

“corporations grow . . . in the personal shadow of one man . . .”

In 1893, just one year after the first gasoline-powered American automobile had rattled and backfired its way to start a new U.S. industry, and the same year that Henry Ford was building his first car, the Manhattan Rubber Manufacturing Company was established in Passaic, New Jersey.

In 1895, the General Asbestos and Rubber Company was founded in North Charleston, South Carolina. That was the year of the first automobile race in America, won by J. Franklin Duryea, who white-knuckled his snorting machine over the 90-mile course to the finish line in 8 hours and 48 minutes.

Seven years later, the Olds Motor Works of Detroit set a record for producing 2500 single-cylinder machines — with the “horse-wanted” look — price-tagged at \$650. That year, the A. H. Raymond Company was established in Bridgeport, Connecticut, the home of the luxurious Locomobile.

By 1906, when the United States Asbestos Company was organized in Manheim, Pennsylvania, automobiles had taken on a bit of class. Most had pneumatic tires and gas headlamps. Some had sliding-gear transmissions. And a few had geared steering systems that put motoring within the “strength of the average woman driver.” Electric starters and lights were still years away.

Each of those companies, Manhattan Rubber, General Asbestos and Rubber, A. H. Raymond, and United States Asbestos, manufactured its own special product lines. Manhattan specialized in mechanical rubber goods, General Asbestos in asbestos yarns, United States Asbestos in asbestos sheet and packing, A. H. Raymond in brake lining and brakes.

It was the A. H. Raymond Company that was to become the catalyst for drawing together the talents, the products, and the assets of those four companies to form, years later, one of the great corporations of American industry, Raybestos-Manhattan, Inc.

Starting on a shoestring, and a knotted one at that — an insolvency of \$1.01 for January, 1902 — the 4-man A. H. Raymond Company opened shop in a building no larger than a house, to manufacture brake lining, the Raymond brake, patented later that year, and clutch facings. Up to that time, brakes were erratic and dangerous, simple straps wrapped around a drum. If a brake failed it had to be repaired by a blacksmith.

By 1906, the Raymond Company had become recognized throughout the automobile industry for quality asbestos- and copper-wire mesh linings that did not char, and for the pedal-smooth, grab-free action of the Raymond brake. A tradename for the non-charring brake lining was needed. "Raybestos" was born, the word coined from the first three letters of Raymond, the last six from asbestos.

Despite the insolvency of \$1.01 for January 1, 1902, the company prospered. By 1910, sales reached \$273,156.61; plant assets, \$21,781.91.

That year, Sumner Simpson, whose insight and influence were to lead R/M through nearly four decades, joined the Raybestos firm, which had become the Royal Equipment Company of Bridgeport, manufacturers of the Royal Marine Engine. Elected president of Royal shortly thereafter, Simpson restructured the company in preparation for the coming demands from the booming automobile industry, establishing prudent debt-to-equity ratios, a strong credit position, higher product standards, and better marketing methods.

Automobile production was rising sharply. In 1911 alone, nearly 200,000 cars had rolled off the assembly lines, followed in 1912 by almost twice that number, of which 78,000 were Fords. Although cars then had 2-wheel brakes — 4-wheel brakes remained in the future for some years — that still amounted to a lot of brake lining and more clutch facings.

Under Simpson's leadership, the Royal Equipment Company soon outgrew its original facility and moved to a larger Bridgeport plant of 85,000 square feet in 1912. In less than two years, the new facility became inadequate to handle the increasing volume of brake lining and clutch facings for the faster, heavier, more powerful cars, trucks, and buses of that day. The plant went through extensive enlargements during the next two years.

By 1916, the tradename Raybestos had become so synonymous with brakes and clutch lining, that the Royal Equipment Company was incorporated in Connecticut as the Raybestos Company with Sumner Simpson its president. That was a milestone year for the new company; sales rose to \$1,344,392. And it was a milestone year for the automobile. Cadillac became a division of General Motors; Charles W. Nash left GM to start his own company; Studebaker, originally wagon makers, exhibited a gold chassis at the 1916 automobile show.

Increased business, multiplied by the overwhelming demands for the new patented Raybestos clutch facing, pointed to even more expansion.

