





Signing of The Partnership

William Procter and James Gamble sign the original partnership agreement on Oct. 31, 1837, creating Procter & Gamble. Procter & Gamble Co.

Into a SECOND CENTURY with PROCTER & GAMBLE

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HIS IS A SUCCESS STORY.

It is the story of two men, one from Ireland, one from England, who came to this country, worked hard and built a great industry.

We have heard such stories many times before. The one about the Detroit mechanic who put a nation on wheels.

And the one about the brooding genius from Milan, Ohio, who heated carbon filaments with electricity to produce the most brilliant illumination man had ever known.

And the one about the two bicycle mechanics of Dayton who were obsessed with the idea that they could fly.

We read them in school books; and re-read them in newspapers and magazines. And we got a little bored with success. Where, doubters asked, had it gotten us? They forgot that these stories were the very fabric of America; a living Part of the history of events which built a great nation. They forgot that fabric of they made us materially wealthy; that they furnished the means with which to nourish a precious heritage of liberty.

We know what we are today. Stories of the type we have to tell here help explain what made us this way. This is the story of two men, one named Procter, one named Gamble, who built a vast industry out of humble, everyday stuff: soap.



OAP is a desperately ordinary substance to us. It is almost as omnipresent as air and water. It is so common that it is difficult to imagine life without it. Yet soap is probably the greatest medical discovery in history. When some forgotten ancient boiled goat tallow and wood ashes in history together, he produced a superior cleaning agent. He provided man with a means of avoiding diseases of filth and gave the generations that followed a weapon against body vermin which spread the twin terrors: plague and typhus.

Greatest medical discovery

> The Greeks knew about soap. So did the Romans-a soap factory was unearthed in the ruins of Pompeii. In the middle ages soap making was a government monopoly. The product of this effort was expensive-reserved for the use of the rich. Not until modern industry came along to demonstrate the virtues of mass production did soap become the property of all the people.

HE birth of Procter & Gamble L of Cincinnati coincides with the birth of large-scale soap manufacture. This firm, which is characteristic of American enterprise as a whole, set up business in the fall of 1837.



The country was experiencing growing pains. People were talking about the new Republic of Texas, and about its pains hero, Sam Houston. The country's first iron boats were being built at Savannah, and Martin Van Buren had just become President. "Old Hickory" was making a lonely journey over the Tennessee mountains to The Hermitage to spend the few remaining years of his life.

Growing

Cincinnati was a little frontier town at the big bend of the Ohio. Its commerce with the outside world—Pittsburgh up river, Louisville, Memphis, New Orleans down river-was carried by boat. Flatboats with deer hides stretched over crude frames, wooden barges, and keel boats floated downstream with the current and were poled upstream by a special breed of rough river boatmen, as strong as oxen and as lasting as pack animals. This was the Cincinnati where William Procter, a candle maker, and James Gamble, a soap maker, set up business.



View of Cincinnati about 1840

Into & SECOND CENTURY

William Procter and James Gamble —the founders



PROCTER was 36 at the time; vigorous, able, hardworking. He was born in England and for a while ran a woolen goods store in London. Fire wiped him out and he decided to get a new start in a new world. He and his wife Martha set out by sailing packet. After a long passage they reached Philadelphia. There they set out for the wagon journey over the high Alleghenies to Wheeling where they could get a boat down the Ohio. Louisville was their destination.

The river lazed its way through a land raw and beautiful —but a land filled with terror. While hostile Indians had been



driven farther west, they were replaced by robber bands who hid on the river banks at shoal water, ready to rob and kill those aboard a grounded boat.

The first few days of the journey were uneventful. Then Martha fell ill with cholera. As her illness grew progressively worse, Procter decided to take her ashore at Cincinnati. A few days later she died. Weary with grief, Procter still had to face the reality of making a living. He set up as a candle maker.

JAMES Gamble arrived in Cincinnati under more happy circumstances. His father, an itinerant preacher, had moved there from North Ireland and leasing a small piece of ground from the town's richest man, Nicholas Longworth, had set up a greenhouse. James worked for his father for awhile, then started a small soap business.

The two men married sisters. At the instigation of their father-in-law they went into business together.

The first Procter & Gamble Bought of William Procter, & Gam factory and store was located on the exact spot in Cincinnati where the Company's 12-story headquarters is situated today.



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Trade Flourished

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Hard work by the partners in making and selling soap and candles made the young business grow and prosper.

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OAP making at this time was, to a large extent, a home industry. Housewives saved fat drippings on the back of the stove. When enough drippings had accumulated they boiled this grease with soda made by pouring boiling water over wood ashes. A crude soft soap resulted.

