San Francisco before the turn of the century. It was a city of 250,000 when John Stauffer arrived there, 12 years after the first transcontinental railway was built.

A HISTORY OF STAUFFER CHEMICAL COMPANY

The history that follows traces the growth of Stauffer Chemical Company from its beginnings as a small, family-owned firm to its present stature as a multinational, billion-dollar corporation.

By Veronica Hauge
Communications Specialist

ONE. THE GOLDEN GATE

When John Stauffer arrived in San Francisco in 1881, the city was a magnet for talented and ambitious young men. The discovery of gold in the mountains west of the Continental Divide and the influx of 49ers had transformed San Francisco from a sleepy little village into a city of fabled opportunity. More than two million dollars in precious metals had been refined by the U.S. Mint in San Francisco, and added growth had come with the completion of the first transcontinental railway in 1869, four years after the end of the Civil War. The city's perfect symbol was the "Golden Gate" – the strait that led from the Pacific Ocean into San Francisco's protected, deep-water harbor, where hundreds of ships from Europe and the East Coast of America rode at anchor.

John Stauffer had come to sell heavy chemicals for the Solvay Company of Belgium. The young German found a vital, cosmopolitan city of 250,000 in which he felt immediately at home. Cable cars were already clattering up and down the precipitous hills, and the elegant mansions of railroad and mining barons were rising on Nob Hill. The telephone was an amusing novelty. There was a feeling of buoyant optimism in the air, as fresh and exhilarating as the Pacific breezes that cooled the great, exuberant city.

John Stauffer made it his first order of business to investigate the local chemical industry. He found that fewer than 100 men were employed, chiefly in the manufacture of nitric and sulfuric acids for refining gold and silver and for explosives used in mining. For the city's manufacturers, and the farmers and grape growers on its outskirts, rail and sea freights made chemicals imported from the East Coast or Europe prohibitively expensive.

There was clearly a great opportunity for a technically-trained young man of initiative and industry.

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Founder John Stauffer (second from right) sits on the ruins of the North Beach plant after the San Francisco earthquake of 1906 destroyed the area.

TWO. THE BEGINNING

John Stauffer had both initiative and industry, and it didn't take him long to go into business for himself. He chose a way that appealed particularly to his old-world sense of thrift.

He had noted, soon after he arrived, that grain ships taking western wheat to England usually returned in ballast, loaded down with white cliffstone from the chalk cliffs of Dover. When these ships took on new cargo, the cliffstone was simply dumped overboard. If he could find a way to grind the cliffstone – much in demand locally for whitewash, distemper, putty and as a filler and extender–he could sell it for half the imported price.

John Stauffer found a countryman – Joseph Mayer of Hamburg – who owned a plot of land at North Beach, near the docks and business area and the honky-tonk Barbary Coast world of gambling and dance halls. He persuaded an elegant young French banker – Christian de Guigne I – to arrange a loan to supplement his own savings. In 1885, incorporated as Stauffer & Company, with Joseph Mayer as his first partner and $30,000 in capital, he built a small grinding plant at Bay, du Pont (now Grant) and North Point Streets. With two shiploads of Dover cliffstone, John Stauffer was in business for himself, four years after he'd first set foot in San Francisco.

THREE. GROWING

Once he had his plant in North Beach, the enterprising John Stauffer looked around for more opportunities.

By 1888, he was grinding sulfur from Japan at North Beach. By 1894 he had a second factory in the Potrero district of south San Francisco, and the company's business had expanded to include powdered, sublimed and roll sulfur; sal soda; soda ash; three grades of whiting; three kinds of acid (nitric, sulfuric and muriatic); carbon bisulfide; boric acid; sulfur wicks, sulfur matches and corks.

For all these products, Durand and Berg at 233 Front Street were "sole agents" and, apparently, served also as John Stauffer's city office.

Making Friends

At the same time that he was expanding his own business, John Stauffer was making friends in the local chemical industry and planning future business mergers.

One of these friends was the earnest young chemist John Wheeler. Wheeler had gone into business for himself at 23, with a crude experimental plant at Berkeley to make carbon bisulfide. He sold it to local grape growers to control a plague of *phylloxera* (plant lice) that was devastating their vineyards. By the time John Stauffer met him, he was also making bone meal fertilizers, gas lime and sulfates of copper and iron.

Another friend was the fiercely independent Irishman, John Reynolds. He was a man of 53 when John Stauffer first came to San Francisco, and had founded his own California Chemical Works to make sulfuric acid and sulfates of copper and iron some 27 years before. When he noted John Wheeler's success in making and selling carbon bisulfide, there was no experimenting for him. He went into the carbon bisulfide business by the simple expedient of hiring away John Wheeler's foreman!

Wheeler, Reynolds & Stauffer

John Stauffer was convinced that the time was ripe for a merger of these complementary and conflicting interests.

John Wheeler was willing, but John Reynolds resisted a total merger. He consented to form a side partnership–Wheeler, Reynolds & Stauffer – to make and sell carbon bisulfide. Later, a Wheeler, Reynolds & Stauffer plant was built at Richmond, next door to Stauffer Chemical's Stege sulfuric acid and superphosphate plants, built in 1897.

The Wheeler, Reynolds & Stauffer partnership endured until 1960, when it became part of Stauffer Chemical Company.

San Francisco Sulphur Company

About the same time that the Wheeler, Reynolds & Stauffer partnership was formed, John Stauffer also effected a merger of a number of local sulfur refining interests into the San Francisco Sulphur Company. The partners were again Wheeler and Reynolds and a J.N.L. Shepard.

Shortly afterwards, Reynolds and Shepard sold their shares in San Francisco Sulphur to Stauffer and Wheeler. Subsequently, San Francisco Sulphur Company, with its first plant at North Beach, became the first wholly-owned subsidiary of Stauffer Chemical. It remained a Stauffer subsidiary for 60 years until it merged with the parent company in 1954.

FOUR. THE MERGER

Stauffer and Wheeler now went ahead with plans to merge their joint interests, including their ownership of the San Francisco Sulphur Company and their two-thirds interest in Wheeler, Reynolds & Stauffer.

John Stauffer again turned to banker Christian de Guigne I for advice and financial assistance. Although the shirt-sleeved, working chemist and the elegant older, French-born banker had such different life styles, they held identical views on thrift, integrity and the value of hard work. Not only did Christian de Guigne I encourage the merger, he decided to become a part of the company.

On July 19, 1895, Stauffer Chemical Company was incorporated under California law with a capital of $300,000. Joseph Mayer, who had returned to Hamburg, was bought out. Christian de Guigne I became president; John Wheeler, vice president and John Stauffer secretary.

These three men ran the company for the next 37 years in great harmony and with outstanding success. Ownership was retained by the families of the three founders for the next 21 years, until the company went public in 1953.

FIVE. EXPANDING WITH THE WEST 1896 – 1906

With the merger accomplished, Stauffer Chemical Company was in a strong position to take advantage of the extraordinary opportunities opening up with the rapid growth of the West and the discovery of western raw materials–chief among them, sulfur, borax and phosphates.

Sulfur

When John Stauffer and John Wheeler started in business, sulfur for agricultural dusts and for making sulfuric acid and carbon bisulfide had to be imported from Japan and Sicily. Its discovery in California at the turn of the century led to its greatly expanded use by local interests.

Shortly after the merger, the company acquired the Alma Mine in the East Bay area of San Francisco. It was

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You Can Help

This history of Stauffer Chemical Company was compiled from many sources, not least among them the recollections of employees past and present. So please bear with us if you come across a gap or inaccuracy. Better still, if you have the information to correct an inaccuracy of fill in a gap, don't hesitate to share it with us. Why not share with us, too, any additional anecdotes or facts about people, products, dates or significant events from Stauffer's past? We may be able to use them in future issues of the "News."

Photographs and other Company memorabilia will also be welcomed. After cataloging, they will be returned if you wish.