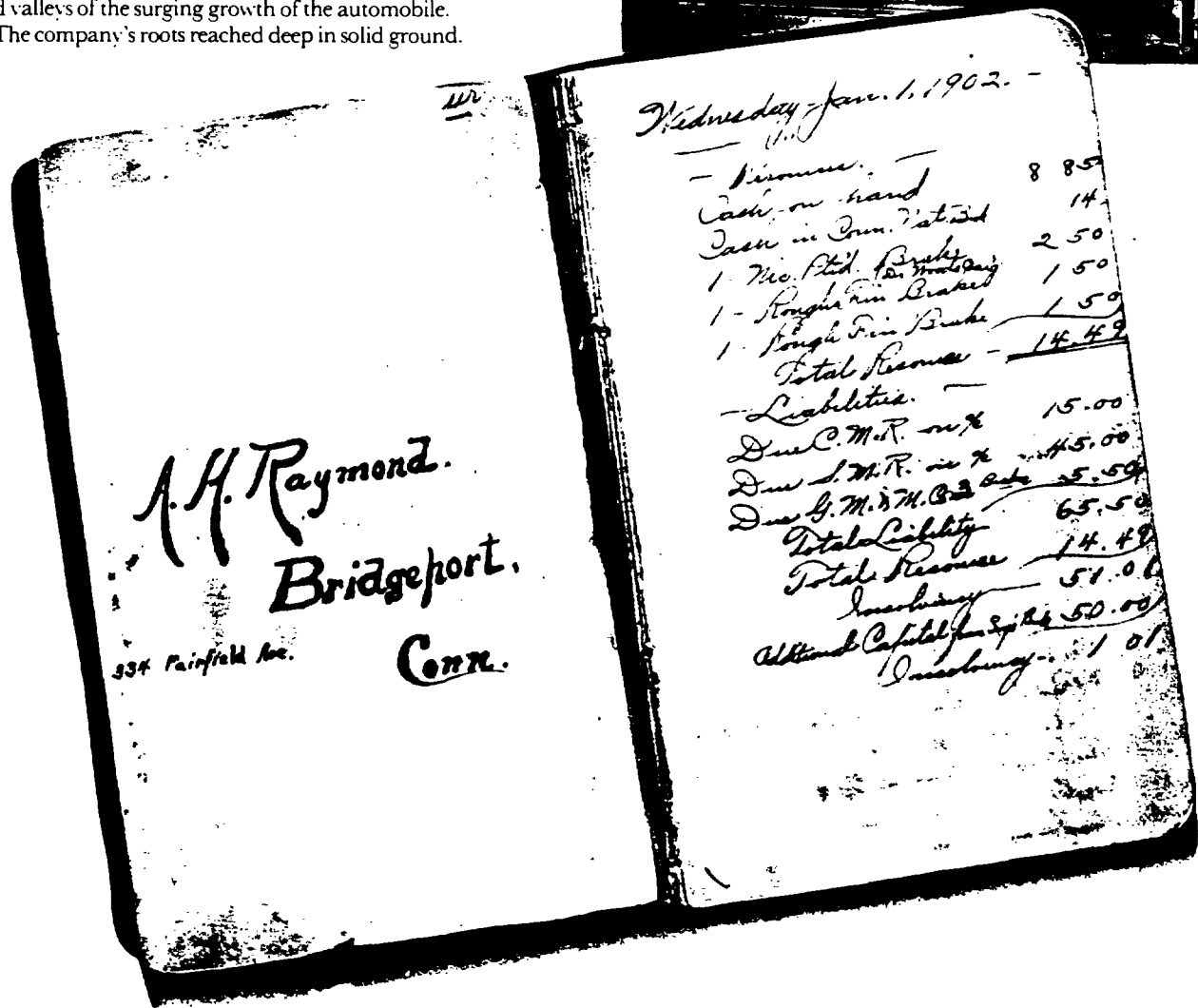
Beginnings

The molded facings were being bought like cookies. Nearly every vehicle on the road was or soon would be Raybestos-equipped, from the Harley-Davidson motorcycle to the elegant machines like Peerless, Locomobile, Packard, Cadillac, Marmon, and Lincoln. The Republic and the General Motors truck had them, and the Avery and Caterpillar tractors. Buick's orders for delivery in 1920, alone, amounted to 1 million facings, equal to Raybestos' entire production for 1919. Orders for 50,000 facings were common. At least 2,900,000 facings were produced from 1918 through 1920.

To meet these demands, Raybestos built a new plant in Stratford, Connecticut in 1919.

Most corporations rise to greatness during their formative years, through the personal shadow of one man. So it was that Sumner Simpson, the right man, at the right place, at the right time, would lead the Raybestos Company through the peaks and valleys of the surging growth of the automobile.

The company's roots reached deep in solid ground.



*“to measure is to
economize; to test
is to progress . . .”*

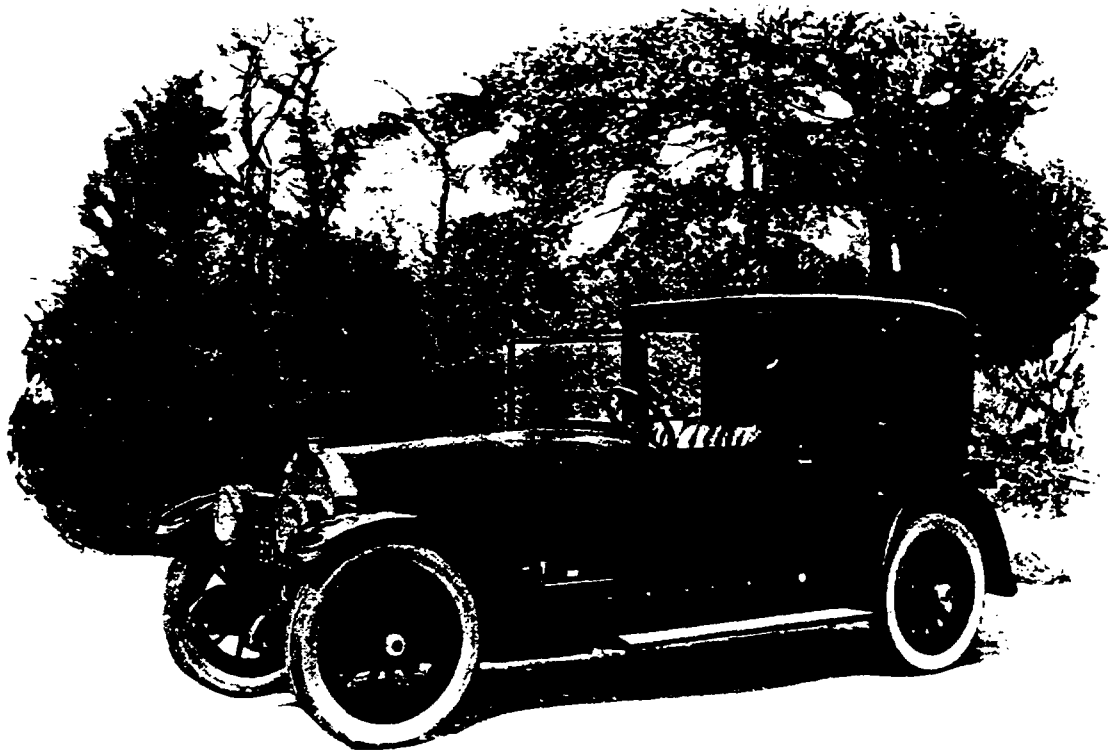
With more than 9 million motor vehicles registered in 1920, the automobile, at first a luxury, was fast becoming a necessity and the drive gear of American industry. Any vehicle on the road probably had a clutch or brake equipped with Raybestos material.