THE process employed at Procter & Gamble's little one-story factory on Main Street wasn't vastly different. There were two large cauldrons to boil fat collected from homes, hotels, and packing houses. Total soap produc- Weekly soap tion was twelve "frames" a week—each frame weighing 1,000 production pounds. Candles were the other half of their business. The part- pounds ners peddled their wares through the streets in a wheelbarrow.

This was the beginning. A period of rapid growth followed. There was an electric current in the air. The country was growing up. Cincinnati was thriving. Pittsburgh was



changing from a country town into a city. Memphis was on the way to becoming the cotton marketing center of the country. New Orleans was growing into a great seaport. Louisville, finding it expensive to transport the grain grown in the surrounding country, discovered the economy of fermenting it into bourbon whiskey.

E ACH year the graceful river packet boats, rich with a decorative lacework of wood, were becoming larger and more elegant. Cincinnati had a boat a week to New Orleans, a boat a day to Louisville, and every boat carried its share of Procter & Gamble's soap and candles.

It was in the days of this river trade that the Procter & Gamble trademark evolved. A clerk with artistic aspirations sketched a cluster of stars on a box of candles. Later, a circle was drawn around the stars and the man-in-the-moon added.



After awhile executives decided they didn't like the trademark, and ordered it discontinued. Customers down river refused to accept the company's "Star" candles without the trademark. "Weren't genuine," they said. That settled it. The moon and stars have been the company trademark ever since.

Eleven years after the start of business the firm netted \$37,000. At the end of another decade the factory employed 80 men and annual business was over the million dollar mark. But soap making was still a crude business. Let an old employee describe it:

"The method of taking soap out of the kettle and putting it into the frame was as follows: One man stood by the



Factory about 1855

kettle with a long-handled dipper with which he filled a bucket—really a half barrel—which was hung on a pole by



hooks. This was carried off by two men on their shoulders and dumped into the frames in the framing house —the frames in those days being entirely of wood.

"While the men were dumping the soap into the frames a man with a long paddle in his hand kept

Early soap making

stirring the soap. The soap was allowed to stay in the frames four or five days, after which the frame was lifted from the block of soap and a wire passed through the soap, cutting it into large slabs about two inches thick. These slabs were then carried to a bench about three feet high where a man by means of a box with a wire stretched across the face of it-cut off bars of soap about two inches wide and two inches thick, the width of the slab making the width of the bar. Another man then packed the soap in boxes . . . "

HIS was the manufacturing process used during L Civil War days—a period of tremendous stress. Government orders poured in. The soldiers needed candles to light their tents. The Company was commissioned to supply all soap requirements for the Armies of the West. Difficult as Soap for the it was, this period taught a lesson. It showed Procter & Gamble how to achieve mass production without impairing the quality of its products.

Armies of the West



TT was in this period—some ten years after the war L to be precise—that an epoch-making discovery was made. One day a careless workman permitted the mixing device called the "crutcher" to run during his lunch hour. This introduced minute air bubbles into the mixture. The result-First ing soap floated!

floating soab

No one could gauge the full significance of this chance happening until the soap reached the customers. But letters began to pour in. "Give us more of this floating soap," they

said. Few of the towns along the river had filtration plants. For long periods of the year water was a tawny brown. When a bar of soap sank in a sink or bathtub, it was lost to view. But floating soap . . .

The new product needed a name. Harley Procter found the name in church one Sunday morning. The minister had chosen his text from Psalms: "All thy garments smell of myrrh and aloes and cassia, out of the ivory palaces whereby they have made thee glad."

The new soap would be called Ivory. The first cake was sold in October, 1879.

Y this time the factory was in the hands of a second generation: William A., Harley and George Procter, and James N. Gamble. The old plant was hardpressed to fill orders. Production grew to an astonishing total Buying on of 200,000 cakes of soap a day. Domestic producers of tallow, markets the chief raw material in soap making, could not supply the demand of the growing company. It was necessary to comb the oil and fat markets of the world for raw materials.

the world



William A. Procter James N. Gamble The second generation



First Trademark

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Procter & Gamble's famous Moon-and-Stars trademark evolved in the early 50's when a shipping clerk painted a cluster of stars in a circle on boxes of Star Camdles.