Stauffer News

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WILLIAM P. DURANTE
Coordinator of Employee Communications

1977

The Founders

Stauffer

JOHN STAUFFER (1861-1940)

John Stauffer was born Johan Gustav Stauffer in Kaiserlautern, Germany in 1861. He had received a good technical education and spoke five languages when he came to San Francisco as a young man of 20 to sell heavy chemicals for the Solvay Company of Belgium. He made friends easily and had the gift of attracting to him men who would work the same long hours he did with the same enthusiasm and dedication. Personally thrifty, he never grudged money spent on others and stories of his private charities are legion. In business, he believed in plowing back money into the firm and in the 50-50 partnership. "No man worth his salt wants to be on the wrong end of a 51-49 partnership" was one of his maxims. For 50 years his indomitable figure, invariably clad in a rumpled black suit, a black derby on his head and a cheroot clenched between his teeth, was a familiar part of the San Francisco business scene. He served as secretary of Stauffer Chemical from 1895 until 1935 and died in San Francisco in 1940. His only son, John Stauffer, Jr., was with the company for 49 years.

de Guigne

CHRISTIAN DE GUIGNE I (1846-1942)

Christian de Guigne I was born on November 2, 1846 on the Island of Réunion off the coast of Madagascar, then a French colony. In 1878 he came to America as a representative of a large French bank, and journeyed to San Francisco on the first transcontinental railway. He was to be associated with banking all his life in San Francisco, for many years with the Donahoe Kelly Banking Company. Personally wealthy (he had his own fortune of one-quarter of a million dollars when he came to San Francisco), he was known as one of the elegants of the city, always faultlessly attired for business in a frock coat, striped pants, spats, an impeccable Homburg and his cravat through a gold ring. When he married the local Parrott heiress, whose family had made its fortune in the California gold fields, they made their home in a rambling Victorian house on the San Mateo peninsula. As president of Stauffer Chemical Company from 1895 to 1942, his financial judgment guided the young company in its most formative years.

JOHN WHEELER (1857-1939)

John Wheeler was born in Oswego, New York in 1857. He studied chemistry at the University of California where he specialized in pesticides for the grape industry whose vineyards surrounded the campus. About the time he graduated, the grape growers of the world were threatened with a plague of plant lice. In France, they had discovered that plant lice could be controlled with carbon bisulfide gas, but the California growers could not afford the imported price of 50¢ to $1.00 a pound. John Wheeler experimented with making carbon bisulfide at his own little factory in Berkeley, using cast-iron sewer pipes for retorts and with the factory walls hinged in case of explosions, and found he could make carbon bisulfide for 13¢ a pound. For his services to the grape industry, he was made chief state viticulture officer in 1887. He was vice president of Stauffer Chemical Company from 1895 until his death in 1939. His second son, Rollo C. Wheeler, took his place as vice president on Stauffer's Board of Directors until 1962.

The Stauffer and de Guigne portraits are by JOSEPH SIGALL, the Austrian-born artist who painted President Coolidge among others, and who married Marie Stauffer, John Stauffer, Sr.'s daughter.

In the early 1900s it took eight mules and two wheel-horses seven days to make the 130-mile round trip from Stauffer's Mt. Frazier, California colemanite mine, managed by Thomas Larkins, to the railhead at Bakersfield, some 65 miles to the north. There the colemanite was loaded into rail cars by wheelbarrow.

Stauffer mined for sulfur at the Alma Mine in the East Bay area of San Francisco from 1902 until 1915.

Stauffer's first plant at North Beach, San Francisco before the earthquake and fire of 1906 destroyed it.

Early and adventurous prospectors for western deposits of borax and phosphate rock could go by plane.

discovered by a bemused farmer, Herman Boehmer, who broke into an underground deposit of bright "fools' gold" —iron pyrites—while digging fence posts.

The Alma Mine was operated from 1902 until 1915. Albert Walter, later Stauffer's president from 1942 until 1946, was mine superintendent there from 1907 until 1910. The Alma was the first of a number of deposits to be mined by the company in California until the Freeport, Texas plant was built in 1916. Freeport was chosen because it was near the vast underground salt dome sulfur deposits of the Texas and Louisiana Gulf Coast, where sulfur is extracted in molten form by the Frasch process.

Borax

Another important raw material discovery was borax.

Above: Stauffer's San Francisco plant, circa 1910, where salt was refined in the early days. Below: typical salt harvesters in the San Francisco Bay area.

Borax—today used mainly in heat-resistant glass, ceramic glazes and pharmaceuticals – had been a very rare commodity until its discovery in vast quantities in the form of colemanite, ulexite and kernite in the deserts and mountains of Nevada and California.

'Borax' Smith

When John Stauffer had founded his first company, Francis Marion ("Borax") Smith, the millionaire developer of Oakland and one of the West's most colorful pioneers, was the undoubted king of the borax industry. The resourceful young John Stauffer had caught the eye of this flamboyant entrepreneur and, even before the merger with Wheeler, John Stauffer had been buying Smith's borax and making boric acid for pharmaceutical use, first at North Beach and later at the Potrero plant.

"Borax" Smith

Shortly after the merger, production of boric acid was greatly increased. "Borax" Smith's Pacific Coast Borax Company entered into an agreement with Stauffer Chemical to make boric acid, whereby Smith's company was to supply the borax and handle sales, Stauffer Chemical was to supply the muriatic acid and superintend production at the Potrero plant.

In 1901, Stauffer acquired its own colemanite mine near Mt. Frazier. The Frazier Mine was one mile above sea level and getting the colemanite to the railroad at Bakersfield, 65 miles to the north, presented a formidable problem.

The solution appeared in the form of Thomas Larkins, a man who could handle the problems of manpower, isolation and the cussedness of mules. It was Thomas Larkins who organized the teams of eight mules and two big wheel-horses to haul the colemanite by wagon to Bakersfield, a seven-day round trip.

Few people today know that there was a tiny hamlet of Stauffer as late as 1960 on Highway 99, 13 miles west of Tejon Pass. Yet it was in Stauffer that Thomas Larkins once operated a mine, saw mills, barns, general store and post office, and kept some 50 to 150 head of stock.

First Overseas Investment

Stauffer's involvement in the borax industry was to lead the company into its first overseas investment in 1909—Suddeutsche Chemische Werke, GmbH at Gernsheim-am-Rhein in Germany. This company is still a Stauffer subsidiary and still in the same business of refining borax and producing boron compounds.

Green River, Wyoming

The 80-year association with the borax industry led Stauffer into mining trona and processing natural soda ash at the Company's facility at Green River, Wyoming. Today, Stauffer is no longer in borax in the United States, but the Green River trona mine and soda ash business constitute an important profit center.

Western Phosphates

The discovery of vast deposits of phosphate rock in the western states led the newly-formed Stauffer Chemical Company into the production of superphosphate fertilizer.

John Wheeler had added the manufacture of superphosphate (made by reacting phosphate rock with sulfuric acid) to his Berkeley plant before the merger. After the merger, Stauffer Chemical Company built the plant at Stege in 1897, mentioned earlier, to make sulfuric acid and superphosphate. The Stege operation was expanded substantially in 1906 when Stauffer formed the Union Superphosphate Company, a joint venture with Pacific Guano and Fertilizing Company, to make superphosphate. This agreement was terminated in 1935, when Stauffer bought out Pacific Guano's share.

Exploration for phosphates and phosphate fertilizer production was continued over the years. Today, the Fertilizer and Mining Division is an important business center for Stauffer, with mines in the tri-state area of Utah, Wyoming and Idaho and fertilizer plants in Utah, Idaho, Washington and Texas.

American Cream Tartar Company

In 1899 Stauffer Chemical started the manufacture of cream tartar, tartaric acid and rochelle salts at a plant put up on the North Beach property.

American Cream Tartar Company was a 50-50 partnership with A. Schilling & Company, a partnership that was to endure for the next 39 years, until American Cream Tartar became a wholly-owned subsidiary in 1938.