Export business had increased sharply following the First World War, and by 1920 Raybestos products were used worldwide, a substantial amount by Canada. This eventually led to the building of a Raybestos plant in Peterborough, Ontario.

During the early 20's, production of brake lining alone averaged nearly 11 million feet annually and was increasing. High-quality asbestos yarns were becoming scarce. Raybestos had been importing yarns from England to augment the quantities from the United States Asbestos Company, which were more suitable for Raybestos' purpose.

To maintain quality and to meet production requirements, Raybestos, in 1924, acquired the General Asbestos and Rubber Company, North Charleston, South Carolina, which produced not only asbestos yarn, but also packings for industry.

In 1925, Raybestos began a facilities expansion that would last until the end of 1928, the year Ford introduced the Model-A with conventional 3-speed transmission that replaced the old Model-T, which had a pedal shift. That same year, Chrysler brought out the snappy 4-cylinder Plymouth, and Buick had 4-wheel brakes.



the adventurous 20's



The new corporation ended 1929 with sales of \$22,290,619, during its first five months. Current assets were \$9,962,608., nearly 9 times the current liabilities of \$1,143,148.

The 20's had taken the measure of the companies competing in the great automobile race. Only those with the reserve power of visionary management, tempered with caution gained from experience, and backed with financial strength were to survive the final test: staying in business.

That the Manhattan Rubber Manufacturing Company, United States Asbestos Company, and Raybestos Company would ever merge in the mid-twenties would have been thought improbable. The companies were competitors.

Manhattan produced both brake lining and clutch facings, as did Raybestos. United States Asbestos made a low-cost good brake lining. In addition, United States Asbestos had a large production of packings that accounted for 60 percent of its sales. Manhattan's total automotive business amounted to only 16½ percent of the company's overall sales. The rest came from general industrial rubber products, well diversified. For Raybestos, automotive business had reached 85 percent of volume, and the company wisely looked to diversification as a hedge against becoming too committed to the runaway automobile industry.

Sumner Simpson foresaw the tremendous competition that lay ahead in friction materials. The trend was toward rubber and resins. Manhattan knew the rubber business, Raybestos knew asbestos. The merging of Raybestos with Manhattan could provide a base for additional growth in the automotive markets. And it could open the door for the further penetration into the profitable markets of general industry, and eliminate the need for new plants and machinery to satisfy the demands of all industries for friction-material products.

Through Simpson's efforts, Raybestos, Manhattan Rubber, and United States Asbestos merged to form Raybestos-Manhattan, Inc. on July 5, 1929, less than four months before Black Tuesday, October 29, 1929 — the memorable collapse of the great bull stock market and the onset of the Great Depression that would last for 10 years. Arthur F. Townsend was elected Chairman of the Board and Sumner Simpson, President.

*“the one permanent
thing about products
and markets is
change . . .”*

This was the decade of sober evaluation, weighed risk-taking. In three years, the Index of Common Stock Prices would plummet from 188 to less than 50. Established firms had failed or were failing. Factory doors closed. Former executives sold apples on street corners. No corporation, no shopkeeper would be spared the effects of the declining economy. Mere survival was the mark of success.

The new Raybestos-Manhattan Corporation had entered the 30's in a comparatively good position. Replacement of brake lining and clutch facings was becoming the very core of the company's annual sales and earnings. Thirty-five hundred service stations throughout the U.S. and Canada were licensed to deal in Raybestos products. Forty thousand garages carried Raybestos and Grey Rock replacement materials and parts. Since 1929, Raybestos-Belaco had been established to manage distribution to the foreign market. In 1930, Allied Asbestos and Rubber Company was set up to handle sales worldwide.

This growth had been fueled by a vigorous research and development program. From the beginning, when Arthur H. Raymond had consulted his former high-school chemistry teacher on the feasibility of impregnating cotton brake lining with solutions to resist charring, research had been the reason for much of Raybestos' success. By the 30's, substantial spending on R&D was keeping Raybestos well ahead of competition. Selecting materials and compounding the ingredients for future design. Testing products round-the-clock, thousands of miles per year in vehicles that pushed the tested parts to the limit. Working with manufacturers to adapt the tested materials and products in their product line.

Raybestos-Manhattan was setting the pace of the industry. Added construction at the Stratford plant, the site for the manufacture of the new molded brake lining developed by Raybestos, began in 1932.

Over 4000 banks failed in 1933. Still the automobiles kept coming out of the factories. Aerodynamic styling was the theme, as displayed in the sweeping lines of the Reo Royale, the bug-like lines of the Chrysler Airflow, and the smooth curves of the Graham.

In 1935, more than 22,000,000 automobiles were in use in the U.S. “Knee-action” front-end suspension made roads seem smoother. “Free-Wheeling” reduced foot-pedal work in gear shifting and saved gas. The Cadillac V16 was in its fifth year, the Ford V8 in its third.

the reviving 30's

Products changed with the changing markets. Semi-metallic clutch facings, first developed by Raybestos in 1936, appeared in trucks, buses, and track-laying tractors, the year before woven brake lining operations were shifted from the Bridgeport plant to facilities in North Charleston, and Manheim, Pennsylvania.

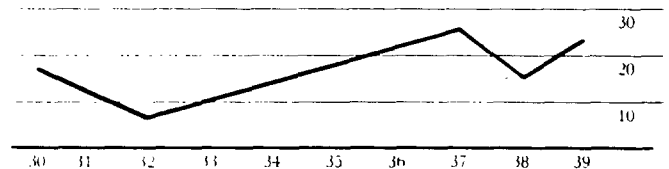
The overall business decline that had plagued industry since the disaster of 1929 was slowly reversed. One big reason was the increase in production of equipment for the U.S. armed forces. Raybestos-Manhattan became an important supplier of goods to the Federal Government, led by its development of the Raybestos resin-asbestos brake blocks for aircraft, which would shorten the landing distance of heavy bombers.

