Formica® Brand Products



Clockwise from top left: This new kitchen features doors and drawer fronts crafted of Formica brand melamine component panels; Formica brand decorative laminates are used throughout this McDonald's restaurant in London; Two members of Formica Corporation's Design Advisory Board, William Turnbull, Jr., and Margaret Larcade, consult with Formica design director J. Allen Montel (standing); Egon Von Furstenberg designed this unique octagon table using Formica brand decorative laminates.

duction, marketing and distribution. Progress was most satisfactory in 1978, and operating profits moved ahead of our expectations.

U.S. sales of decorative laminates also were up for the year. However, U.S. operating earnings were adversely affected by high costs caused by the severe winter weather early in 1978 and the start-up of our plant expansion at Evendale, Ohio.

Sales of Formica melamine component panels, especially designed for wall storage systems and other vertical applications, moved ahead of competitive brands in the United States and Canada during 1978.

Formica Corporation's long-range sales potential is being enhanced by a design advisory board which completed its first full year in 1978. Consisting of 18 leading interior architects and designers, the board meets regularly with Formica's management to discuss new design and application possibilities. During 1978 projects in development ranged from a new line of juvenile furniture to furnishings for health-care facilities. The program was supported by a series of grants from Formica Corporation.

CY0005656

Operating Results — Cyanamid's consolidated sales in 1978 were $2.75 billion, up 13.8 percent from $2.41 billion in 1977. Net earnings of $155.9 million in 1978 were 11.9 percent above 1977. Net earnings per share for 1978 were $3.26 compared to $2.92 in 1977 based on the average number of shares of common stock (excluding treasury shares) outstanding for each year. The 1978 sales, net earnings and net earnings per share results are the highest in the history of Cyanamid.

Quarterly Results — Quarterly net sales, gross profit, net earnings and net earnings per share for 1978 and 1977 were as follows:

Amounts in thousands

1978 Quarter	Net sales	Gross profit	Net earnings	Net earnings per share
First	$ 650,552	$ 258,923	$ 36,409	$ .76
Second	688,504	275,335	39,583	.83
Third	672,561	272,896	35,975	.75
Fourth	734,128	299,794	43,976	.92
	$2,745,745	$1,106,948	$155,943	$3.26

1977 Quarter	Net sales	Gross profit	Net earnings	Net earnings per share
First	$ 584,491	$221,735	$ 31,573	$ .66
Second	600,709	241,362	39,322	.82
Third	604,618	243,143	31,918	.67
Fourth	642,493	259,731	36,587	.77
	$2,412,311	$965,971	$139,400	$2.92

Gross profit is derived by subtracting manufacturing cost of sales from net sales.

Common Stock Prices and Dividends Paid — Reported comparative high and low market prices on the New York Stock Exchange Composite Tape and dividends paid per share of the common stock by quarter for 1978 and 1977 were:

	1978			1977		
	Market price		Dividends	Market price		Dividends
Quarter	High	Low	paid	High	Low	paid
First	$26¾	$22⅝	$ .37½	$29¾	$25⅛	$ .37½
Second	32	24⅛	.37½	28¼	25⅛	.37½
Third	32⅞	28½	.37½	27⅝	25	.37½
Fourth	30⅜	23¼	.37½	27¼	23	.37½
			$1.50			$1.50

We have examined the consolidated balance sheets of American Cyanamid Company and subsidiaries as of December 31, 1978 and 1977 and the related consolidated statements of earnings and earnings employed in the business and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned consolidated financial statements present fairly the financial position of American Cyanamid Company and subsidiaries at December 31, 1978 and 1977, and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

New York, N.Y.
February 6, 1979

PEAT, MARWICK, MITCHELL & CO.

American Cyanamid Company and Subsidiaries

Years Ended December 31, 1978 and 1977

	1978	1977
	(Thousands of dollars except per share amounts)	
NET SALES	$2,745,745	$2,412,311
Expenses:		
Manufacturing cost of sales less depreciation and depletion	1,638,797	1,446,340
Selling and advertising	483,835	420,031
Administrative and general	134,821	118,966
Depreciation and depletion	120,150	104,370
Research and process development	108,148	96,381
	2,485,751	2,186,088
EARNINGS FROM OPERATIONS	259,994	226,223
'nterest, royalties and other income, net	33,989	37,403
	293,983	263,626
nterest expense	54,908	47,255
EARNINGS OF CONSOLIDATED COMPANIES BEFORE TAXES ON INCOME	239,075	216,371
'axes on income (Note 8)	90,000	84,100
:ARNINGS OF CONSOLIDATED COMPANIES	149,075	132,271
quity in net earnings of associated companies	6,868	7,129
IET EARNINGS	155,943	139,400
'ARNINGS EMPLOYED IN THE BUSINESS AT BEGINNING OF YEAR	916,826	848,773
'educt dividends of $1.50 per share	(71,422)	(71,347)
ARNINGS EMPLOYED IN THE BUSINESS AT END OF YEAR	$1,001,347	$ 916,826
IET EARNINGS PER SHARE OF COMMON STOCK	$3.26	$2.92