This new venture appealed particularly to the founders' sense of thrift. The raw material for tartrates comes

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An aerial view of Stauffer's Westport, Connecticut headquarters complex, about fifty miles from New York City. The addition of two new buildings, now under construction, will double occupancy during 1977.

from the waste products of wine making: the argols, crystalline deposits formed on the sides and bottoms of the wine casks during fermentation, and from the pomace, or the grape pulp and seeds.

At the turn of the century, consumption of cream tartar and tartrates on the West Coast was as much as 100,000 pounds a year, largely imported from Italy and used chiefly to make baking powder and effervescent beverages. In his booklet to wine makers explaining how they could save their argols and pomace, John Stauffer appealed to them with missionary fervor: *Everything imported into this country that we could just as well produce here, means just that much loss to the people of this country.*

These early educational efforts were so successful that, by 1939, American Cream Tartar was able to buy two and one-half million dollars worth of tartrates from western vineyards.

First Venture on the East Coast

In the same year that American Cream Tartar Company was incorporated — 1899 — Stauffer bought a plant in Brooklyn that was making cream tartar and tartrates for the East Coast market.

John Wheeler left his beloved vineyard home in St. Helena to manage the Brooklyn operation. When the plant burned down in 1902 it was not rebuilt, and John Wheeler returned to California as president of the Western Mineral Company, another Stauffer subsidiary, which mined for borax at Daggett in San Bernardino County until the borax was mined out.

The Ten Years

The ten years before the San Francisco earthquake had been a decade of tremendous activity for the young Stauffer Chemical Company.

New plants were built at North Beach and at Richmond; the Company was involved in mining sulfur, borax and phosphates, and a whole new line of products had been added to its sales list with the production of cream tartar, tartrates and rochelle salts.

Stauffer Chemical's office was at 318 Front Street—one big room with a potbelly stove. It was staffed by bookkeeper and office manager Carl Jantzen, who was to be with Stauffer for nearly 50 years, and two young stenographers, a Miss Gegan and a Miss March.

It has been estimated that total sales for Stauffer Chemical Company in 1898 were some $180,000. Early figures, however, are not completely reliable as most of the Company's records were destroyed in the earthquake of 1906 and the fire that followed.

SIX. THE SAN FRANCISCO EARTHQUAKE

On April 18, 1906, at 5:13 a.m., San Francisco was rocked by the most severe earthquake recorded in the

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The historic barn at Westport headquarters was preserved as the Company's Record Retention Center.

Stauffer Headquarters 1885--1976

1885 – 1895 233 Front Street, San Francisco in the offices of Stauffer & Company's "sole agents," Durand and Berg.

1895 – 1906 318 Front Street. Before the earthquake of 1906, Stauffer Chemical Company's office at 318 Front Street was staffed by four people – Carl Jantzen, bookkeeper and office manager; two stenographers, a Miss Gegan and a Miss March, and John Stauffer.

1906 – 1925 After the quake, temporary offices were set up at the old Potrero warehouse. Then, late in 1906, a one-story office was built at 624 California Street, San Francisco.

1925 – 1954 636 California Street. In 1925, the one-story building at 624 California Street became too small. Stauffer Chemical moved next door into a two-story Company-owned building at 636 with a map company on the top floor.

1954 – 1967 380 Madison Avenue, New York City. In 1953, Stauffer Chemical became publicly owned and headquarters moved to New York City the following year. Previous offices for the Eastern Region office had been in the Chauncey plant (1913–1925); in rooms 5007 and 5009 of the Grand Central Building (1926) and, from 1927 to 1953, in the Greybar Building at 420 Lexington Avenue, New York City.

1967 – 1972 299 Park Avenue, New York City.

1972 – Present Westport, Connecticut. In April 1972, the Company moved its executive headquarters to a multi-building complex on the 52-acre site of a former prize dairy farm in Westport, about 50 miles from New York City on Long Island Sound.

Headquarters were at 624 California Street, San Francisco, from after the 1906 quake until 1925.

The office staff at 624 California Street, **circa** 1924. Jack Reynolds II is center rear and Miss Clarabelle Green, who was 47 years with Stauffer, is far right.

Above: a view of the Company headquarters office at 636 California Street, where Stauffer moved in 1925. Below: Western headquarters are still in the new building that went up on the 636 site in 1965.

United States. The quake leveled buildings, burst water mains and killed some 200 people. The fire that raged for three days in its wake destroyed four square miles of property valued at over $200 million.

Stauffer's office on Front Street, with all its records, was totally destroyed. The Potrero and North Beach plants were heavily damaged and the San Francisco Sulphur Company's unit at North Beach was destroyed and all its assets wiped out. Only the American Tartar Company's plant at North Beach, built like a fortress by P.M. Paulson with cement, not mortar, between the bricks, survived unharmed.

Thomas Larkins Remembers

Many years later, Thomas Larkins vividly remembered the quake and fire. He had hurried to San Francisco from the Frazier Mine, seeking his wife and children, as soon as the news was cabled.

He arrived in Oakland when the exodus from San Francisco was at its height to find that ferry boats were not accepting passengers for the stricken city. He made his way around to the southern end of the Bay on trains operating over buckled tracks without fares or schedules. He reached the city at nightfall to find soldiers on guard with orders to shoot prowlers on sight. He spent the night in an empty schoolhouse and reached his family at their home at at 18th and Delores Streets in the early morning. The house burned to the ground the next day.

SEVEN. AFTER THE QUAKE 1906 – 1913

The quake had an extraordinary psychological effect on San Francisco. It was succeeded not by despair, but by a frenzy of reconstruction. Streets were cleared, new offices and buildings and homes put up. So much energy spilled over that the city fathers began to plan a world's fair—the Panama-Pacific International Exhibition that took place nine years later.

Stauffer Chemical quickly put its own affairs in order. Temporary offices were set up at the Potrero plant and, by great good luck, John Wheeler had kept his own business records at his St. Helena home. These helped to reconstruct the Stauffer records.

Within a few weeks, a plot of land had been purchased at 624 California Street and a one-story building erected to serve as the Company's new offices.

This remained Company headquarters until November 1925, when Stauffer moved into a two-story building next door at 636 California Street. In turn, 636 California Street was Company headquarters until 1954, when the headquarters was moved to 380 Madison Avenue, New York. Several floors in a modern, high-rise building at 636 California Street, built in 1965, and a separate group of offices in the city's Embarcadero Center, still serve as western headquarters for Stauffer.

After the quake, the San Francisco Sulphur Company's plant at North Beach was completely rebuilt with money from the parent company. In addition, a new sulfur refining plant to make Stauffer's Anchor brand refined flowers of sulfur was put up east of 7th Street in Berkeley. In 1911, a second San Francisco Sulphur Company plant was built on land across the street from the first Berkeley plant and, in 1913, a third unit was added to the complex. These plants remained in operation until 1956.

The Potrero plant was repaired and the manufacture of sulfuric and muriatic acids and borax refining begun once more. In 1910, land across the street was bought and a new plant for refining borax and salt went up at Fifteenth Street and San Bruno Avenue. Solar evaporation of the Bay area salt had been tried in the late 1890s and abandoned. Here again salt refining was ultimately abandoned, but boric acid is still manufactured at the second Potrero plant, known today as the Company's San Francsico plant.

All Stauffer Chemical plants, old and new, were in full production when it was decided to make a second attempt to establish a manufacturing base on the East Coast.

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Stauffer's Presidents 1895 -- Present

CHRISTIAN DE GUIGNE I 1895 – 1942

de Guigne I

It was during the early years of the Company's growth, when Mr. de Guigne, John Stauffer and John H. Wheeler ran Stauffer Chemical as a family-owned firm based in San Francisco, that the company built up its present solid base in heavy industrial chemicals.

Christian de Guigne I (who is also profiled under "The Founders," page 3) came to San Francisco as a young man of 32 in 1878 to represent a French bank. He was associated with banking and building up West Coast industry all his active business life. He died in 1942 in his home in Bordeaux, France, where he had spent the last 12 years of his life, as alert mentally at 96 as he had been when he was president of Stauffer Chemical Company in its formative stages.