In 1939, Raybestos consolidated operations in Stratford. That same year, Hitler's tank divisions rumbled into Poland.

The war that was to become the Second World War had begun.



NET SALES IN MILLIONS



“we have become so engrossed in our selling . . . that we are not keeping step in our telling . . .”

R/M entered the 40's stressing the security that comes from safe brakes, telling the 50 million readers of Saturday Evening Post, Life, Time, Colliers, and Country Gentlemen they could have their brakes checked free at their Raybestos dealers. With the cooperation of Mayor La Guardia, the New York City Police Department placed 25,000 safety posters throughout the city featuring the Raybestos "Friendly Cop" to tell the story. Safety councils and police departments all over the country requested posters. It was one of the most successful promotional campaigns ever staged by the corporation.

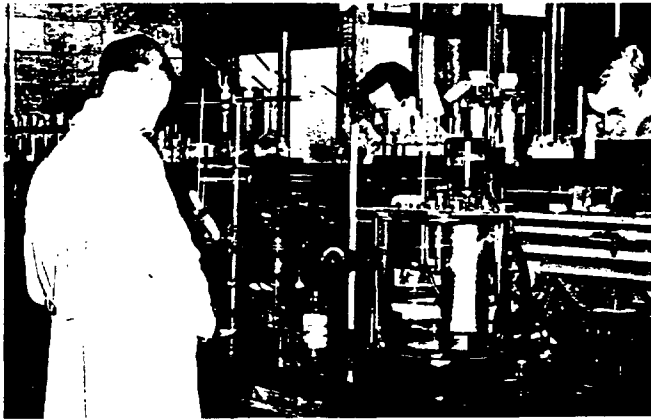
But there was another kind of security worrying America. Could it stay secure and still avoid involvement in the spreading war in Europe. R/M, like other corporations, had kept one eye on the European conflict; the other on the increasing demand for defense products. Despite the expressed neutrality of the United States and the rising economy bolstered since the mid-30's with orders for national defense, the times remained unsettled.

In 1940, Col. Arthur F. Townsend, Chairman of the Board of R/M, died. That same year, the passing into law of the first peace-time draft in the history of the United States erased some of the doubt about future involvement in the war in Europe.

By 1941, when the Stratford plant was turning out sintered-metal clutch parts, first used in earth-moving equipment, R/M was devoting 50 percent of its production to military use. Within months, several of R/M's key men joined the Advisory Committee of the War Production Board in Washington, D.C.



the demanding 40's



After the holocaust of Pearl Harbor and the declaration of war by the U.S. on December 11, 1941, many materials vital to the machinery of war, already in short supply, became even scarcer, if not unavailable. Natural rubber was one, and R/M turned to Buna and Butyl synthetics, as it had years earlier to Neoprene for special purposes. Asbestos was another, its availability and textile production controlled by the government.

Automobile production, except for military vehicles, had all but stopped, to make way for round-the-clock defense production. By 1942, R/M products were vital parts in the muscle of the United States land, air, and sea armament. Virtually every tractor, tank, car, trailer, motorized gun, weapons carrier, crane, road-making machine, bulldozer, bomber and fighter plane, ship and submarine depended on R/M products. Clutch facings. Brake lining. Brake blocks. Fuel and oil connections. Packings. Hose. V-belts. Sintered-metal parts. Battery-compartment linings. Propeller-shaft coverings. Deck matting. Gaskets. Seals. Cable covering. From 1941 through 1945, at 30,000 linings a day, Raybestos produced 90 percent of the brake linings for all U.S. heavy bombers made for World War II.

On October 28, 1943, the Manhattan Division was 50 years old. That year a total of 1700 R/M employees were in the armed services, many of their jobs filled by women who, for nearly three years, helped to "put it all together." Within one year that total would reach 2600, and management would be planning for the returning veterans and the conversion to peacetime operations, even though the end of the war seemed years away.

Every division in the corporation by 1944 had received the Army-Navy E award at least twice, and the Canadian Division, the V-flag. That year R/M employment totaled 8000, and net sales, \$60,692,703.

With peace declared in Europe in May, 1945, and in the Pacific in September of 1945, the war that would go down in history as the 4 Trillion Dollar War officially ended.

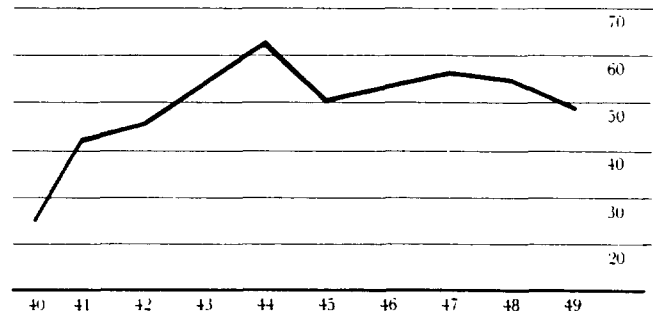
It had been a period of 3-shift days, tiring machinery, and hot smokestacks. The smokestacks would become cool, following the war's end, but not for long. Industry's tired machines had to be refurbished, household goods, automobiles, and trucks replaced.

Automobile production started again in the spring of 1946, the "new" models no more than repeats of those of 1942. Raybestos resumed designs of parts for the automatic transmission, curtailed for four years, and of other products that had been set aside during the war. There were other products designed and built for the transportation, chemical, paper, mining, petroleum, agricultural, coal, lumber, shipping, and railway industries.