See accompanying Notes to Consolidated Financial Statements

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LIABILITIES AND STOCKHOLDERS' EQUITY	1978	1977
	(Thousands of dollars)	
CURRENT LIABILITIES		
Accounts payable and accrued expenses	$ 460,627	$ 384,800
Short-term borrowings, including commercial paper of $82,885 ($9,968 in 1977) (Note 9)	110,458	73,741
Funded debt instalments due within one year	29,472	16,301
Income taxes	38,399	33,408
TOTAL CURRENT LIABILITIES	638,956	508,250
FUNDED DEBT NOT DUE WITHIN ONE YEAR (Note 5)	520,194	442,420
DEFERRED INCOME TAXES	61,300	70,800
OTHER NON-CURRENT LIABILITIES (Note 9)	31,292	31,890
STOCKHOLDERS' EQUITY (Notes 5 and 6)		
Common stock — par value $5 per share		
Authorized — 60,000,000 shares		
Issued — 48,905,338 shares	244,527	244,527
Additional paid-in capital	39,015	38,898
Earnings employed in the business	1,001,347	916,826
	1,284,889	1,200,251
Less cost of 1,090,756 shares of common stock held in treasury (1,133,744 shares in 1977)	30,382	31,360
TOTAL STOCKHOLDERS' EQUITY	1,254,507	1,168,891
	$2,526,149	$2,222,251
CONTINGENT LIABILITIES AND COMMITMENTS (Note 7)		

See accompanying Notes to Consolidated Financial Statements.

CY0005659

American Cyanamid Company

[illegible] Balance Sheets

December 31, 1978 and 1977

	1978	1977
	(Thousands of dollars)	
ASSETS		
CURRENT ASSETS		
Cash	$ 46,392	$ 52,685
Marketable securities and time deposits, at cost (approximates market)	51,285	58,013
Accounts receivable, less allowance for doubtful accounts of $13,030 ($10,810 in 1977)	570,866	462,537
Inventories (Note 3)	489,728	439,477
TOTAL CURRENT ASSETS	1,158,271	1,012,712
INVESTMENTS AND ADVANCES		
Equity in net assets of and advances to associated companies	58,010	54,246
Other investments and advances	46,961	22,581
TOTAL INVESTMENTS AND ADVANCES	104,971	76,827
PLANTS, EQUIPMENT AND FACILITIES, at cost (Note 4)	2,123,420	1,908,236
Less accumulated depreciation and depletion	910,613	826,328
NET PLANT INVESTMENT	1,212,807	1,081,908
INTANGIBLES RESULTING FROM BUSINESS ACQUISITIONS	16,111	16,888
PREPAID EXPENSES AND DEFERRED CHARGES	33,989	33,916
	$2,526,149	$2,222,251

CY0005660

American Cyanamid Company and Subsidiaries

Years Ended December 31, 1978 and 1977

	1978	1977
	(Thousands of dollars)	
SOURCES OF WORKING CAPITAL		
Net earnings	**$155,943**	$139,400
Items not requiring the use of funds:		
Depreciation and depletion	**120,150**	104,370
Deferred income taxes	**10,500**	26,200
Equity in undistributed net earnings of associated companies	**(2,215)**	(1,031)
Funds derived from operations	**284,378**	268,939
Issuance of funded debt not due within one year	**160,040**	71,740
Equity arising from issuance of common stock	**1,095**	169
All others - net	**762**	6,248
	446,275	347,096
USES OF WORKING CAPITAL		
Additions to plants, equipment and facilities	**251,034**	235,451
Cash dividends on stock	**71,422**	71,347
Non-current net assets consolidated, principally plants, equipment and facilities (Note 1)	**—**	24,962
Reduction in funded debt not due within one year	**82,276**	53,457
Increase (decrease) in investments and advances - net	**25,929**	(41,884)
Increase in prepaid expenses and deferred charges	**73**	6,188
Decrease (increase) in other non-current liabilities	**688**	(1,363)
	431,422	348,158
INCREASE (DECREASE) IN WORKING CAPITAL	**$ 14,853**	$ (1,062)
INCREASE (DECREASE) IN THE COMPONENTS OF WORKING CAPITAL		
Cash, marketable securities and time deposits	**$ (13,021)**	$ (38,218)
Accounts receivable	**108,329**	60,972
Inventories	**50,251**	66,949
Accounts payable and accrued expenses	**(75,827)**	(74,124)
Short-term borrowings	**(36,717)**	(25,530)
Funded debt installments due within one year	**(13,171)**	(1,439)
Income taxes	**(4,991)**	10,328
INCREASE (DECREASE) IN WORKING CAPITAL	**$ 14,853**	$ (1,062)

See accompanying Notes to Consolidated Financial Statements.

(Thousands of dollars)

1. Summary of Accounting Policies

Consolidation — The consolidated financial statements include the accounts of American Cyanamid Company and all subsidiaries, except real estate subsidiaries whose operations were discontinued in 1974. All significant intercompany transactions and balances have been eliminated. Subsidiaries operating outside the United States and Canada are included on a fiscal-year basis ending November 30.

The equity method of accounting is used for investments in associated companies (20% to 50% owned). Aggregate cost of these investments was $25,544 at December 31, 1978 ($23,640 at December 31, 1977). Dividends of $4,653 were received from these companies in 1978 ($6,098 in 1977). At December 31, 1978, principal associated companies are comprised of the following (% owned):

Arizona Chemical Company (50%)	Mitsui-Cyanamid, Ltd. (50%)
B. Braun-Dexon G.m.b.H. (50%)	Sherkat Sahami Cyanamid-KBC (50%)
Cyanamid-Ketjen Katalysator B.V. (50%)	Societe des Sutures Chirurgicales Robert & Carriere-Lederle (50%)
Cyanenka S.A. (40%)	
CY/RO Industries (50%)	TDF Tiofine B.V. (50%)
Lederle (Japan) Ltd. (50%)	

Formica International Limited (FIL) became a wholly owned subsidiary in April, 1977, after the remaining 60% interest was acquired for $13,800. The company's total investment in FIL approximates the fair value of the net assets of the subsidiary. This acquisition was accounted for as a purchase. Prior to April, 1977, the consolidated earnings statements included only the equity in net earnings of FIL as a 40% owned associated company.