ALBERT WALTER 1942 – 1946

Mr. Walter had effectively guided the company since 1932, when he was made vice president and general manager on the illness of both de Guigne and Stauffer. During the difficult years of the Great Depression, he held the company together and enlarged and consolidated its base in industrial chemicals.

Mr. Walter was born in 1875 in Kehl-on-Rhine, Germany. He graduated from high school in Strassburg, Alsace, served a year with the Engineer Corps of the German Army, then studied math, chemistry and engineering at the Universities of Strassburg, Karlsruhe and Munich. When he came to America in 1904, he taught school in Sacramento before joining Stauffer as superintendent of of the Alma Mine in Richmond in 1907. In 1912, he was sent east to manage the Eastern Region; he became vice president and general manager in 1932 and president in 1942. He retired at 65 in 1946 and died 10 years later.

Personally very modest, Mr. Walter was never known to have had his photograph taken, but he is described by former associates as short and stocky, with a ready smile —someone who could have been mistaken for a successful doctor rather than the dedicated chemist and business leader that he was.

CHRISTIAN DE GUIGNE III 1946 – 1954

de Guigne III

Under Christian de Guigne III and Hans Stauffer, after Mr. de Guigne became chairman of the board, the company became a publicly owned corporation and entered upon a new period of expansion and diversification with a greatly increased emphasis on research.

Mr. de Guigne is Christian de Guigne I's grandson. He was born in San Mateo, California on August 26, 1912 and joined Stauffer Chemical Company in 1936. In 1937 he was elected vice president and, in 1939, a director. In World War II, he saw active service in the South Pacific as a major in the U.S. Marines. He was elected president in 1946 and served until 1954 when he became chairman of the board, the position he holds today.

HANS STAUFFER 1954 – 1967

Stauffer

Hans Stauffer was born in Osthofen, Germany in 1901. During the First World War he was a technical student at Worms and came to San Francisco in 1920 as a young man of 19 to work for his uncle John Stauffer, Sr. He went to school to learn English in the morning, worked the afternoon shift at the San Francisco plant and took business courses at night. In 1926 he was sent to New York to be eastern sales manager and, in 1942, he was made vice president and general manager when Albert Walter was made president. He served as president from 1954 until 1967, a period of dramatic growth through acquisition. On his retirement, he served one year as chairman of the executive committee of the Board of Directors and then as a director until 1971. Mr. Stauffer lives in Bronxville, New York and still goes every day to his office at 380 Madison Avenue, where the company had its first Eastern Headquarters.

ROGER GUNDER 1967 – 1971

Gunder

Under Mr. Gunder, the company's new thrust towards specialization and diversification was vigorously pursued. A period of consolidation and reorganization was combined with expansions in plastics, silicones and food ingredients.

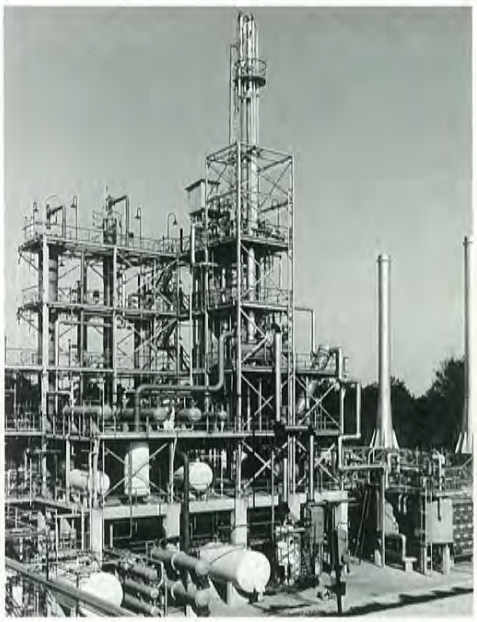
Mr. Gunder was born in Fort Wayne, Indiana in 1908. He joined Stauffer as a salesman in 1934 in the San Francisco Division and served in various posts in the Industrial Chemical Division before being made vice president and general manager of ICD in 1962. The following year he was elected a director and was made president in 1967. In 1971, he was named vice chairman and chief executive officer when Mr. Morley became president and chief operating officer. Since retiring in 1974 Mr. Gunder has served on the Board of Directors.

H. B. MORLEY 1971 – Present

Morley

In 1975 president H.B. Morley announced that Stauffer was launching a major new investment program of $600 million from 1975 through 1977 to enable the company to expand into new areas, while maintaining and expanding its base in heavy chemicals. This program is on target and will provide Stauffer with in-place capacity for a sales potential of $1.7 billion by the beginning of 1978.

Mr. Morley was born in Sydney, Nova Scotia, Canada in 1929. He has a PhD from the University of Toronto in Canada and joined Stauffer in 1962 as director of the Eastern Research Center. He later served successively as assistant to the president; as vice president and general manager, Silicone Division; as vice president – technical and as executive vice president. He was elected a director in 1969, president and chief operating officer in 1971, and assumed the role of president and chief executive officer in 1974 on Mr. Gunder's retirement.



Stauffer has been in the carbon bisulfide business since 1895 and is the largest U.S. producer today. Above: the modern carbon bisulfide plant at Le Moyne, Alabama. Below: the old carbon bisulfide retort plant at Bentonville, Virginia, closed in 1960.

Above: In the early days, Stauffer refined crude sulfur blocks on site at a number of its own small mines in California. Below: most of Stauffer's sulfur comes from the mines in the Texas Gulf Coast area where the sulfur is pumped out of the ground in molten form by the Frasch sulfur recovery process.

Ground-breaking, 1961, for Stauffer Chemical Company of Wyoming's natural soda ash complex at Green River, which now processes 1.6 million tons a year. Left to right: O.U. Bever and Glen Sorensen of the Wyoming Natural Resources Board; H.C. Miller, L.D. Adams and John Steuck of Winston Brothers, builders of the original unit; L.F. Cummings, then assistant vice president, Finance, Stauffer; George Bowland, director, Energy Conservation, ICD, then resident manager, SCCOW; H.D. Hellmers, vice president, Production, West End Chemical Company; W.R. Newton, Winston Brothers; D.G. Ellis, vice president Sales, West, Stauffer Chemical Company; L.E. Mannion, Stauffer's chief geologist; J.A. Buchanan, Wyoming Natural Resources Board; G.L. Jefferson, Stauffer geologist; R.M. Stampley, sales manager, Stauffer, and J.V. Wiseman, plant manager, West End Chemical Company.

EIGHT. BUILDING STRONG FOUNDATIONS . . . 1913 – 1929

Expanding East

For some time, John Stauffer and John Wheeler had been aware of a growing demand for carbon bisulfide in the East for the manufacture of rubber and for a new industry—rayon.

In January 1913 John Stauffer and Carl Jantzen came east to inspect a site recommended by Albert Walter as ideal for a carbon bisulfide plant. His choice was approved and land and a factory building were bought at a site in the town of Greenberg, Westchester County, New York, known as Chauncey, after the local railroad stop and post office. Subsequently, carbon bisulfide was made there for Goodyear and American Viscose.

Originally Chauncey operated with one furnace and four retorts. Today, the Chauncey site is a major Stauffer complex. It includes the old Chauncey plant, now used as a pilot plant and as the Ardsley plant of the Specialty Chemical Division, and land subsequently acquired across the Saw Mill River Parkway in Dobbs Ferry, Greenberg, now the site of the Eastern Research Center and the J.B. Ceccon Engineering Center.

Typically, in those days, Stauffer built small carbon bisulfide retort plants adjacent to its major customers. Carbon bisulfide plants were put up subsequently at Monongahela, Pennsylvania (1916); Chester, Pennsylvania (1924); Nashville, Tennessee (Old Hickory Chemical Company, 1928); and Roanoke, Virginia (1929). At the same time, the Chauncey plant continued to expand its own carbon bisulfide production.