R/M turned to the task. Long before the downward trend that was expected to follow the war became apparent in 1948, the corporation had been evaluating realignment of facilities and products, and readying for the future.

In 1948, John F. D. Rohrbach, Executive Vice President, was elected President of R/M. Sumner Simpson, who as President since its founding in 1929, had led the corporation through the worst depression and war in history, was elected Chairman of the Board, the position left vacant since the death of Colonel Townsend in 1940.

NET SALES IN MILLIONS



*“we now enter a
different period,
a period of
readjustment...”*

At mid-century, American industry was slowly breaking the holding pattern it had been in since the slump following WW2. Hopes by the taxpayers that tanks, jeeps, and guns would be hammered quickly into refrigerators and automobiles had been chilled by the new “cold” war now becoming warm from the mounting tension that shifted from Europe to Asia. After the involvement of the U.S. in Korea in June of 1950, government controls, allocations, manpower shortages, and increased taxes pointed the direction industry would take for years to come. It was not the time for prophecy but for readjustment and cautious venture.

Yet, for R/M 1950 became the best year on record. Sales rose to nearly \$66 million and earnings were the highest in its history. R/M looked to expansion in 1951 purchasing 60 acres in Crawfordsville, Indiana for the future site of the Wabash Division which would manufacture powdered metal products, essential for national defense. The plant became operational in 1952, the year R/M purchased 42½ additional acres for expansion of the Stratford facility. Sales that year increased to slightly less than \$85 million.

On June 13 of 1953, Sumner Simpson died, his position as Chairman of the Board left unfilled. Corporations are said to grow in the personal shadow of one man, and R/M had grown in Simpson's. After 43 years of building the company, the roots of his sound management reached deep. Keeping a prudent debt-to-equity ratio. Setting, not following the pace of the industry. Developing products on the strength of good research and development. Making employee relations human relations. Those were strong roots to grow from.

Throughout 1953, the year the Korean conflict ended, all R/M Research and Development Departments were further strengthened for the design and manufacture of new products arising from acquisitions already made and those to come. Expansion continued in 1953, the corporation investing \$1.6 million in asbestos mining property in British Columbia, Canada. The new plant at Neenah, Wisconsin was completed at the cost of \$820,000.

Acquisition of the Revolite Asbestos Laundry and Padding Division of Atlas Powder Company in 1955 added to the diversification of R/M's textile products. That year, R/M received for the second time the United Shareholders annual meeting award for meritorious achievement in management and stockholder relations and, for the sixth consecutive year, the certificate of excellence from the American Institute of Management.

the enterprising 50's



In 1956, an additional plant at Peterborough, Ontario and another unit at Neenah, Wisconsin were started to accommodate increasing business. Net sales were \$84.6 million, just short of the all-time high of \$84.9 million reached in 1951. That year R/M set a record for paying dividends to its stockholders for 63 straight years, a precedent that has never changed.

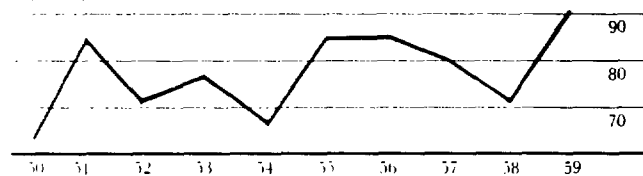
Including the acquisition of the Graf Manufacturing Company in Paramount, California, for the production of fluorinated polymers, investment for facilities expansion amounted to nearly \$2.4 million in 1957. Sam Hanks won the Indianapolis 500 on Raybestos disc brake pads that year, the first of 23 consecutive wins for Raybestos-equipped cars at Indianapolis. The next year, the Studebaker Avanti would be the first passenger automobile to feature the Raybestos disc brake pads.

In October of 1957, the USSR aroused the world by orbiting a 184-pound "Sputnik" beeping its way around the earth and, a month later, by putting up another weighing more than a half ton containing a dog. The United States countered in February 1958, successfully launching into orbit its first satellite, Explorer I. The space race was on, a race that could shape man's lot for better or warp it into a plotless orbit, depending on how the race was run.

R/M established the Pacific Coast Division the same year, relocating the production of fluorinated polymers from Paramount to a new plant at Fullerton, California.