Currency translation — Foreign currency financial statements and transactions are translated into U.S. dollars in accordance with Statement of Financial Accounting Standards No. 8. Exchange adjustments before tax effect ($600 loss in 1978, $25,400 loss in 1977) are included in earnings of the respective years.

Depreciation and amortization — Depreciation is provided on a straight-line composite method over the estimated remaining useful lives of various classes of assets. In view of the variety of plants, equipment and facilities, it is not considered practicable to list the rates used in making the computations. However, the aggregate charge for depreciation was equivalent to 7.1% in 1978 and 1977 of the average amount of depreciable plants, equipment and facilities. When depreciable assets are sold or otherwise retired from service, their cost, less amounts realized on sale or salvage, is charged or credited to the accumulated depreciation account. Expenditures for maintenance and repairs are charged to current operating expenses. Acquisitions, additions and betterments for increasing productive capacity or prolonging service lives of the plant, equipment and facilities are capitalized. Intangibles resulting from business acquisitions are carried at cost and amortized over a period of forty years unless, in the opinion of management, their lives are limited, or they have sustained a permanent diminution in value, in which case they are amortized over appropriate periods.

Inventories — Inventories are carried at the lower of cost or market. Cost is determined on the last-in, first-out (LIFO) method for substantially all inventories in the United States with the remainder determined on the first-in, first-out or average method.

Taxes on Income — The provision for Federal taxes on income is reduced by the investment tax credit using the flow-through method. Deferred income taxes are provided to recognize the effect of timing differences between financial statement and income tax accounting, principally differences in depreciation methods and rates.

Earnings per share — Earnings per share of common stock is based on the average number of shares outstanding during the year, 47,792,323 in 1978 (47,768,905 in 1977). The stock options described in Note 6 do not result in a material dilution of earnings per share.

2. Foreign Operations included in the consolidated financial statements are as follows:

	1978	1977
Net current assets	$219,000	$189,300
Net other assets (principally plants, equipment and facilities)	323,000	289,500
Net earnings of foreign subsidiaries	84,400	70,900
Equity in undistributed earnings of foreign subsidiaries	342,600	302,500

The company provides for taxes on the undistributed earnings of subsidiaries and associated companies where the remittance of such earnings is not considered to be indefinitely postponed. At December 31, 1978, the company has no present intention of remitting undistributed earnings of subsidiaries and associated companies aggregating $360,800 ($306,400 in 1977).

3. Inventories — At December 31, 1978 estimated current cost exceeded the LIFO value of the inventories by approximately $101,000 (1977 — $85,000). It is not practicable to determine the major components of inventory under the dollar value LIFO inventory method.

4. Plants, Equipment and Facilities are comprised of [illegible]

	1978	1977
Land, including mining land	$ [illegible]	[illegible]
Buildings	[illegible]	[illegible]
Machinery and equipment	[illegible]	[illegible]
Construction in progress	[illegible]	[illegible]
	[illegible]	[illegible]

5. Funded Debt, [illegible] portion, is as follows:

	1978	1977
Sinking fund debentures		
5¾% due 1980	$ [illegible]	$ [illegible]
7⅞% due 2001	100,000	100,000
8⅜% due 2006	99,562	99,540
Promissory notes, 3¾% due [illegible]	81,500	85,000
Promissory notes, 8¾% due [illegible]	150,000	—
Commercial paper (see below)	—	51,826
Pollution control bonds		
6.8% due 2000	21,800	21,000
6.5% due 2006	22,400	22,400
5.5% to 6.6% due at various dates through 2008	37,412	32,307
Sundry obligations	25,840	44,347
	$520,184	$442,420

Annual maturities of funded debt and sinking fund requirements for the four years subsequent to December 31, 1979, are as follows: 1980 — [illegible]; 1981 — $14,400; 1982 — $15,600; and 1983 — $9,200.

At December 31, 1977, the commercial paper was considered funded debt as it represented a temporary borrowing pending consummation of a loan agreement in January 1978, at which time the commercial paper was retired.

The 3¾% and 8¾% promissory notes contain certain restrictions including limitations on the payment of dividends. Under the most restrictive of such limitations, the amount of earnings employed in the business at December 31, 1978, which may be applied to the payment of such cash dividends is limited to $158,800.

6. Stockholders' Equity

Authorized Capital includes 650,000 shares of preferred stock with a par value of $1 per share, none of which is outstanding.

Stock Options — Under the company's stock option plan key employees may be granted ten-year non-qualified options to purchase common stock at not less than 100% of market value on the date of grant; 2,300,000 shares were reserved for stock options under the plan. All options are exercisable in cumulative installments of one-third of the number of shares commencing one year after date of grant and annually thereafter.