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HE factory staggered under the load. There was discussion of a new plant. Then discussion stopped abruptly. William Procter was having lunch at the Queen City Ouick Club one day in January, 1884. A page brought word that the thinking factory was on fire, and that the fire was out of control. Most Company businessmen would have rushed to the fire. William Procter rushed to the telegraph office.

saves the



He knew what this fire would mean in the oil markets of the world. Speculators would attempt corners-for a gigantic squeeze on Procter & Gamble. He sent a barrage of telegrams and cables. To New York, Chicago; to London, to Liverpool, to Hamburg. Buy, buy, buy! ... As a result, there was an ample supply of raw materials when Ivorydale, the new factory, was completed in the Cincinnati suburbs.

P to this point this story isn't greatly different from scores of others that might be taken from the files of industrial America. The country was growing. It Scientific was hungry for new and better products and Procter & Gamble begins was helping satisfy that demand. But the chance discovery of Ivory soap had a profound influence on company executives. Their thoughts on the subject ran something like this:

soap making

A workman had stumbled on the secret of Ivory. Wasn't it possible that soap makers were leaving too much to chance? Mightn't it be better to know something about the fundamental chemistry of soap? Might not this knowledge lead to a vast array of new products?

Until a number of years before this everyone had thought of soap as a simple combination of fat or oil and soda. Then Michel Chevreul, a brilliantly versatile Frenchman, had shown the error in this thinking. He demonstrated that a cake of soap represented the end result of some very complicated chemistry-a discussion of which has no place here.

AS a result of these thoughts Procter & Gamble set out to find more basic facts about soap. The First Company boarded off a corner of the machine shop, installed a sink and a few benches and put a chemist to work there. machine This was one of the first industrial research laboratories in the

laboratory in the shop

United States. Its implications for the future were probably far more important than the early results secured. During the next twenty years that little back-room laboratory was to become a great and growing factor in Procter & Gamble's ex-



panding business. Quality had been dependent on the skill and integrity of a few men who realized to the fullest their responsibility toward their well known trademark and tradenames. But from then on, quality was to be guarded-scientifically-in a laboratory.

RAINED men scanned scientific journals for new ideas and Procter & Gamble chemists toured the world in search of new products which would contribute to the comfort and well-being of Americans. They saw and realized the tremendous implications of the experiments of two French chemists, Sabatier and Senderens, leading to hydrogenation. These two men pioneered with revolutionary



experimental work. Others found that by heating vegetable oils to high temperatures, then adding hydrogen in the presence of another material called a catalyst, the oils would be converted into a solid fat. In England, Norman, a chemist working in this field in 1903, was granted a patent with rather broad coverage.

As it often happens, others had been working along founds a similar lines. A chemist named Kayser, working in England, had gone on from the fundamental experimental work to the industrial application of the process of hydrogenation. Procter & Gamble research men saw that Kayser's work contained the foundation for a great new industry, so arrangements were made for him to come to Ivorydale, the Com-

Research new industry



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Manufacturing

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As years went by, soap making, once the housewife's task, became a great industry turning out vast quantities of soap made to an exact chemical formula.

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pany's parent plant near Cincinnati. Work there proceeded rapidly, and a commercial hydrogenation plant was put into operation in February, 1909. Kayser applied for U. S. Patents on his discoveries, including those made at Ivorydale. These patents were issued jointly to Kayser and the Company.

It was a far-sighted point of view which inspired Procter & Gamble to bring Kayser to this country to continue his work on hydrogenation: far-sighted because the Company's research men were thinking of a new use for cottonseed oil which would satisfy the growing demand for solid fats for food purposes. If commercially practicable, this use of cottonseed oil would provide a remarkably nutritious food to the American consumer at low cost.



THE cotton planters of a century ago were quite content to sell their cotton at a generous profit. The seeds were considered unsatisfactory for use; they were dumped in streams or allowed to accumulate in piles at the gins. There they would go rancid and become such a health hazard that states passed legislation to control the disposition of the "useless" cottonseed. But these seeds were rich rich in food-oil! Chemistry came to the rescue, and experiments were initiated in pressing cottonseed to produce oil. The country's first cottonseed oil mill was built in 1826. There were six in 1860 and by 1900 there were 357. Cottonseed oil by this time had found an important place in animal lard compounds-products in which the oil was stiffened or made plastic by being mixed or beaten together with hard animal stearine. But these products still left much to be desired in flavor, color, odor, and in their ability to keep fresh in the package.