These plants—and others built later at Bellwood, West Virginia; Bentonville, Virginia; Lowland, Tennessee, and Perry, Ohio – remained in production until Stauffer's Le Moyne, Alabama and Delaware City, Delaware plants came on stream in 1956 and 1960, respectively. Le Moyne was the first Stauffer plant to use the "Pure Oil" natural gas process developed by Dr. Harold Thacker, still a Stauffer consultant. The "Pure Oil" method combined sulfur and natural gas at high temperatures in the presence of a catalyst, and rendered the old retort plants obsolete.

From these early beginnings, Stauffer is today the largest producer of carbon bisulfide in the United States.

Niagara Smelting Corporation

On one of his visits east to check on the Company's carbon bisulfide business there, John Stauffer became convinced that carbon tetrachloride would become an important industrial chemical. In 1925, the Company acquired a 50 percent interest in Niagara Smelting Corporation, which had been producing carbon tetrachloride for about two years. This was the company's first venture into chlorine-based chemicals, today a major business area with chlorine plants at Henderson, Nevada; Le Moyne, Alabama, and St. Gabriel, Louisiana.

Going down the shaft to the trona mine at Green River, Wyoming, **circa** 1961 (l. to r.): Don Ellis; project manager L.D. Adams; George Bowland; John Ceccon, then vice president of Engineering, now retired; Bob Maurer, then mine superintendent, SCCOW; Rod Christensen, now director Corporate Aviation, and pilot Bud Mansfield.

First Office in the East

Stauffer's first office in the East was opened in 1913 at the Chauncey plant, with Albert Walter, Herman Hecht and Ida Kopp, secretary to Mr. Walter. It remained Stauffer's eastern office for 13 years, until January of 1926, when eastern headquarters was moved to Rooms 5007 and 5009 in the Grand Central Building in New York City.

In these cramped quarters Albert Walter presided at a battered oak desk. Oscar Crispens, who was to be with Stauffer for the next 33 years, moved in the first day as office manager. The office moved after one year to the Greybar Building adjacent to Grand Central Station. There the staff was joined by Hans Stauffer, the nephew of John Stauffer, who was sent from San Francisco at age 25 to be in charge of eastern sales. It was Hans Stauffer who arranged the joint partnership with E.I. du Pont de Nemours & Company to make carbon bisulfide in Nashville, Tennessee. This was the Old Hickory Chemical Company, mentioned earlier.

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Stauffer's Board of Directors, 1956, after the merger with Consolidated Chemical Industries, Inc. Clockwise from left: Senior vice president Rollo C. Wheeler; treasurer Christian de Dampierre; president Hans Stauffer; chairman of the board Christian de Guigne III; senior vice president and chairman of the Executive Committee John Stauffer, Jr.; senior vice president George L. Bond; directors Vincent O'Donnell and Elliott McAllister; senior vice president Edward Rothrock.

Texas Sulfur

At the same time that Stauffer Chemical had been expanding in the East, the Company also made its first entry into the Southwest.

The First World War (1914–1918) had led to an enormously increased demand for sulfur products. This was one reason for the decision to build a new plant in Texas in 1916.

The Freeport plant was built by P.M. Paulson, who had joined Stauffer in 1894 as a millwright and builder. He built the American Cream Tartar Company's factory at North Beach and rebuilt the North Beach sulfur plant after the quake of 1906. He also built the San Francisco Sulphur Company's plants at Berkeley.

When he came to Freeport, he built an earthquake-proof plant for earthquake-free Texas, so strongly constructed that, unchanged to this day, it remains the same fortress that "P.M.P." designed and built.

First Contacts with Australia

The First World War was also indirectly responsible for the Company's long association with Australia, which continues to this day.

In 1913, the first John Stauffer had acquired substantial interests in the California-based West Coast Kalsomine Company, manufacturer of Wesco brand waterpaints, run by R.S. Penniman, Sr. and his two sons, R.S., Jr. and J.G. Penniman.

On the elder Penniman's death in 1914, John Stauffer became president of West Coast Kalsomine and, shortly afterwards, German submarine warfare prevented Australia importing from Europe or America's East Coast. A brisk trade sprang up between Australia and San Francisco. At the end of the war, prohibitive Australian tariffs dictated the establishment of a Wesco paint factory in Parramatta, now a suburb of Sydney. Later, land nearby was acquired for Stauffer Chemical Company. This became the site for two Stauffer affiliates, Australian Cream Tartar Company and Chrome Chemical Company. In 1926, Stauffer Chemical Company (Australia) Pty. Ltd. was formed that still, today, manages Stauffer's interests "down under," including an association with Wesco paints, although the American connection was terminated in 1952.

Philadelphia Quartz Company of California

In 1917 John Stauffer embarked on a new joint venture—Philadelphia Quartz of California – to make silicate of soda for West Coast soap manufacturers in partnership with Philadelphia Quartz Company of Pennsylvania.

In June 1918 Philadelphia Quartz of California built a plant at Berkeley on Grayson Street between 4th and 7th Streets. Subsequently, the company built plants at Portland (1922–1927), Vernon (1924–1932) and South Gate, Los Angeles (1932). The joint venture continued to supply West Coast soap and detergent manufacturers until 1967, when Stauffer sold its interest in the company.

Solomon Peiser

Peiser

Solomon Peiser was born in San Francisco in 1871 in a rough neighborhood known as Hayes Valley, that had produced world heavyweight boxer Jim Corbett. He was eleven when his mother was left with a big family to support. He did his best to help by selling newspapers. In 1890 he was hired at Pacific Bone Coal and Fertilizing Company, the company of which he was ultimately to be president. Immediately, he threw himself into the job with characteristic energy. He found a chemist in Berkeley to take lessons from, he fitted up a small lab at the plant and, many evenings, he spent the night there. His lunch was a hard German roll that he carried in one pocket. In his other pocket, he kept a silver dollar to give him a feeling of affluence. He carried this silver dollar to his dying day.

Well over six feet tall, with a vital personality, Peiser's energy and capacity for hard work delighted John Stauffer. From the time John Stauffer helped Pacific Bone Coal get back on its feet after a disastrous fire in the 1890's, they were good friends and for many years business partners in Consolidated Chemical Industries (CCI), the joint venture of Stauffer Chemical and Pacific Bone Coal in the Southwest during and after the First World War.

Solomon Peiser became president of Pacific Bone Coal and Fertilizing company in 1914. Even when the company became very large, he ran it as a personal business, overseeing every detail himself and keeping everything in order by dint of his prodigious memory. For the last 10 years of his life, from 1941 to 1951, Solomon Pesier was blind, but he went about his daily business and ran the company with his son-in-law, George L. Bond, and his two grandsons acting as his "eyes."

The Los Angeles Division

It was P.M. Paulson again who built the first Vernon plant in 1918 to more easily supply the Los Angeles market with muriatic acid. With Los Angeles growing fast, it was increasingly difficult to supply the area from San Francisco, 440 miles away by rail.

Vernon, now part of metropolitan Los Angeles, was then a suburban neighborhood of orange groves, vineyards and open fields. The Vernon muriatic acid plant did a good business with the jobbing trade and in supplying surplus muriatic acid to make smokeless powder for the British government.

In 1919 a chamber sulfuric acid plant was begun at Vernon and, in 1933, a contact acid plant was built to supply the growing oil refining industry of the area. In 1928 sulfuric acid plants were built at Dominguez and Wilmington to supply the new oil refineries.

Presiding over this varied activity was John Stauffer, Jr., son of the founder, as head of the Los Angeles Division. John Stauffer, Jr. made Los Angeles his permanent headquarters, serving the Company as secretary, vice president, senior vice president and chairman of the Executive Committee. He retired in 1963 and was director emeritus at the time of his death in 1972.

Opening Up the Southwest

At the same time that the San Francisco Sulphur Company was constructing the Freeport plant and the Los Angeles Division was growing under John Stauffer, Jr., the Company was moving into the Houston area in a joint venture with Solomon Peiser's Pacific Bone Coal and Fertilizing Company.