Details of stock option activity with respect to the present plan and predecessor plan (under which no further options can be granted) for 1978 and 1977 follow:

	Number of shares	Option price: Per share	Option price: Total	Market value: Per share	Market value: Total
Options granted:				(at dates of grant)	
1978	[illegible]	$26.25-29.75	$ 8,128	$26.25-29.75	$ 8,128
1977	275,979	27.75	7,578	27.75	7,578
Options which became exercisable:				(at dates exercisable)	
1978	222,[illegible]	$24.75-27.75	$ 5,827	$26.00-29.125	$ 5,852
1977	183,840	24.00-27.50	4,648	26.82-27.62	5,016
Options exercised:				(at dates exercised)	
1978	118,882	$24.00-28.50	$ 2,024	$25.125-32.50	$ 3,584
1977	7,181	24.00-27.50	173	25.31-29.12	195
Options outstanding:				(at dates of grant)	
Dec. 31, 1978	1,429,482	$24.00-37.25	$39,716	$24.00-37.25	$39,716
Dec. 31, 1977	1,394,748	24.00-37.25	37,919	24.00-37.25	37,919

At December 31, 1978, options to purchase 870,815 shares (855,803 shares at December 31, 1977) were exercisable and 1,976,518 shares (2,257,372 shares at December 31, 1977) were available for option.

Upon exercise of options, the difference between the proceeds and the par value of shares issued or cost of treasury stock, $117 in 1978 and $7 in 1977, is recorded in additional paid-in capital.

Of the options exercised, 77,946 shares in 1978 (1,333 shares in 1977) were surrendered under the plan pursuant to stock appreciation rights.

Additional Paid-in Capital changes during 1978 and 1977 were attributable solely to the issuance of shares under stock options.

Treasury Stock is acquired from time to time and used to fulfill obligations under the company's incentive compensation and stock option plans. During 1978 no such shares were acquired (2,301 shares acquired in 1977). In 1978, 40,734 shares were issued pursuant to the above stock options (5,848 in 1977) and 2,254 shares were issued to retired participants under the incentive compensation plan (3,759 in 1977).

7. Contingent Liabilities and Commitments — Rental expense under property and equipment leases in 1978 was $35,200 ($29,800 in 1977). Estimated future minimum rental expenses under property and equipment leases that have initial or remaining noncancellable lease terms in excess of one year as of December 31, 1978 are: 1979 — $9,700; 1980 — $5,500; 1981 — $3,500; 1982 — $2,200; 1983 — $1,500; later years — $4,700, all in the aggregate. The company accounts for leases as operating leases, which in all material respects complies with Statement of Financial Accounting Standards No. 13.

The present status of significant litigation is disclosed in the section entitled "Antibiotics Litigation" elsewhere in this report.

8. Taxes on Income — The components of the provision are:

	1978	1977
Current:		
Federal	$13,300	$ 8,500
Foreign	62,400	44,800
Other	3,800	4,600
	79,500	57,900
Deferred:		
Federal	11,200	18,300
Foreign and other	(700)	7,900
	10,500	26,200
Total taxes on income	$90,000	$84,100

The principal components of the 1978 deferred tax provision are the excess of tax over book depreciation ($20,000) partially offset by investment tax credit ($8,500) carried forward to subsequent years. In 1977, the principal components of the deferred tax provision are the excess of tax over book depreciation ($11,000) and the realization for tax purposes of deductions resulting from foreign currency fluctuations ($7,000).

A reconciliation between the company's effective tax rate and the U.S. Federal income tax rate of 48% is as follows:

	1978 Amount	1978 % of pretax income	1977 Amount	1977 % of pretax income
Computed expected tax expense	$114,800	48.0%	$103,800	48.0%
Investment tax credit on assets purchased during the year	(20,000)	(8.4)	(15,200)	(7.0)
Other	(4,800)	(2.0)	(4,500)	(2.1)
Total	$ 90,000	37.6%	$ 84,100	38.9%

9. Other financial statement information is as follows: Details of short-term borrowings are as follows:

1978	Domestic	Foreign	Total
Average borrowings during the year	$53,700	$49,700	$103,400
Weighted average interest rate during the year	8%	15%	11%
Highest level of borrowings at any month-end during the year	$78,800	$56,100	$134,900
Weighted average interest rate at December 31	10%	15%	13%
Balance, December 31	$62,895	$47,563	$110,458

1977	Domestic	Foreign	Total
Average borrowings during the year	$ 5,600	$49,100	$54,700
Weighted average interest rate during the year	7%	17%	16%
Highest level of borrowings at any month-end during the year	$25,000	$59,400	$84,400
Weighted average interest rate at December 31	7%	18%	16%
Balance, December 31	$19,968	$53,773	$73,741

At December 31, 1978 the company had $85,000 of domestic short-term lines of credit that were available for general corporate purposes.

Other non-current liabilities at December 31, 1978 include incentive compensation to officers and other employees of $9,300 ($11,100 at December 31, 1977). A portion of such amount is not payable currently in cash but is contingently payable in common stock of the company after employment terminates; pending allotment of the amount available for 1978, the portion so contingently payable in common stock is not determinable. Another portion of such amount is similarly contingently payable based on the performance of the company over a four-year period.

Maintenance and repairs in 1978 were $138,000 ($113,400 in 1977). Social security taxes for 1978 were $54,300 ($42,000 in 1977). Taxes other than income taxes for 1978 were $31,700 ($26,900 in 1977). Advertising in 1978 was $161,200 ($136,900 in 1977).

The company and its consolidated subsidiaries have various pension plans covering substantially all their employees including certain employees in foreign countries. The company's policy generally is to accrue and fund pension costs over the service lives of the covered employees. The total pension expense was $33,600 for 1978 and $27,800 for 1977. The actuarially computed value of vested benefits at the most recent valuation date under the principal pension plans of the company exceeds the current market value of fund assets and balance sheet accruals by approximately $31,000.