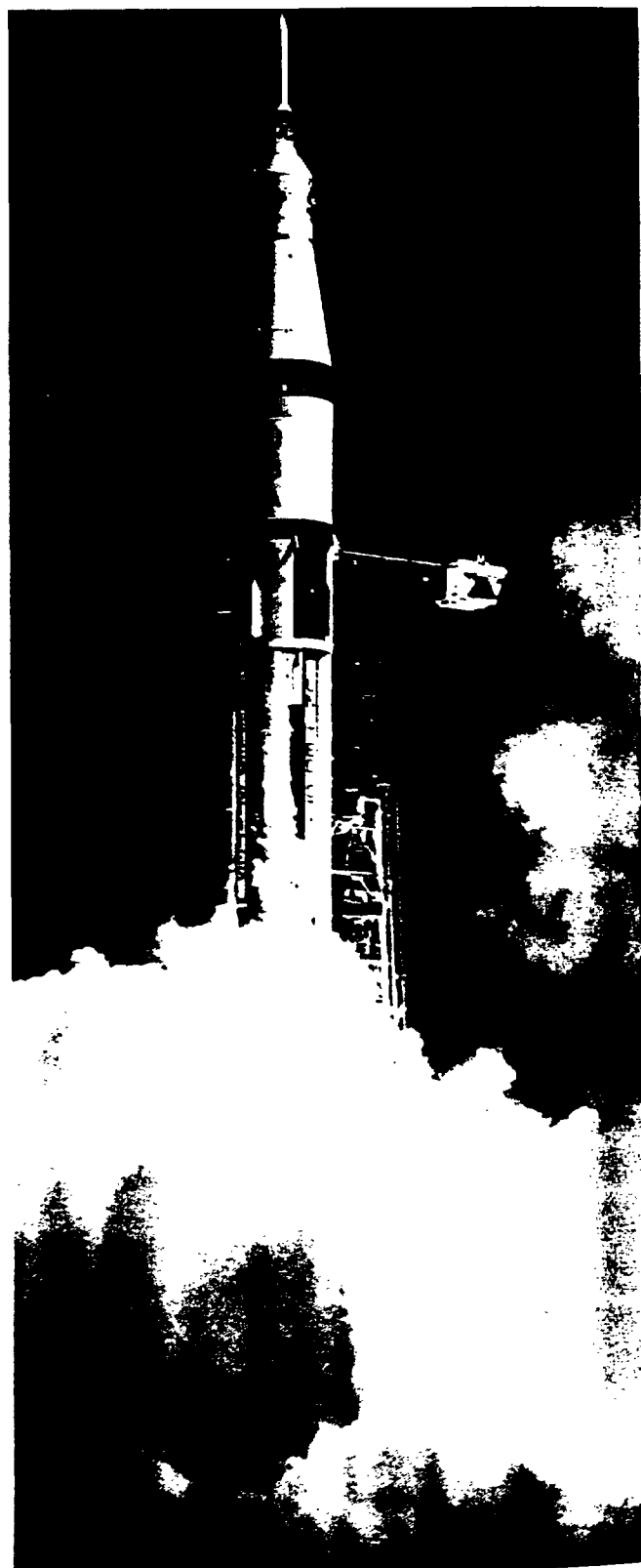
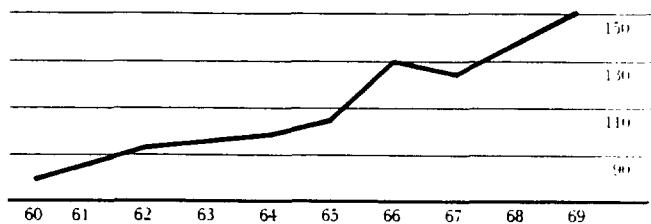
What had begun as a period of predicted readjustment became for R/M a decade of marked success through improvement and expansion of facilities, and acquisition. R/M was ready for the new space age. Its heat-resistant materials already had helped put Explorer I into orbit.

NET SALES IN MILLIONS



*"nothing we sell is
as important as
the business of
saving lives..."*

NET SALES IN MILLIONS



the searching 60's

With man's search into space in the 60's came the search for materials that would safely get him there and back — the search for products that did not exist earlier. Products that would withstand new combinations of stress, vibration, pressure, corrosion, and extremes of high and low temperature. That would not fail in the vacuum of dark space. That would save the lives of those who probed it.

Man's threshold now opened into eternity of space itself, and the words reliability and safety took on wholly new meanings.

Saving lives had been R/M's product, not a chance by-product, since 1902, when the search for safety in automobile brake design began. Long in the vanguard of rubber, asbestos, and sintered-metal techniques and specialized plastics, R/M moved into a new product area that was to make a major contribution to safety of the space program. This was the creative development of composites — blends of materials whose desirable qualities had been retained, the undesirable cast out, by special processing. R/M composites added strength to structural parts. Insulated against temperatures as hot as 5000°F and as cold as -392°F. Protected liquid oxygen from catastrophic contamination. Sealed liquids and gases from the intrusion of hostile environments. Prevented errant combustion.

By 1960, composites had changed the very concepts in the design handbook for man's new interplanetary ventures. R/M had written many of those pages and was adding new ones, for R/M composites had become vital to virtually every major U.S. space effort.

In sum, it would take composites to send man to the moon, to garb him, feed him and give breath while he was there, to return him safely to earth.

As man reached outward into space, he also looked earthward. It was a time of social unrest cresting on a new awareness for the environment. And it was a time of confusion. The paradox of Vietnam, smoldering for nearly 10 years, finally fanned hot in 1965 with the commitment of U.S. Forces to defend South Vietnam. Industry perched on the 3-legged stool of satisfying the citizenry, supporting the space effort, and backing the new military front.

In 1961, Alan B. Shepard, Jr. became the first American in space with the suborbital flight in Mercury Freedom 7. R/M added a complete series of hydraulic parts that year to broaden its automotive, industrial aircraft, aerospace, and military product lines.

By 1965, when Gordon Cooper had orbited the earth 22 times in Mercury Faith 7, R/M was producing components made of composites and stock materials; these were essential to saving lives on earth, in the depth of the ocean, and in space. Heat-resisting asbestos-reinforced plastics for rocket nozzles, blast tubes, rocket-motor casings and nose cones. Powdered metal

disks that stopped accidental escape of atomic radiation from the cooling system of atomic submarine reactors. Sintered "fire-eater" copper brake discs for shipboard jet catapults. Disc brake pads for commercial jet liners. "Fadeless" braking for the automotive industry distilled from nearly two decades of brake tests at the Indianapolis 500 and at every stock car race in the country. An elastomer-graphite smog control device for

automobiles. REFSET[®], the nonflammable fluoroelastomer that prevents burning in 100-percent oxygen atmosphere of spacecraft.

The decade also saw the introduction of NOVATEX[®], the "great protector," providing insulation for power plants, nuclear reactors, and for a variety of industrial and shipboard applications. NOVATEX[®] is a "wet" process that locks in asbestos fibers. So doing, it exceeds OSHA control standards. It, too, saves lives.

In 1967, the year Surveyor 6, first U.S. moon probe to move laterally on the moon's surface, completed its mission. R/M expended over \$3.3 million for facilities expansion. John F. D. Rohrbach was elected Chairman of the Board, and William S. Simpson named President and Chief Executive Officer. Simpson previously had been elected Secretary and Member of the Board in 1951, a Vice President and General Manager of Raybestos Division in 1953, and Vice President of the Canadian Division.