John Stauffer had known and liked Solomon Peiser from the early days in San Francisco, when Peiser had joined Pacific Bone Coal and Fertilizing Company in 1890 as an enthusiastic, hard-working young man of 19. Christian de Guigne I had been one of the early investors in Pacific Bone Coal. When its plant burned down in the early 1890s, he had been quick to lend money to rebuild, and had interested John Stauffer in helping the company regain its position as a major supplier of bone meal fertilizers and bone coal for sugar refining.

Solomon Peiser built up the business steadily over the years. He became president of Pacific Bone Coal in 1914, and he and John Stauffer often went on business trips together, including annual visits to the Hawaiian sugar and pineapple plantations. Associates remember that in spite of their long friendship, they remained "Mr. Peiser" and "Mr. Stauffer" to each other to the end.

In 1916, the Texas Chemical Company was formed as a 50-50 joint venture of Stauffer Chemical Company and Peiser's Pacific Bone Coal and Fertilizing Company to build a plant on the Houston Ship Channel to produce bone coal, fertilizer and ammonia.

The Manchester plant, as it is now known in the Company, was soon to produce sulfuric acid as well for the Southwest's rapidly expanding oil refining industry. In 1919 a sulfuric acid plant was added, with a 30-tons-per-day capacity, a respectable production figure for the times.

In 1926, a Texas Chemical Company subsidiary, the Louisiana Chemical Company, constructed a plant at Baton Rouge, Louisiana, also to make sulfuric acid.

Consolidated Chemical Industries

In 1929 a holding company – Consolidated Chemical Industries, Inc. (CCI) – was formed under Delaware state law to represent the joint Peiser-Stauffer interests in California, Texas and Louisiana. That same year, CCI constructed a plant at Fort Worth, Texas to produce sulfuric acid, muriatic acid and potassium sulfate: one at Bastrop, Louisiana to make alum for the paper industry, and a plant at Buenos Aires, Argentina to process animal bones for bone charcoal and glue.

Expanding in the Midwest

In 1929 a 40-tons-a-day sulfuric acid plant was opened by Stauffer on Christmas Eve at Hammond, Indiana. It was intended to serve the Chicago market area.

This plant was managed by Earl Demmon, who started with Stauffer as an outgoing, hard-working office boy at 624 California Street. Before going to Hammond, Earl Demmon had managed the Freeport, Texas plant and the Houston sulfuric acid plant. Under his direction, Hammond built up large sales in the Chicago area.

NINE. A HOUSE BUILT UPON A ROCK 1929 – 1942

The 1929 New York stock market crash, that presaged worldwide depression, came on the 29th of October. It rocked America to its foundations.

In 1929, Stauffer and associated companies had plants on the West Coast at Berkeley, Dominguez, Los Angeles, San Francisco, Richmond and Wilmington. In the South-

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The original Chauncey plant and office buildings bought in 1913 have grown into a major Stauffer complex in Westchester County, New York with extensive research facilities, a pilot plant, an engineering center and the Specialty Division's Ardsley plant. Above: The entrance to the Eastern Research Center is on the left and the J.B. Ceccon Engineering Center, which was greatly enlarged in 1975, is seen straight ahead.

Above: The Mountain View Agricultural Laboratory.

at Greens Bayou, Texas to make anhydrous hydrogen fluoride and aluminum chloride for sale to petroleum refineries in the area.

Also in 1942, the Basic Magnesium, Inc. complex was built at Henderson, 12 miles south of Las Vegas in the Nevada desert. Included in the complex was a caustic/chlorine plant and, at the request of the War Production Board, Stauffer closed down its Dominguez caustic unit in favor of buying caustic from Henderson.

This fortunate connection led to Stauffer's leasing of the caustic/chlorine unit from the government at the end of the war. Henderson became 100 percent Stauffer owned in 1952. Today, Henderson is a large Stauffer complex. In addition to the caustic/chlorine plant—which Stauffer spent $22 million to modernize in 1976—there is an agricultural chemical plant to make chlorine-based pesticides and intermediates. Also at the site, a Stauffer joint venture, Montrose Chemical Corporation of California, manufactures chlorine-based insecticides.

The Chauncey plant in 1913, where Stauffer had its first Eastern Region office from 1913 until 1925.

A photograph taken in 1967 shows (l. to r.): Executive vice president H.S. Mickley, then an outside director; Dr. Charles Persing, for many years director of Stauffer's Mountain View Laboratory, now a Stauffer consultant, and Donald S. Mac Iver, vice president and general manager, Stauffer Chemical Company of Wyoming, then director, Western Research Center.

The Richmond Research Center in California (above) at the old Stege location is part of a Stauffer complex that includes the Western Engineering Center, the Geology Department and the Richmond plant and semi-works plant of the Agricultural Chemical Division. The Research Center was formally dedicated in 1961.

Expanding Sulfuric Acid Production

At the same time that Stauffer was establishing a new base in the chlorine industry, the sulfuric acid operations of Stauffer's joint venture in the Southwest, Consolidated Chemical Industries, were being expanded to meet wartime needs.

Particularly important was technology developed by Stauffer research to convert the sulfuric acid used in oil refining – which becomes a contaminated, unusable "sludge"–back into pure acid that could be reused in the refining process. Once more, Stauffer had found a way to turn waste material into profit – a development that delighted a Stauffer management reared in the waste not-want not tradition.

In 1943, the Manchester plant in Houston was the first U.S. plant to use this method to convert spent sulfuric acid from aviation gasoline processing into fresh sulfuric acid.

In 1944, additional 200-ton acid regeneration units were added at Houston and at Baton Rouge.

On the West Coast, Stauffer's Dominguez plant added a second sulfuric acid unit for reclaiming alkylation sludge. A plant to make virgin sulfuric acid was acquired at Torrance, California (now owned by Montrose Chemical Corporation of California, a Stauffer joint venture).

In 1945, a 17-acre site was purchased at Harvey, Louisiana–just across the river from New Orleans–for a plant to produce ground sulfur and insecticides.

American Cream Tartar Moves East

In 1945, the City of San Francisco informed Stauffer that it needed the North Beach site for a sewage disposal plant. The historic site where John Stauffer had first started grinding cliffstone and sulfur was doomed and, with it, the adjacent plant of the American Cream Tartar Company.

When it became clear that the city would insist on requisitioning the site, Stauffer entered into negotiations with Standard Brands for the purchase of its Tartar Chemical Works in Brooklyn. This purchase was completed on December 31, 1945, and the entire San Francisco tartrate operation was moved from the West to the three and one-third acre site on the bank of Brooklyn's Gowanus Canal. At that time, American Cream Tartar, a wholly-owned subsidiary, was the world's largest producer of refined tartar products.

The tartrate business, built up so painstakingly over the years, was gradually to fade away in the 1950s. Import restrictions and changing labor conditions combined to make it increasingly difficult to obtain the necessary raw materials in the United States. The plant was closed down in 1958 and today, as in the 1890s, cream tartar, tartrates and rochelle salts are all imported from abroad.

Organizing Research Activities

It was under Albert Walter in 1943 that Stauffer's fragmented research activities were combined in a central organization for the first time.

On the West Coast, the formidable, German-born Dr. Edmund Missbach, who had been hired by John Stauffer in 1905 and who had degrees in both medicine and chemistry, was working seven days a week at his Berkeley lab. At Richmond, Albert Mohr was developing improved sulfuric acid catalysts, superphosphates and aluminum sulfates. At Torrance and Dominguez, Earl Ross and Cecil Wilde were developing the technology for converting spent sulfuric into virgin acid.

In the East, Iver C. Macdougall worked on improving carbon bisulfide process engineering at Chester and Nashville. Ray Wallcott worked on sulfur processes at Bayonne. Citric acid research was carried on at Chauncey.

In 1943 Dr. Arnold Belchetz was hired as director of research to organize a formal program to coordinate all

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Above: A view of the Delaware City complex where, last year, Stauffer completed the world's largest polyvinyl chloride dispersion resin plant to manufacture the Company's proprietary 50 Series bulk handleable dispersion resin. Left: The petrochemicals plant at Long Beach, California was Stauffer's first entry into the vinyl chloride industry. The Stauffer-developed technology used there has been licensed worldwide.

these varied activities. Dr. Chester Arnold was chosen to organize research on the West Coast and Dr. George Dalin to head up a program in the East. The present Eastern and Western Research Centers were built several years later.