10. Quarterly Results (Unaudited) — Net sales, gross profit, net earnings and net earnings per share for the quarters of 1978 and 1977, which are unaudited, are included in the "Financial Review" section.

11. Supplemental Information on Replacement Cost (Unaudited) — The company's annual report on Form 10-K contains specific information with respect to year-end 1978 and 1977 replacement cost of inventories and productive capacity and the approximate effect which replacement cost would have had on the computation of cost of sales and depreciation and depletion expense for the years. Since the company's investment in plants, equipment and facilities is substantial and was made over an extended number of years, the cost to replace these assets (and the related depreciation expense) is significantly higher than the historical cost. Because inventories are of a current nature and because substantially all inventories in the U.S. are recorded on the LIFO basis of accounting, cost of sales on a replacement cost basis approximates the amount in the statements of earnings while the replacement cost of year-end inventories is greater than the amount in the balance sheets.

The amounts reported in the Form 10-K as replacement cost data are based primarily on indices and are not necessarily indicative of either the value which could be received for such assets or management's intention to replace such assets. Similarly, the use of indices results in costs which are not necessarily representative of those which might be incurred in any future period. The data presented in the Form 10-K pertains only to selected balance sheet items and not to monetary or other non-monetary assets or liabilities. It is management's view that the replacement cost data presented in the Form 10-K cannot be used to assess the total effect of inflation on reported results of operations.

CY0005664

12. **Information about Operations by Businesses and** [redacted] in accordance with the provisions of Statement of Financial Accounting Standards No. 14 for the years ended December 31, 1978 and 19[redacted] below:

Businesses:	Agriculture	Medical	Specialty Chemicals	Consumer Products	Formica® Brand Products	Corporate	Consolidated
1978							
Net sales	$611,613	$559,880	$821,628	$356,829	$395,795		$2,745,745
Operating earnings	82,523	85,405	79,656	30,276	32,498		310,358
General corporate expenses						$(32,062)	(32,062)
Interest (expense) income, net						(39,221)	(39,221)
Earnings of consolidated companies before taxes on income							239,075
Equity in net earnings of associated companies	421	5,857	661		(71)		6,868
Identifiable assets	535,577	344,299	758,085	135,183	304,537		2,077,681
Equity in net assets of and advances to associated companies	2,159	14,406	39,653		1,792		58,010
Corporate assets						390,458	390,458
Total assets at December 31, 1978							2,526,149
Depreciation and depletion	20,271	16,338	61,378	3,772	13,528	4,865	120,150
Capital additions	41,598	32,204	134,836	6,165	23,037	13,394	251,034
1977							
Net sales	$555,068	$484,044	$735,322	$320,732	$317,145		$2,412,311
Operating earnings	79,067	70,242	65,890	33,513	27,595		276,307
General corporate expenses						$(26,777)	(26,777)
Interest (expense) income, net						(33,159)	(33,159)
Earnings of consolidated companies before taxes on income							216,371
Equity in net earnings of associated companies	437	3,254	4,524		(1,086)		7,129
Identifiable assets	422,294	324,373	627,812	124,560	266,913		1,765,752
Equity in net assets of and advances to associated companies	1,994	12,036	40,216				54,246
Corporate assets						402,253	402,253
Total assets at December 31, 1977							2,222,251
Depreciation and depletion	12,961	14,847	57,593	3,452	11,367	4,150	104,370
Capital additions	39,892	29,026	121,933	6,442	26,530	11,628	235,451

CY0005665

The company is engaged primarily in the manufacture and sale of a highly diversified line of agricultural, medical, specialty chemicals, consumer and [illegible] Formica® brand products.

Total sales between businesses were approximately $87,400 in both 1978 and 1977. These intersegment sales, which are made at cost, were not significant for any of the businesses except medical ($23,900 for 1978 and $27,800 for 1977) and specialty chemicals ($82,100 for 1978 and $58,900 for 1977).

Operating earnings consist of total net sales less operating expenses. In computing operating earnings, none of the following items has been added [illegible] general corporate expenses, interest expense, interest income, [illegible] earnings of associated companies, and income taxes.

[illegible] assets are those assets that are used in the company's operations [illegible] business or geographic area. Corporate assets are primarily [illegible] marketable securities and construction in progress.

[illegible] Intergeographic sales are made at prices which provide reasonable and appropriate returns based upon the respective properties employed and the businesses conducted, and applicable eliminations have been applied to the intergeographic transactions.

Geographic areas:	United States	Other Western Hemisphere	Eastern Hemisphere	Adjustments and Eliminations	Consolidated
[illegible]					
Net sales to unaffiliated customers	$1,791,952	$353,049	$600,744		$2,745,745
Intergeographic sales	111,244	32,041	9,428	$(152,713)	
Total net sales	1,902,296	385,090	610,172	(152,713)	2,745,745
Operating earnings	151,812	43,404	115,642		310,858
General corporate expenses					(32,062)
Interest (expense) income, net					(39,221)
Earnings of consolidated companies before taxes on income					239,075
Equity in net earnings of associated companies	[illegible]	398	2,478		6,868
Identifiable assets	[illegible]	262,500	386,176		2,077,681
Equity in net assets of and advances to associated companies	22,197	1,916	33,897		58,010
Corporate assets					390,458
Total assets at December 31, 1978					2,526,149
[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]		$2,412,311
[illegible]	[illegible]	27,945	7,596	$(128,310)	
[illegible]	[illegible]	381,287	439,059	(128,310)	2,412,311
[illegible]	[illegible]	41,892	78,495		276,307
[illegible]					(26,777)
[illegible]					(33,159)
[illegible]					216,371
[illegible]	[illegible]	402	[illegible]		7,129
[illegible]	[illegible]	[illegible]	[illegible]		1,765,752
[illegible]	[illegible]	1,394	30,291		54,246
Corporate assets					402,253
Total assets at December 31, 1977					2,222,251

CY0005666

Net Sales and Earnings—Consolidated net sales in 1978 of $2.75 billion were the highest in the history of the company, exceeding sales of $2.41 billion in 1977 by 13.8%. Sales in 1977 represented a 15.2% increase over the $2.09 billion of sales in 1976. Sales gains in both years were achieved in each of the five businesses.