Crisco

THE French and British experimental research leading to hydrogenation changed this picture. It The result paved the way to work on an entirely new and different kind of shortening, not a mixture, but all-vegetable, bland, odorless, digestible-a product which stayed fresh for long periods. Industrial science replaced laboratory science: the once wasted cottonseed oil was converted into an edible fat. The end result-Crisco-was a food product entirely new to the world. The early enthusiasm of Procter & Gamble chemists for hydrogenation was fully justified. It created a new industry for the United States with products worth \$100,-000,000 a year! However, even a statement of the size of the industry in dollars does not do justice to the importance of



the hydrogenation development. Other manufacturers also adapted the hydrogenation process to shortening production. A highly competitive industry has developed in which the competition has stimulated improvements in methods and economies in production. For example, when coconut oil was no longer available for nut margarines, hydrogenated vegetable oils were developed by Procter & Gamble. These replaced coconut oil and permitted the margarine industry to expand its business.

A REVOLUTIONARY new type of shortening had been created, but in the three following decades constant improvements were made to give greater value to the consumer. Particularly significant was work which had been going on for some time in the Company's research laboratories and test bakeries-work which led to another important discovery on which the U.S. Patent Office granted the Company a broad coverage in a series of patents issued from 1934 to 1938. This latest shortening development, characterized by improved emulsifying properties in the product, was probably the most emulsifying revolutionary since the discovery of hydrogenation. It first found application in the baking industry, where it contributed much to the baker's ability to make cakes and other products of even better than "home-made" quality! It was soon found that the housewife, as well as the baker, could take advantage of this improvement and it was made available in Crisco. Since these patents were issued, Procter & Gamble has granted rights under them to practically the whole shortening industry.

Improved properties



Early Shipping

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Procter & Gamble's soaps and candles traveled the rivers and canals first, as its business expanded thru the Middle West.

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THE imagination of research men accounted for other notable achievements at Procter & Gamble. In another field, the story of Crisco was, in a way, duplicated in 1931. That year the Company's idea scouts learned that some European chemists had invented an entirely new kind of



sudsing and cleansing agent, which came to be known as a synthetic detergent. It was later covered by U. S. Patents, rights which were eventually sold to an American company.

The historical background regarding these patents makes interesting reading. It is a story which forcefully illustrates the keen competition between companies seeking to obtain new developments in products or processes which can be passed on to benefit the general public. This competitive spirit has been one of the principal factors in raising the standard of living in the Americas: it is a powerful force that will ultimately do the same thing throughout all the countries of the world.

As we have seen, ordinary soap is made by reacting soda with fats and oils. In the case of these new synthetic detergents, however, intricate equipment and specialized chemical knowledge were employed to convert the fats first



Early Selling

The first cake of Ivory Soap is delivered to the Company's store in 1879 by William A. Procter, who did much of the early selling.

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to fatty alcohols and ultimately to fatty alcohol sulphates. The resulting product was a cleansing agent which lathered freely in the hardest water-even sea water. It left no rings on tubs or basins as do ordinary soaps when used in hard water.

After much research in its own laboratories, the Company was convinced that this new type of product was indeed revolutionary, for such a product would meet a very definite need, particularly of people living in hard water territories. And so, in 1932, the Company obtained rights to the use of these inventions for the production of synthetic detergents.

THE magic of synthetic detergents was utilized to give the United States many new products, including shampoos, and household and industrial detergents. They are marketed under such names as Dreft, Drene, Prell, Shasta, Tide, and Orvus. Besides providing newer and better products, their creation made jobs for hundreds of workmen.

Another potentially interesting development in the soap field was a method of synthesizing fats from petroleum. Chemical If successful, the method would permit the making of soap from petroleum instead of from coconut, palm and cottonseed oils, from whale oil or from tallow. It meant that the United States could look forward to the day when she no longer had to import millions of tons of fats and oils for soap making.

Although considerable experimental work has been done, the economic practicability of the process has not yet been demonstrated. When it is perfected, the benefits of this process will become available to the American consumer.

magic



Ivorydale Is Built

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This gigantic new type of factory, largest of its kind and surrounded by employee playgrounds, was completed in 1887 outside of Cincinnati.

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NLY a few of those who are intimately associated with the work realize how much time and energy are spent by Procter & Gamble idea scouts, research chemists, products service men, and engineers in improvising equipment, in testing products, and in eliminating the "bugs" in processes. Most of this work, which takes years, is done quietly before a new product blazes across the market.



Ivorydale and St. Bernard Plants-Cincinnati

ROCTER & Gamble research chemists and engineers have made notable contributions to manufacturing techniques and the developments of new products: these manufacturinclude short cuts in tedious processes which have resulted in large consumer savings. Patents have been granted by the United States Government on several hundreds of these improvements in apparatus, processes, and products. The Company has licensed other concerns-in some cases, competitors-to use some of these patented inventions.