ELEVEN. NEW DIRECTIONS 1946 – 1967

In 1946 Albert Walter retired at the age of 65, after more than 40 years with Stauffer. As his permanent legacy, he left a strong management team and a company with a firm, if conservative base in heavy industrial chemicals.

For the next 23 years Stauffer Chemical had two leaders who were to effect basic changes in the organization of the company and to lead it in bold new directions toward diversification and specialization.

– Christian de Guigne III, grandson of founder de Guigne, who served as president from 1946 to 1954. In 1954, de Guigne became chairman of the Board of Directors of Stauffer Chemical Company, a position he holds today.

– Hans Stauffer, nephew of founder John Stauffer, who was president from 1954 to 1967. On his retirement, Stauffer served as chairman of the Executive Committee for one year and then as a director until 1971.

Highlights of the development that took place under their leadership include:

• *Stauffer Chemical Company became publicly owned.* In 1953 it was decided by the Board of Directors that the Company must broaden the base of stock ownership to secure the capital for major expansions.

To accomplish this, Stauffer was merged into a new Delaware company of the same name on September 15, 1953. The new Company then made an initial offering of 325,000 shares of common stock to the public. To further broaden the market for the company's shares, Stauffer Chemical Company (Delaware) was listed on the New York Stock Exchange on April 19, 1954. Ownership in the Company was increased from about 60 stockholders to nearly 3,000. For the first time in its history, Stauffer released a public, year-end report. In May 1954, New York became Company headquarters, with offices at 380 Madison Avenue.

• *The Company was reorganized into business areas based on related product lines, rather than geographical regions.* Before 1955 the Company had functioned as three virtually autonomous regions – San Francisco, Los Angeles and New York. The process of organizing the Company into divisions based on related product lines was begun in 1955.

• *In 1955 Consolidated Chemical Industries merged with Stauffer Chemical.* Solomon Peiser, the grand old man of CCI, had died in 1951 at the age of 80. On his death, his son-in-law, George L. Bond, succeeded him as president of the corporation.

Since 1946, CCI had been adding more plants to its extensive operations in the Southwest:

– In 1947, Little Rock, Arkansas, to mine and process alumina-bearing clay and Springhill, Louisiana to make alum for the paper industry.

– In 1948, a 400-tons-a-day unit at the Manchester plant to make virgin sulfuric acid.

– In 1950 at Baton Rouge, Louisiana, a plant to recover sulfur from refinery gases.

– In 1953, a sulfur recovery unit at Baytown, Texas. In 1955, a sulfuric acid regeneration unit was added at Baytown, which was then the largest such facility in the world.

When the merger with Stauffer took place in 1955, CCI became 100 percent Stauffer owned and a division of the Company at the same time. CCI had become a publicly-owned company in 1938 and approximately 1,700 new stockholders were added to Stauffer Chemical, which now had assets of some $125 million. George L. Bond and Edward S. Rothrock joined the Stauffer Board of Directors.

Sales for Stauffer before the merger with CCI had passed the $100 million mark. After the merger, combined sales for the two companies topped $143 million.

The partnership that had started before the First World War had proved to be both enduring and fruitful. With the strong base provided by the merger with CCI, Stauffer today is the largest producer of sulfuric acid for merchant sales in the United States.

• *Bold new ventures were undertaken in petrochemicals, carbon bisulfide and specialized sulfur products.*

It was during the 1950s that Stauffer first entered the *petrochemicals* field. Ground was broken for a plant at Louisville, Kentucky to make chlorinated hydrocarbons, including carbon tetrachloride, methylene chloride, chloroform, perchlorethylene and anhydrous hydrogen chloride.

In 1959 Stauffer embarked on a second petrochemicals plant at Long Beach, California. American Chemical Corporation was a joint venture with Richfield Oil Company that subsequently became 100 percent Stauffer owned in 1974. The technology for the proprietary balanced process (including the oxychlorination of ethylene) that is used at Long Beach to make vinyl chloride monomer was developed by Stauffer research, and has been licensed in more than 15 countries worldwide.

In the established field of *carbon bisulfide*, it was in 1956 that Stauffer instituted the catalytic method of producing carbon bisulfide at Le Moyne. As mentioned earlier, this process rendered the older, retort method of production obsolete.

In the *sulfur* business that John Stauffer had started in 1888, Stauffer was in the forefront of developing specialized products. Chief among these was a patented process for making Crystex® insoluble sulfur, developed by Dr. Arnold Belchetz and Alvin Schallis and piloted at Chauncey and Bayonne. In 1954, ground was broken for a new plant to make Crystex at Monongahela, Pennsylvania.

• *New bases were secured in phosphorus, organo-metallics and silicates.*

In an interview some years after his retirement, Hans Stauffer reminisced that his most important contribution to the Company had been the acquisition of Victor Chemical Works in 1959. Victor was then one of four leading U.S. producers of elemental phosphorus and phosphate chemicals.

"Victor was a turning point for the company," Mr. Stauffer noted, "because it gave us a whole new building block in phosphorus chemistry. It laid the foundation for the Company's expansion into food ingredients, and it gave us a base for organo-phosphorus pesticides and phosphate detergents and, later, for flame retardants."

The Victor deal–which brought Stauffer's sales to over $200 million per year–was initiated with a simple hand-

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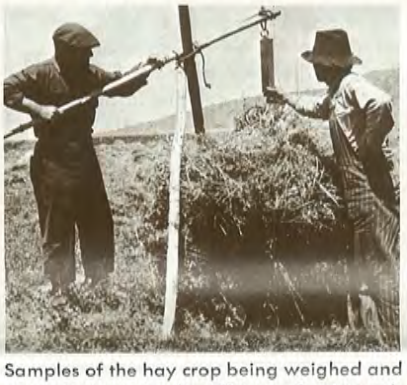
A picture taken in 1928, when August Kochs (r.) had been president of Victor Chemical Works for 15 years. Center is W.B. Brown, president of Victor, 1947–49, with O. Rascke, vice president, Sales.

Modern methods of using Stauffer's proprietary pesticides include the orchard sprayer shown above that could be applying **Captan**® fungicide or **Imidan**® insecticide to prevent orchard pests from attacking fruit trees and their crops.

Stauffer's ground and sublimed sulfur dusts were used as fertilizers and for pest control by farmers before selective proprietary pesticides were developed. Above: a California farmer, **circa** 1910, on his way to sulfur dust his fields.

An early display booth for the San Francisco Sulphur Company, Stauffer's first wholly-owned subsidiary. P.M. Paulson, Stauffer's self-styled "sulfur king," is shown helping at right.



Samples of the hay crop being weighed and compared to test the efficacy of using sulfur in the soil. Photo was taken **circa** 1912.

At left: A sampling of the 50-pound bags in which sulfur was sold by the San Francisco Sulphur Company for use in agriculture and the rubber industry.

shake between Hans Stauffer and August Kochs, the 88-year-old president of Victor Chemical. This informal style, based on mutual trust, was typical of the way Hans Stauffer, and his uncle before him, preferred to conduct business.

In addition to phosphorus applications technology, the Victor acquisition added the plants at Chicago Heights, Illinois; Morrisville, Pennsylvania; Mt. Pleasant and Nashville, Tennessee; Richmond, California; Silver Bow, Montana, and Tarpon Springs, Florida. It also brought many valuable new people to Stauffer.

Organo-Metallics

The year before the Victor acquisition, 1958, Stauffer had acquired Anderson Chemical Company at Weston, Michigan. Anderson specialized in organo-metallics, vanadium chloride catalysts and alkyl silicates binders, virtually a new field for Stauffer.

A later joint venture at Adrian, Michigan with Wacker Chemie GmbH of Germany grew out of this initial acquisition of Anderson Chemicals. Anderson's original Weston plant is part of the Specialty Chemical Division, while the silicones operations are now conducted by SWS Silicones Corporation, a Stauffer subsidiary.