Net earnings for 1978 were a record $155.9 million or $3.26 per share, 11.9% above the $139.4 million or $2.92 per share in 1977.

Medical sales increased 16% and operating earnings were up 22% for the year with the largest gains in the United States and Europe. Sales advances were led by antibiotics, anti-cancer agents, Dexon® synthetic absorbable sutures and the company's Stresstabs® vitamin formulations.

Agricultural sales rose 10% and operating earnings were 4% higher than in 1977. Continued progress with pesticides worldwide and improved domestic and European sales for animal industry products offset the effects of lower prices for fertilizers.

Sales of specialty chemicals, which include fibers, rose 12% and operating earnings were up 21%, both to new highs. Demand for a number of Cyanamid chemicals contributed to the gains.

Consumer product sales increased 11% but operating earnings were [illegible] below 1977, reflecting increased [illegible] competition in the shampoo business and the costs of business-building programs for both new and existing products that were undertaken in 1978. Sales of fragrances and household cleaners were strong.

Sales of Formica® brand products were 25% higher than in 1977 and operating earnings were up 18% from last year. Overseas operations showed good gains, but in the U.S. earnings were adversely affected by 1978's severe winter and start-up and expansion costs of the Evendale, Ohio plant.

Sales and operating earnings for the past five years for each of the company's businesses are shown in the individual business sections in this annual report.

Manufacturing Cost of Sales reflects added volume and the continuing higher raw material, payroll and maintenance costs as the primary reasons for the 13% increase in 1978 and 17% increase in 1977 (including in 1977 FIL manufacturing cost of sales for the first time). Foreign exchange fluctuations related to inventories resulted in a gain of $7.6 million in 1978 and a loss of $11.2 million in 1977.

Depreciation and Depletion increased 15% in 1978 as compared to 17% in 1977. The increases in both years continue to reflect the high level of capital investment to provide necessary capacity, improve efficiency of production units, modernize or replace older facilities, and install equipment required for protection of the environment.

Selling, Administrative and Research Expenses increased by 14% in 1978 as compared with a 13% increase in 1977. Much of these increases resulted from higher payroll costs. Foreign exchange losses not related to inventories amounted to $8.1 million in 1978 and $14.2 million in 1977. Advertising and sales promotion expenses were at increased levels in the consumer business in a continuing effort to improve and strengthen our consumer market positions. Research and process development expenditures increased 12% to $166 million in 1978 following a 16% increase in 1977, reflecting our long-range program to ensure the flow of new products and processes.

Interest Expense increased 16% in 1978 reflecting an increase in both short-term and long-term borrowings. Interest expense increased 34% in 1977, reflecting increased indebtedness and a higher overall interest rate on foreign indebtedness.

Taxes on Income for 1978 were $90 million as compared to $84.1 million in 1977 because of higher pre-tax earnings partially offset by an additional $4.8 million of investment tax credit in 1978. The overall effective tax rate is lower in 1978 than in 1977 primarily because of the investment tax credit.

CY0005667

[illegible]

[illegible]	[illegible]	[illegible]	1976	1975	1974
Earnings					
Net sales	[illegible]	[illegible]	$2,094	$1,928	$1,780
Manufacturing [illegible]	1,639	[illegible]	1,241	1,088	1,003
Depreciation [illegible]	[illegible]	[illegible]	89	78	72
Selling, [illegible]	727	[illegible]	581	526	474
Interest expense	68	47	35	22	18
Taxes on income	90	[illegible]	81	101	104
Earnings of [illegible]	[illegible]	[illegible]	125	143	129
Equity [illegible]	7	7	11	5	17
Earnings from [illegible]	[illegible]	[illegible]	[illegible]	148	146
Discontinued [illegible]	[illegible]	[illegible]	—	—	9
Net earnings	[illegible]	[illegible]	[illegible]	148	155
Per share of [illegible]					
Earnings from [illegible]	[illegible]	2.92	2.84	3.09	3.07
Net earnings	[illegible]	2.92	2.84	3.09	3.24
Dividends	[illegible]	1.50	1.50	1.50	1.45
[illegible]					
(used in calculating earnings per share)	[illegible]	[illegible]	47.8	47.7	47.7
Other Data					
Additions [illegible]	[illegible]	[illegible]	[illegible]	204	139
Current [illegible]	[illegible]	[illegible]	[illegible]	797	802
Current [illegible]	[illegible]	[illegible]	[illegible]	344	343
Working [illegible]	[illegible]	[illegible]	[illegible]	453	459
[illegible]	[illegible]	[illegible]	[illegible]	1,486	1,311
[illegible]	[illegible]	[illegible]	[illegible]	765	659
Funded [illegible]	[illegible]	[illegible]	[illegible]	282	244
[illegible]					
Common [illegible]	[illegible]	[illegible]	[illegible]	244	244
Additional [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39
Earnings [illegible]	1,001	[illegible]	[illegible]	784	708
Less treasury [illegible]	(30)	(31)	(31)	(32)	(32)
Total stockholders' equity	1,254	1,159	[illegible]	1,005	959

[illegible] per share. [illegible] is not material.