New ing techniques

Into a SECOND CENTURY



Unusual laboratories Taking a movie through a microscope of suds action on a single hair. This was about the first time scientists had been able to see what actually happened when suds went to work rolling away dirt.

A complete commercial bakery at Manufacturing Headquarters solves bakers' problems, and supplies formulas and practucal baking hints.

Below: The home kitchen at Ivorydale where Crisco recipes are tested and cook books are written.





The cavalcade of improvements covered by these patents includes major advances made in soaps, cleaning agents, processed edible oils and cooking fats, shampoos and dentifrices. Some of the interesting patented improvements of the past twenty years include: making soap flakes of tissue thinness; blowing soap through small jets into a heated atmosphere, thereby producing soap in finely divided particles or powdered form; developing cartons to prevent fine powdered soaps from sifting out; improving apparatus for stamping bars of soap; developing a wonderful new Ivory Soap of superior solubility, appearance, and freedom from warping.

ONTRAST for a moment the picture at Ivorydale-J the plant in suburban Cincinnati built after the fire of 1884-with the processes in the old soap factory which and the new we saw a little earlier. Today there are over 100 gigantic

kettles in Ivorvdale alone, holding hundreds of thousands of pounds of soap; lakes of soap, rivers of soap. There is soap boiling angrily, soap cascading through pipes. Soap is being churned like butter in one operation, whipped like cream in another-all by machinery. The



hardened bars are cut, stamped, and wrapped automatically.

In the last few years, Procter & Gamble chemical and mechanical engineers developed and put into operation a new way to make soap which eliminates the kettle-a streamlined

The old soap making method from raw materials right through to the finished product. A key part in the process is played by an ingeniously constructed piece of equipment called a hydrolyzer, which helps cut days from production time.

The hydrolyzer is a stainless steel tube about the diameter of a barrel, towering to the height of an eight story building. Fats and oils under pressure are pumped in at the bottom and scalding hot water, also under pressure, enters at the top. As the boiling water passes through the hydrolyzer it meets the fats and carries off glycerine and impurities liberated from those fats and oils. Glycerine recovery from the hydrolyzer is the most efficient known.

time

At the same time that glycerine emerges from the Hydrolyzer bottom, the fatty material used in making soap is pumped saves from the top of the hydrolyzer and, after further purification, enters a continuous soapmaking process. Soap made from hydrolyzer-processed fats is of exceptional purity and high quality. The hydrolyzer removes impurities, makes possible closer control of the composition of soap, and allows greater flexibility of operation. The last two soap plants built by the Company have operated under this system without the use of soap kettles.

> In the field of production of synthetic detergents, likewise, Procter & Gamble's development work has pioneered. In addition to the work previously mentioned, other products and improvements have resulted from Company research: methods of improving the sudsing and cleansing properties of synthetic detergents and methods of speedier manufac

ture. The work has involved not only fats and vegetable oils, but petroleum products as well.

Developments have come along so fast that it would be impracticable to include them all in this book. However, mention of some of the more interesting ones is made in a chronology in the concluding pages.



EVERAL hundred scien-Stists and chemists are now Products engaged in Procter & Gamble's re- Service search and production laboratories. In addition, the Company maintains

Laboratories

a test kitchen, test bakeries, a home laundry and some commercial equipment, a complete experimental beauty parlor, and dental and skin-research laboratories.

It is the test kitchen's job to provide more interesting recipes for better foods. Other laboratories study, develop and test methods of laundering which will prolong the life of textiles. One set of figures will indicate the value of this work to consumers: Under poor laundering conditions, textiles may lose up to 35 % or 40 % of their strength in 20 washings. This leads to frayed collars, torn sheets, shredded towels. When handled according to methods worked out in the Procter & Gamble laboratory, textiles lose less than 10% of their strength in 20 washes. This means longer service and greater wear from laundered articles.

The Company employs a large group of specialists who spend all their time discovering the public's wishes in the way of new products and improvements in present favorites.

Into a SECOND CENTURY



Early Ivory advertising Many tests are run, and countless consumers are interviewed, so the Company may be sure its products are as exactly suited to the user's needs as modern scientific methods can make them. Faced with the most highly competitive market in



the world, the sales and advertising men are aided in their job by a complete confidence in the high quality of the products they offer the public.

S far back in the Company's history as one can trace, we find a record of the management's use Advertising of advertising. But it was the discovery of Ivory Soap-a and promotion new, white, pure soap-that brought Procter & Gamble its first real advertising opportunity.