A year later, John F. D. Rohrbach died in December, and W. S. Simpson, retaining the title of Chief Executive Officer, was named Chairman of the Board.

Acquisition and expansion expenditures exceeded \$5.7 million in 1968. Changes in organization and facilities were significant. Transfer of production equipment for plastic products from Fullerton, California to the U.S. Asbestos Division in Manheim, Pennsylvania made way for converting the Fullerton plant to a brake lining plant, to meet the demands on the Pacific coast. Completion of a hose manufacturing plant of 70,000 square feet in Peterborough, Ontario augmented Canadian hose production.

Other changes included the consolidation of the Atlanta and Los Angeles corporate, manufacturing, sales, and distribution facilities and the opening of a new corporate distribution center in San Francisco. Plans were completed for a new distribution center in Chicago, to open in mid-1969. In 1968 the Spartan Abrasives Company, Morgan, Pennsylvania, was acquired to complement R/M's facilities in Passaic, New Jersey. R/M International was established to replace Allied Asbestos & Rubber Export Company. In May, 1969 the addition of Breku Reibbelag G.m.b.H. Radervormwald, West Germany strengthened European operations of R/M International. Other 1969 acquisitions included Milford Rivet and Machine Company with its five plants — a further diversification of R/M product lines. The Marshville, North Carolina asbestos textile plant of Johns Manville, increased R/M's capacity in the asbestos textile and clutch-facing fields. That year R/M opened a new plant at Lakewood, New Jersey for production of rubber belts.

Additions to property, plant, and equipment for 1969 totaled nearly \$11.5 million. Sales reached the new high of nearly \$150 million.

By earth's time, July 16, 1969, Apollo 11 landed on the moon and the world applauded when Neil A. Armstrong and Edwin E. Aldrin, Jr. left man's first footprints on its powdery surface.

R/M composites, again, had done their job in helping bring about this giant step for mankind. One protected the astronauts' feet.

"could our fathers have foreseen the changes . . . ?"

Never had the fabric of the United States become so frayed by so many crises as during the 60's and 70's. The social unrest born of the 60's splintered into ideologies demanding identity. The war in Vietnam burned on, laying the groundwork for a savage increase in the rate of inflation. Punching recession's 5-year time clock was routine. Environment was spelled in capitals, as was OSHA, and all industry began to take new notice of the public concerns embodied in these two elements. The economic uncertainties were soon overshadowed by political crisis, climaxing in the spreading stain of Watergate.

For R/M the 70's was a decade of consummate change. Of evaluation and reevaluation. Realignment. New priorities. Decentralization of operations. Product lines expanded, dropped, added. Pruning the tree, nurturing the old growth and planting new roots. Ever stronger emphasis on the environment.

In 1970, S. R. Zimmerman, Jr., Executive Vice President and General Manager of the Manheim Division, was elected Chairman of the Board of R/M, retiring with that title on December 31. W. S. Simpson then was made Chairman, retaining his presidency.

Extension of the company's influence continued. R/M Australia was established in 1971, to manufacture products for the Australian market. Milford Rivet & Machine Company, an R/M subsidiary, acquired Farrell Products Company, Costa Mesa, California, to expand operations in the tool market. And to speed services throughout the south, R/M opened a new corporate distribution center in Dallas, Texas. That year, the Raybestos-Belaco joint venture with Turner and Newall, Ltd. was terminated.

After long study of the company's strengths, capabilities, and profitability, market by market, domestic and foreign, R/M began to withdraw from unprofitable product lines, concentrating its R&D, production, and sales efforts in the areas of highest profit and growth potential.

To take full advantage of these new directions, R/M in 1973 underwent an important organizational realignment. Operations were decentralized into six separate, product-defined profit centers under centralized finance and administration: R/M Friction Materials Company; Raybestos-Manhattan Industrial Products Company; R/M Roll Products Company; Manhattan Leisure Products Company; R/M International; Milford Rivet & Machine Company.

There followed divestiture of unprofitable hose, belting, abrasive wheel, and selected rubber product lines. The Passaic and Lakewood, New Jersey plants were closed and their remaining operations moved elsewhere.

In 1973, capital investment amounted to \$17.5 million, the highest in the corporation's history. Manhattan Leisure Products Company completed a 70,000 square foot office and manufacturing plant at La Grange, Georgia. In Crawfordsville, Indiana, R/M Friction Materials Company finished plant expansion of 65,000 square feet, Milford Rivet added 50,000 square feet at Milford, Connecticut. The Pacific Coast Division was closed down, production activities of the Fullerton, California plant transferred to Milford, and remodeling of the Fullerton facility started, to accommodate relocation there of the Farrell Products Division.

the reflecting 70's

Also in 1973, R/M International, in a joint venture with Daikin Manufacturing Company, Ltd., began construction of a new plant in Hokkaido, Japan for the manufacture of automatic transmission parts for the automotive, marine, industrial, and construction fields.

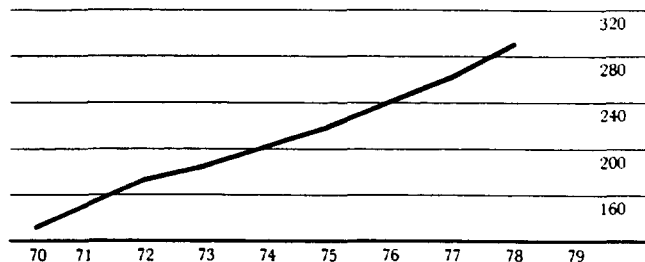
1973 will long be remembered for the cease-fire in Vietnam, the collapse of the Watergate coverup, OPEC and the burgeoning oil crisis that changed the color of gold to black, and the beginning of the fourth Arab-Israeli War. It also will be remembered as the most significant year in the history of R/M. The organizational changes effected in 1973 had been the turnkey to dealing with the fast-changing economy and the six-fingered hand of government regulation. Although those changes were not solely responsible for it, net sales for 1974 crested to more than \$202 million, 16 percent above 1973.