CY0005668

The new trial of the United States government's suit against the company and four other drug manufacturers for damages, based upon the government's purchases of broad-spectrum antibiotics and its reimbursing and financing of purchases by others, commenced in June, 1978, this time before the United States District Court in Philadelphia. In May, 1978, the Court had decided that possible issues of fact required the denial of the defendants' pretrial motions to dismiss the government's claims for damages based upon indirect purchases and reimbursements. It appears that the trial will continue well into 1979. [illegible]

On January 23, 1979, the District Court in Philadelphia [illegible]

[illegible]

ruling on January 23, 1979 also dismissed the cancellation claims against two of the patents.

In addition to the United States government suits, suits by the governments of Iran, Kuwait, the Philippines, West Germany, India and Colombia are pending. There is also a suit brought by an individual consumer. No trial dates have been set and the amounts of damages claimed have not been specified for these suits.

The company's share of the claims asserted in the nine remaining suits would be approximately $100 million, but the company believes the claims are grossly exaggerated.

Due to the uncertainties necessarily inherent in litigated matters of this sort, the eventual cost of this litigation to the company, and its disposition, cannot be accurately predicted. During 1977 the company made a provision in the amount of $17 million, which has been charged to earnings [illegible]

[illegible]

amount from current earnings to ta[illegible] account of defense costs incurred in 1978. This amount was not materia[illegible] While the possibility exists that large amounts may eventually be paid, the company believes, on the basis of information and advice presently available, that any additional liability with regard to this litigation above and beyond the amount of the reserv[illegible] will be substantially less than the amounts claimed and would not have a material adverse effect upon the financial position of the company and its subsidiaries. Under present accounting standards, any such additional amounts would be charged against current earnings.

The company denies that it has violated the antitrust laws or engaged in any wrongdoing before the Patent Office.

[illegible]

The Federal Trade Commission has commenced a proceeding before the Trademark Trial and Appeal Board to cancel the registration of the Formica[illegible] trademark of the company's subsidiary Formica Corporation, on the ground that the word "Formica" has allegedly become the generic name for all decorative laminate products. Formica Corporation believes that the case is unjustified and is contesting it vigorously.

CY0005669

Alden, IA
Andersonville, GA
Azusa, CA
Benton, AR
Bound Brook, NJ
Bradley, FL
Carolina, PR
Charlotte, NC
Chattanooga, TN
Chicago, IL
Childersburg, AL
Clifton, NJ
Cloquet, MN
Damascus, VA
Danbury, CT
Demopolis, AL
DeRidder, LA
Escanaba, MI
Evendale, OH
Fort Madison, IA
Forth Worth, TX
Frankfort, IN
Fortier, LA
Georgetown, SC
Hamilton, OH
Hannibal, MO
Havre de Grace, MD
Hazleton, PA
Jackson, MS
Joliet, IL
Kalamazoo, MI
Linden, NJ
Longview, WA
Manati, PR (2)
Marietta, OH
Mays Landing, NJ
Memphis, TN
Michigan City, IN
Milton, FL
Mobile, AL
Monticello, MS
Painesville, OH
Pearl River, NY
Perrysburg, OH

Plymouth, NC
Savannah, GA
Shippan, CT
Sierra, CA
Springhill, LA
Tarboro, NC
Wallingford, CT
Weeping Water, NB
West Springfield, MA
Willow Island, WV
Woodbridge, NJ
Woodbury, NY

Algete, Spain
Atequiza, Mexico
Baie d'Urfe, Canada
Baulkham Hill, Australia
Bilbao, Spain
Bogota, Colombia
Botlek, Netherlands
Bradford, England
Brussels, Belgium
Buenos Aires, Argentina (3)
Bulsar, India
Caracas, Venezuela (2)
Cartagena, Colombia
Catania, Italy
Derrimut, Australia
Gosport, England
Guadalajara, Mexico
Guarenas, Venezuela
Hsinchu, Taiwan
Hsinfeng, Taiwan
Hurstville, Australia
Isando, South Africa
Karachi, Pakistan
Leiden, Netherlands
Managua, Nicaragua
Mexico City, Mexico (2)
Newcastle, England
Niagara Falls, Canada (2)
North Shields, England
Oullins, France
Papakura, New Zealand
Quillan, France
Resende, Brazil
Rio de Janeiro, Brazil
Sao Paulo, Brazil
St. Jean, Canada
St. Mary's, Australia
Tahara, Japan
Witbank, South Africa
Wolfratshausen, West Germany

Botlek, Netherlands
Bound Brook, NJ
Bradford, England
Catania, Italy
Clifton, NJ
Danbury, CT
Evendale, OH
Gosport, England
Hsinchu, Taiwan
Los Baños, Philippines
Maidenhead, England
Milton, FL
Niagara Falls, Canada
Painesville, OH
Pearl River, NY
Porto Alegre, Brazil
Princeton, NJ
Stamford, CT
Zarzoura, Egypt

(% Owned)
Arizona Chemical Company (50%)
B. Braun-Dexon G.m.b.H. (50%)
Cyanamid-Ketjen Katalysator B. V. (50%)
Cyanenka S. A. (40%)
CY/RO Industries (50%)
Lederle (Japan) Ltd. (50%)
Mitsui-Cyanamid, Ltd. (50%)
Sherkat Sahami Cyanamid-KBC [illegible]
Societe des Sutures Chirurgicales
Robert & Carriere-Lederle (50%)
TDF Tiofine B. V. (50%)

Brewster Phosphates
[illegible]Catalyst Company
[illegible]um Enterprises

CY0005670

Agricultural [illegible]
Joseph J. Ga[illegible]
Animal feed, [illegible] products, insecticides, fungicides and [illegible]

Cyanamid [illegible]
John H. Schriever, *President*
Manufactures, [illegible] Cyanamid's products, except for Household, Shulton and Jacqueline Cochran products, and fertilizers, fibers and catalysts, through subsidiaries and distributors in Canada, Latin America, Asia and the Pacific.