The Company took its first illustrated advertisement in the old Independent in 1882. Glance back at 1882. The Brooklyn Bridge was nearing completion. Frenchmen were being cut down in the jungle of Central America by malaria and yellow fever-in a dismal attempt to build a canal from the Atlantic

to the Pacific. Chester A. Arthur had just succeeded the assassinated Garfield. In Italy, Rosa Mussolini was carrying a son destined to nefarious fame. In Berlin, Robert Koch had just discovered the tubercle bacillus.



Beside such momentous events the placing of a full page magazine advertisement seems like a trivial event, indeed. But only at first glance. It was the birth of a sound idea: that if one devotes enough time, money and effort to telling people

Into a SECOND CENTURY



Advertising stresses each brand's individuality about a quality product, they will buy that product in unprecedented quantities.

Procter & Gamble has consistently followed this idea and kept in the forefront of American advertisers.

ItS magazine and newspaper campaigns month after month, and year after year, have built good will for its brands. Its radio programs, ranking with the most popular on the air, have added to that good will with the persuasive power of the human voice. Its new household products, introduced from time to time, have first been brought to the housewife's attention with broad sampling and couponing campaigns. Its promotions have used contests that have prompted millions to try their skill for valuable prizes. Its merchandise offers have moved carloads of premiums. Fast-footed in its marketing policies, Procter & Gamble has led its industry.

THE Company has practiced sound public relations: on the one hand, continually keeping sensitive to the public's changing desires and needs; on the other, keeping the public continually informed of actions of the Company, its policies, and its products.

A hand on the public's pulse

The sum of all this effort—manufacturing, research, advertising, promotion, public relations—has created in Procter & Gamble a great and typically American enterprise. It is big, yes. An initial \$7,190 has grown into an invested capital of \$165,000,000.

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Employee Relations

The Company's world-famous employee relations are commemorated in these panels on the Wm. Cooper Procter Memorial at Ivorydale.



OMETHING like 250 carloads of raw materials enter the parent plant at Ivorydale each day. Included are soya bean oil from Illinois, cottonseed oil from the South, babassu nut oil from Brazil, whale oil from the Antarctic. In normal times there is copra, the dried meat of From the coconuts from the Philippines, palm oil from Africa, green of the world olive oil from Spain, Algeria, and Greece, peanut and sesame oil from China, delicate perfumes from southern France, Italy, and Australia. They come from the four corners of the world to join the fats and tallow, backbone of soap making, from the country's great packing centers. This vast bulk of raw material emerges as an incredible variety of soaps, cooking fats, and other products.

Procter & Gamble's chief by-products are glycerinerecovered in the soap-making process, cotton seed linters -the fuzz left on the seed after the cotton has been ginned. and the seed cake from which the cottonseed oil has been Important pressed. These find their way into many finished products including dynamite, smokeless powder, rubber, textiles, live stock feed, photographic film, quick-drying paint, floor coverings, artificial leather, plastics, roofing materials, safety glass and pharmaceuticals.

These things are products of the combined efforts in

four corners

by-products

peacetime of 15,000 employees. Procter & Gamble is big, very big. It is big in a day when bigness is often confused with evil. Let us see.

THE great size of the Company has permitted tre-

Mass

mendous expenditures for research—with obvious benefits to the consumer. It has permitted large capital outproduction lays for any device or process which could cut the cost of soap manufacture. This fact has kept the price of soap within the price reach of everyone. As an example, the price of a mediumsized bar of Ivory soap stood at 5 cents in 1890. In the 57 years that have elapsed since then the price of raw materials has risen more than 150 per cent. Wages have gone up 1000 per cent. New taxes have added over half a cent to the cost of each bar of soap. Considering all these things, we should therefore conclude that the 1890 bar of soap should cost about 15 cents today. Actually it costs approximately 10 cents in the average store, and is the best bar of soap in Ivory history. Mass production has demanded the utmost attention to manufacturing detail: a constant striving for higher efficiency reflected in a lower sales price.

A Great Leader

IGNESS in this case has worked for job security unique in American industry. Away back in 1886 the Company inaugurated what was then a radical departure-Saturday half holidays. The step was just one of the many changes which came with the advent of a most unusual man-William Cooper Procter-who entered the business upon his graduation from Princeton in 1883. Of the third generation in the firm, he started in the plant shoveling salt and rosin.

As he progressed through the ranks he came to know the employees and their daily problems intimately. This knowledge added to his intense concentration on every detail of the business and his enthusiasm brought the partners of the firm to his way of thinking. In 1887 a revolutionary profit-sharing plan for employees was inaugurated. Profit-sharing and disability benefits in some form have been an integral part of Procter & Gamble's employee program ever since. So, almost fifty years before Social Security, Procter & Gamble had a pension plan for its workers.