In 1959, Stauffer went into a second venture in the organo-metallic field with Hercules Incorporated—a company called Texas Alkyls, Incorporated at La Porte, Texas. Texas Alkyls was the first U.S. company to commercialize the manufacture of aluminum alkyls – catalysts for the low-pressure polymerization of olefins. They are used to make polymers, rubbers and various polypropylene fibers, such as synthetic turf and indoor-outdoor carpeting.

New Base in Silicates

In 1967 Cowles Chemical Company, founded by Alfred Cowles in 1885, was acquired to give the Company its own base in sodium metasilicate proprietary product lines. These included a full range of cleaning products and specialty items for the laundry, dry cleaning, metal finishing and food and beverage industries.

Cowles

Cowles plants at Skaneateles Falls, New York; Joliet, Illinois; Pittsburg, California, and the Benzol Products facilities at Edison, New Jersey were absorbed by Stauffer. Today, the first three plants produce products for the Industrial Chemical Division and for the Chemical Systems Division that was formed in 1973, and Benzol Products is part of Specialty.

• *The Company's interests overseas were greatly expanded.* At the beginning of 1946, Stauffer had interests in Argentina, Australia, Germany and Canada. During the next 22 years, the Company was to make substantial investments in Mexico and Japan as well.

Between 1949 and 1964, six industrial and agricultural chemical plants were built in Mexico in various joint ventures.

In 1961, Kali-Chemie-Stauffer, GmbH was formed as a joint venture in Nienberg, Germany to produce CRYSTEX® insoluble sulfur for the European market.

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Proprietary flame retardants for textiles, urethane foams and functional fluids are among the new products developed by the Specialty Chemical Division.

In 1965 Stauffer embarked on its first joint venture in Japan—Toyo-Stauffer Chemical Company—with a plant in Yamaguchi, Japan to make dentifrice grade dicalcium phosphate. A year later, Toyo-Stauffer started a second plant to make titanium trichloride.

The International Division was formed in 1958 to conduct this varied activity, to promote exports and to handle overseas licensing.

• *The Research Facilities of Stauffer Chemical Company were enlarged and consolidated.*

In 1946, Iver C. Macdougall was made director of Research. In 1949 he was succeeded by Dr. Chester Arnold, who was made vice president, Research and Development, in 1955.

In the East, the research facilities from the 15th floor of a New York skyscraper on East 32nd Street, the groups doing research at the Boyce Thompson Institute in Yonkers, and the process development engineers scattered among the various eastern manufacturing plants were gathered together at Chauncey, New York under John Crowther in 1949. In 1965, the present Eastern Research Center at Dobbs Ferry was formally dedicated.

In the West, Dr. Charles Persing was named director of the Mountain View Agricultural Research Laboratory in 1945. In 1958, the Torrance research facilities were consolidated with those of the old Richmond Research Center. The new center at Richmond was dedicated in 1961.

Research directions began to change—away from process improvement engineering to the development of new, specialized products. It was the research begun in these years in agricultural chemicals, catalysts, food ingredients and sulfurs, among others, that was to yield such valuable dividends in the 1960s and 1970s. In large part, it was to make possible the diversification and specialization that are the Company's new directions today.

TWELVE. DIVERSIFICATION AND SPECIALIZATION . . . 1967 — PRESENT

The years from 1967 to 1976 have been a period of dramatic growth for Stauffer.

Roger Gunder, who became president in 1967 when *Hans Stauffer retired, and president and chief executive* officer in 1969, keynoted the Company's new directions in his letter to the stockholders in Stauffer's *1968 Annual Report:*

> Traditionally, growth in chemicals was predicated on being a major producer of basic industrial products. Today, producers are serving more sophisticated consumers, and attractive opportunities for major production of specialized chemical products have been created. Consequently, our strategy is to build from our solid foundations as a basic chemical producer into related areas that show potential for rapid and sustained growth . . . more and more of our resources will be channeled into the specialized areas of the chemical and related industries.

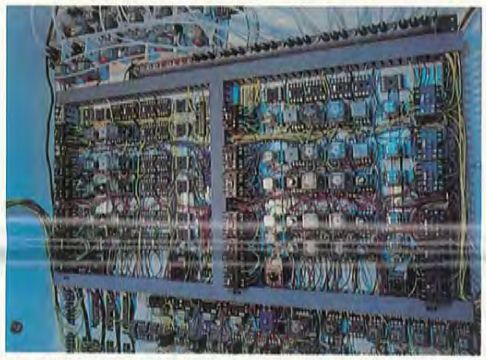
This new policy has been followed very successfully by Mr. Gunder and by president H.B. Morley, who was elected president and chief operating officer in 1971 and president and chief executive officer in 1974.

Sales jumped from $424 million in 1967 to just under one billion dollars in 1975.

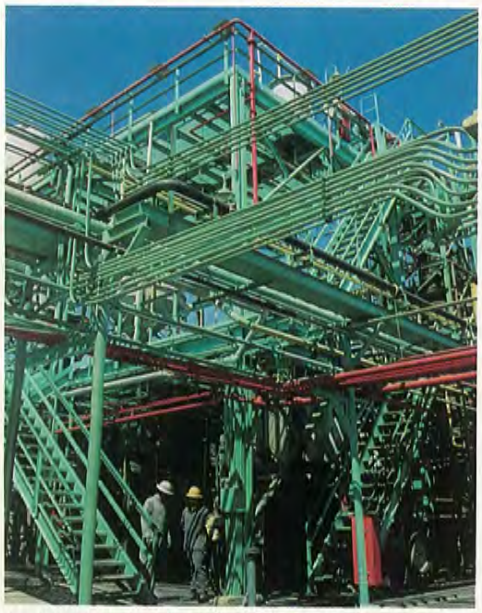
In the last quarter of 1976, sales topped the one billion dollar mark.

While total sales of Stauffer's industrial chemicals increased from $207 million in 1967 to $310 million in 1975, the *percentage* of total sales represented by this figure had decreased markedly—from 48 percent in 1967 to 33 percent in 1975. Stated differently, by the time Stauffer topped one billion in sales, proprietary and specialized chemicals represented more than 67 percent of the Company's total sales.

Giant kelp harvested off the California coast provides the raw material for Stauffer's SEACOR™ alginate gums and PARKELP® and SEA QUESTRA-MIN® food and feed supplements. The Food Ingredients Division, formed in 1973, manufactures and markets a broad range of products, including food gums and stabilizers, monosodium glutamate and cheese whey proteins.



The SENTINEL™ CUSTOMIZED AUTOMATED LAUNDRY SYSTEM, developed by the Chemical Systems Division, is typical of the specialized technology and services the division provides for industry.



Agricultural chemicals have been a spectacular growth area for Stauffer since 1960. Two of Stauffer's newest plants producing the Company's proprietary pesticides are at Cold Creek, Alabama (above left), built in the 1960s, and the grass roots complex at St. Gabriel, Louisiana, that was completed in 1976.

FOURTEEN. CAPITAL INVESTMENT . . . THE FUTURE

In April 1975 President Morley announced a program of increased capital investment to back up the Company's ambitious new growth plans.

"Obviously," Mr. Morley stated, "we are not going to be able to keep expanding sales and profits at attractive rates while maintaining a modest investment program such as we have had in recent years."

The new investment program allowed for $600 million to be spent at a rate of $200 million a year from 1975 through 1977. Of the total, $400 million was allocated for new capacity, $150 million to maintain existing plants and $50 million to expand research, engineering and corporate facilities.

In 1975, Stauffer was right on target with capital expenditures of $199 million. In 1976, new investments approximated the same amount. In 1977 Stauffer has a very substantial new investment base for future growth, with a sound balance established between heavy industrial chemicals and proprietary, high growth lines.

In July 1958, *Business Week* profiled Stauffer Chemical Company as a company "with a feel for the future."

In November 1976, *Business Week* profiled Stauffer as "a company that outperforms the industry."

The founders had built well. Not least in the quality of men and women the Company attracts to serve it.