Cyanamid Europe/Mideast/Africa
Ben H. Loper, *President*
Manufactures, imports and markets Cyanamid's products, except for Household, Shulton and Jacqueline Cochran products, and fertilizers, fibers and catalysts, through subsidiaries and distributors in Europe, Africa and the Middle East.

Fibers Division
Philip G. Connell, Jr., *President*
Creslan® acrylic fibers for apparel, home furnishings and industrial applications; [illegible]

Formica Corporation
Martin B. Friedman, *President*
Formica® brand decorative laminates and [illegible] component panels for residential and commercial construction; adhesives; Sanitas® and Wallclad® coated wall fabrics from Standard Coated Products.

Household Products Division
John H. Dietze, *President*
Household maintenance and cleaning aids, including Pine-Sol® cleaner-disinfectant-deodorizer.

Industrial Chemicals Division
Fredric E. Detoro, *President*
Basic chemicals and intermediates for the chemical processing industries; polymers and specialty chemicals for papermaking, mineral ore processing, water treating and oil production; catalysts for petroleum refining and automotive emissions; molding compounds and resins for coatings, laminates and adhesives. Structural adhesives and aluminum honeycomb for aircraft and industrial applications. Unitane® titanium dioxide.

Jacqueline Cochran, Inc.
Carlo F. Bifolli, *President*
Manufactures and markets prestige designer fragrances including Parfums Nina Ricci®, Paris; Parfums Carven®, Pierre Cardin® fragrances for men and women; and a Contemporary Fragrance Group consisting of CIE® and Tabac Original® fragrances.

Lederle Laboratories Division
David Carroll, *President*
[illegible] vaccines; Davis & Geck surgical sutures and hospital products; fine chemicals and bulk pharmaceuticals.

Organic Chemicals Division
Gerard A. Fodera, *President*
[illegible] organic and inorganic pigment colors [illegible] Chemical Co., Inc.

[illegible]

[illegible]

[illegible]
[illegible], *President*
Manufactures and markets household maintenance and cleaning aids, personal care and grooming products and fine and contemporary fragrances through subsidiaries, distributors and licensees in countries outside of the United States.

Shulton, Inc.—Toiletries Division
Paul C. Baker, *President*
Personal-care and grooming products, including Old Spice® men's toiletries and Breck® hair care preparations.

® Trademark.

Agricultural Research Division
Robert H. Becker, *Director*

Chemical Research Division
Jason M. Salsbury, *Director*

Consumer Products Research Division
D. Dennis Heard, *Director*

Controller's Division
Robert D. Reisman, *Controller*

Corporate Planning
Frederick W. Armstrong, *Director*

Engineering and Construction Division
Herbert H. Holmaier, *Director*

Federal Government Relations
Don A. Goodall, *Director*

Formica Products Research Division
Lee A. Landers, *Director*

Investor Relations
Wallace G. Taylor, *Director*

Law Division
Donald C. Droste, *Director*

Materials Planning and Procurement Division
Theodore E. Hazell, *Director*

Medical Research Division
George L. Sutherland, *Director*

Personnel Division
W. Perry Brown, *Director*

Public Affairs Division
Joseph C. Calitri, *Director*

Tax Division
Alan M. Breitman, *Director*

Transportation and Distribution Division
Arthur C. Fennimore, *Director*

Treasury Division
Richard L. Martino,
Director of Financial Services and Treasurer

CY0005671

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Board of Directors

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Borden R. Putnam	*Senior Vice President American Cyanamid Company*
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William L. Wearly	*Chairman of the Board and Chief Executive Officer Ingersoll-Rand Company Diversified manufacturer of machinery and equipment*

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Borden R. Putnam	*Senior Vice President*
Charles E. Austin	*Group Vice President*
George P. Bywater	*Group Vice President*
Edmund G. Vimond, Jr.	*Group Vice President*
James I. Wyer	*Vice President and General Counsel*
W. Perry Brown	*Vice President*
Richard L. Martino	*Director of Financial Services and Treasurer*
Robert D. Reisman	*Controller*
John K. Bangs	*Secretary*

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William A. Liffers
George J. Sella, Jr.

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Clifford D. Siverd *Chairman*
James G. Affleck
James B. Fisk
Thomas P. Forbath
L. Emery Katzenbach
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Ian K. MacGregor
Clifford D. Siverd
William L. Wearly

Nominating Committee

William L. Wearly *Chairman*
Ian K. MacGregor
George L. Schultz
James G. Affleck *ex officio*

Transfer Agent and Registrar

The Chase Manhattan Bank, N.A.
New York, N.Y. 10015

Stock Exchanges

Cyanamid's common stock is listed on the New York Stock Exchange as well as on stock exchanges in Amsterdam, Basle, Frankfurt, Geneva, Lausanne and Zurich.

Printed in U.S.A.

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1978 Annual Report