THE year 1923 saw another of William Cooper Guaranteed Procter's ideas put to work—an idea which was work in the to have repercussions around the world. It was guaranteed work-steady employment for at least 48 weeks of the year for factory employees. From the workman's point of view, the outstanding evil of our industrial system is its inability to provide steady employment. Depressions, seasonal slumps and re-tooling shut factories. They leave workmen to face periods of unemployment, living as best they can. Here was a man in a position of authority who sensed the unsoundness of this situation and decided to do something about it.

A STUDY revealed that the consumption of soap T was regular throughout the year. The irregularity in sales and production was caused by spasmodic buying A costly on the part of the wholesalers. They bought heavily when solution prices were rising-thereby requiring factories to run day and night. When prices fell they left the market. Factories closed. The obvious solution-a costly one, incidentally-was to sell

factory

Into a SECOND CENTURY

Wm. Cooper Procter Pioneered in guaranteed work for factory employees

> directly to retailers as well as to wholesalers. Such a procedure would insure an even flow of Procter & Gamble products to the public. It would mean steady, year round jobs for Company employees. It made possible the adoption of the Guaranteed Employment Plan, which cost the Company something like \$3,000,000. The plan guarantees employment for 48 weeks to all hourly rate workers. It is in operation at the main factories of Procter & Gamble in the United States and Canada.

> The business principles and practical humanitarian philosophy of William Cooper Procter are as much a living, active part of present-day Procter & Gamble as the name Ivory. His vision, his boldness and his courage—courage to discard outworn methods and procedures and push ahead carry through to today. His humanity, too, reflected in an ever-

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with PROCTER & GAMBLE

present sense of fairness to those whose hands produced and sold the Company's goods, is a legacy written into all Company employee policies through the years—and still the cornerstone of its dealings with employees today.

THAT brings us up to today—the aftermath of *Contribution* to the World War II. What part did Procter & Gamble war effort play in the War?

A year before the attack on Pearl Harbor, the Company had, at the request of the Government, set up a million dollar corporation—The Procter & Gamble Defense Corporation. In two giant Government-owned plants, designed and managed by Procter & Gamble personnel, millions of shells and rockets were loaded, using the same efficient mass production methods worked out for packing, boxing and weighing soap products. Both plants were awarded the Army-Navy "E". The Government also awarded a Gold Medal to the Vice President in charge of this activity and the citation read as follows: "... several of the largest facilities engaged in the production of artillery ammunition became models of efficiency in quantity and quality of output and in reduction of unit costs."

The production of glycerine—a vital constituent of munitions and a base for the miraculous sulfa drugs—assumed very great war time importance; likewise the production of specially treated cotton-seed fibers for the manufacture of guncotton and smokeless powder.

Tons of soaps and shortenings were essential to the Army and Navy and to our Allies. Synthetic detergents were also used in great quantities by Navy doctors, for example, to



Workers Salute Fighters

The Company has served through five wars. Never did Procter & Gamble contribute as beavily in men or materials as it did to the cause of America and her Allies in World War II. remove fuel oil from men picked up in the water from damaged ships. Also, Procter & Gamble research laboratories did an important job, working with the rubber companies in developing soap to be used as an emulsifier in the buna synthetic rubber process. Soap was also used in one of the most widely followed methods of utilizing reclaimed rubber. Three basic materials used for making plastics were furnished by the Company in tremendous quantities: glycerine, cotton linters, and soya beans. Plastics made from these three helped to replace vital metals on every battle front.



Special industrial soaps were needed for processing textiles. Others were required for finishing iron, steel, brass, bronze, or white metal, all of which must be free of oil or foreign matter to be plated smoothly and easily. Wire-drawing, tube-drawing, and metal rolling, as well as leather finishing, require special soaps.

Procter & Gamble products followed its 3600 fighting men and women to every one of the world-wide battle fronts.

Today Procter & Gamble is one of the great industries of the United States, with a business in excess of \$300,000,000 a year—more than nine times the total receipts of the Federal Government when the Company was founded.

In the Second

One hundred and ten years have elapsed since the orig-Century inal Procter and the original Gamble peddled their products through the streets of Cincinnati in a wheelbarrow. In this period our country has grown up, become great. Procter & Gamble has grown with it and contributed to that greatness.



LSEWHERE in industry, brilliant achievement L has been met by quick fortune. Planes, automobiles, electricity have created vast wealth. But soap is altogether too commonplace for such golden strikes. The best its makers can hope for is to produce a better product at a slightly lower cost. Procter & Gamble has followed this principle. It has stuck rigidly to the dictum of old James Gamble: "When you cannot make pure goods and full weight, go to something else that is honest, even if it is breaking stone."