William S. Simpson continued in 1974 as Chairman of the Board and Chief Executive Officer. Robert M. Gordon was elected President. Gordon, previously President of the Milford Rivet & Machine Company and R/M Board Member since 1972, had been named a Vice President of R/M in 1973.

In 1974, R/M relocated its executive and general offices to the new 45,000 square foot corporate headquarters building in Trumbull, Connecticut, and R/M Roll Products Company completed a 77,000 square foot office and plant at Scranton, Pennsylvania. The bowling ball line of 35 years was dropped, the assets at La Grange, Georgia sold. Raybestos-Manhattan Industrial Products Company completed a 55,000 square foot manufacturing plant at North Charleston, South Carolina, and R/M Inc. acquired 47 percent interest in Manufacturas Multiples, S. A. (Mamusa) of Caracas, Venezuela. The Mamusa product lines included mechanical packings and brake linings for automotive and industrial applications, and industrial yarns and textiles.

R/M made two important capital commitments in 1975. An \$11-million program based on the expansion of the "wet process" for manufacturing NOVATEX® yarns, and an \$8-million

NET SALES IN MILLIONS



project which included a new plant to be built in the southern part of the Republic of Ireland, for manufacture of passenger-car disc brake pads. That year, Farrell Products Division of the Milford Rivet & Machine Company became fully operational in the remodeled plant at Fullerton, California.

In 1977, the plant in Ireland was completed; R/M Roll Products was sold to Beloit Corporation, and the new 36,000 square foot manufacturing plant built by Milford Rivet at Greenville, Mississippi was completed to go into operation the following year.

To exploit the strength of the name Raybestos, long a standard for quality and integrity, in 1978 R/M Friction Materials Company changed its name to Raybestos Friction Materials Company, and later relocated its key people to its new headquarters at Trumbull, Connecticut. And to consolidate manufacturing and marketing of friction materials worldwide, the company assimilated R/M International.

R/M established a joint venture with ITAPSA of Mexico in 1979 to manufacture automotive brake materials. The expansion of the "wet process" for manufacturing NOVATEX®, started in 1975, was completed that year on schedule.

1979 marked the agreement on the Arab-Israeli peace, the public discovery of a place called Three-Mile Island, the pangs of long lines at the gas pump, and the beginning of debate over a SALT treaty.

Since assuming the position of Chief Executive Officer 12 years before, William S. Simpson has replotted the course of R/M many times, the realignment of organizational structure in 1973, doubtless the most significant. This, among other changes, impelled R/M into broader, more vital penetration of the ever-fluid marketplace.

Could the fathers of R/M have foreseen the transformations to come 50 years ago? In their own way, perhaps they did. For the corporation they founded was soon caught in a time of great change, the Depression. Yet, it had tested its way to progress, recognized in the 30's that the only permanent thing about products and markets is change, and in the 40's, that telling is as important as selling. Knew in the 50's there are few reliable prophets, and in the 60's, that no product is as important as the business of saving lives.

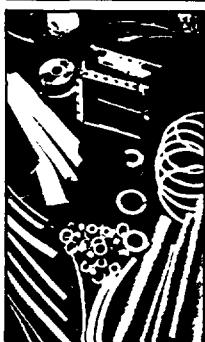
But, if they did not foresee the changes, they had faith in industry, itself. For Industry, the ubiquitous magician, would always find a way to man the plants it would build, to develop materials and products best suited to mankind, and to finance the enterprise to the benefit of all.

RAYBESTOS-MANHATTAN, INC.

RAYBESTOS
FRICTION
MATERIALS CO.

RAYBESTOS
INDUSTRIAL
PRODUCTS CO.

MILFORD
RIVET CO.



RAYBESTOS
INTERNATIONAL

the outreaching 80's

*"To the inquiring mind,
the portals of wisdom
are never closed..."*

Raybestos-Manhattan looks to the 80's with confidence. Confidence built on a half century of success. On an exacting preparedness for the use of people, capital, and facilities in a decade that will stretch man's imagination and philosophies to new limits.

R/M will continue to attract people interested in working with a "conservatively progressive" organization. From within, to generate the leadership to guide the organization through the 80's. Leadership with keen insight into the use of new materials to stimulate product innovation for conserving, maintaining, and enhancing human and natural resources. With imaginative evaluations of fibers, polymers, oils, metals, and their compounds that will lead to the development of new composites and products.

Through systematic programs to enrich that leadership, R/M keys the executive, the manager, and the professional, alike, to individual responsibility for timing, cost, and results.

R/M welcomes the challenge of meeting the changes of the 80's, with a broad scientific base for developing and testing composites that will predictably survive the service requirements of future machines and systems. With test methods that give more specifics of the physical and chemical changes occurring in a component when it is processed. With new equipment, new procedures, better data acquisition. Keener analysis for evaluating performance of a component tested under simulated service conditions.

Although R/M plans to phase out asbestos, as suitable alternate materials are developed and tested, the success of the NOVATEX® "wet process" in exceeding OSHA requirements will extend the production of asbestos yarns for those uses where there are no substitutes. Successful development and testing of alternate materials will ensure that R/M retains its leadership as a supplier to not only the automotive but the agricultural and off-the-road industries.

The government regulations for the environment, safety, and the use and conservation of energy are stringent. The extent that they will control the materials of industry through these agencies can bear on R/M's future. Yet, R/M sees those regulations as opportunities to develop the custom-engineered materials and products of the future.

From its inception, R/M has been the inquirer, the tester, the innovator; designing and developing tomorrow's products today. That is why people always have and will continue to come to Raybestos-Manhattan for products that serve the land, air, sea, and space sciences.