CHRONOLOGY

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- 1819 James Gamble comes to Cincinnati from Ireland and begins to make soap.
- 1832 William Procter, a native of England, arrives in Cincinnati and begins the manufacture of candles.
- 1837 The two men form a partnership, Procter & Gamble.
- 1854 Employees at the old Central Avenue Plant, in downtown Cincinnati are still being paid part of their wages in soap or candles which they trade off on grocery bills around town.
- 1861 Procter & Gamble is busy supplying soap and candles to the Union Armies of the West. Federal Inspectors find Procter & Gamble's wooden shipping cases invariably contain full weight and first quality goods. Disgusted with the shoddy substitutes foisted off on the Government by unscrupulous manufacturers, James Gamble says, "When you cannot make pure goods and full weight, go to something else that is honest, even if it is breaking stone."
- 1879 In October of this year the first cake of Ivory Soap is sold.
- 1882 The first Ivory Soap advertisement appears in the Independent. Procter & Gamble's "moon and stars" trademark—in use over thirty years—is registered at the U. S. Patent Office.
- 1883 The Central Avenue Plant is partially destroyed by fire.

1885 The first issue of the Ladies' Home Journal displays an Ivory Soap advertisement.

> Ground is broken for a new plant at Ivorydale. The Company's first chemist is given one small corner of the machine shop at Ivorydale for a laboratory. The Company adopts a profit-sharing plan, devised by William Cooper Procter—the basis of the plan in operation today.

The first soap is boxed for shipment from Ivorydale.

- 1890 The Procter & Gamble Company is organized as a stock company. Wm. A. Procter, son of the founder, is made first president, and William Cooper Procter, his son, General Manager.
- 1898 The Company enters the cottonseed oil business because large quantities of this oil are used in soap.
- 1900 All the Company's activities are still concentrated in one plant—Ivorydale.

Procter & Gamble makes its first milled soap.

1901 A winter oil plant is erected at Ivorydale for making salad oil from cottonseed oil.

Equipment is purchased and rights obtained from Carbondale Company of Carbondale, Pennsylvania, for use of an improved process for "graining" of cottonseed oil to remove the stearine (more solid) portion in order to produce salad oil.

- 1904 The Kansas City plant is opened for business.
- 1905 The Company begins marketing P and G The White Naphtha Soap.

- 1907 William Cooper Procter is President of the Company. The Port Ivory Plant begins production at Staten Island, New York, giving Procter & Gamble three plants: Ivorydale, Kansas City and Port Ivory.
- 1909 Soap in flake form is first produced at Ivorydale. McCaw Manufacturing Company is purchased by Procter & Gamble, putting the Company actively in the business of producing all-vegetable oil shortenings.
- 1911 Crisco, the hydrogenated all-vegetable shortening, is first marketed.
- 1915 Canadian manufacturing begins at a new plant in Hamilton, Ontario.
- 1919 Ivory Soap Flakes, a new flaked form of Ivory, is introduced to meet popular demand.
- 1920 Direct selling is widely extended to level off sales and production peaks throughout the year. This is a long step towards planning manufacturing quotas well in advance, leading to guaranteed employment in Procter & Gamble factories.
- 1921 A new Procter & Gamble shortening plant begins production at Dallas.
- 1923 The Company adopts a guaranteed employment plan which assures 48 weeks' work each year to all hourly rate workers. The plan is effective in the main factories of Procter & Gamble in the United States and Canada. Chipso is first marketed.
- 1926 The milled toilet soap, Camay, is introduced after five years of technical and market research studies.

Procter & Gamble patents soap flakes of a new tissue thinness which improves dissolving speed, and calls them Ivory Flakes.

- 1927 Procter & Gamble begins the production of soap in the form of beads or granules.
- 1928 Purchase of the assets of the Wm. Waltke Co., St. Louis, and its best known brands, Oxydol and Lava Soap, begins a great period of Company expansion.
- 1929 The Globe Soap Company of Cincinnati is purchased. Acquiring the Duz Company, New York, brings with it the brand name, Duz.
- 1930 Richard R. Deupree succeeds William Cooper Procter as President of The Procter & Gamble Company, Mr. Procter becoming Chairman of the Board.

Controlling interest is obtained in Thomas Hedley & Co., Ltd., Newcastle-on-Tyne, largest independent British soap manufacturer.

James S. Kirk & Company's plant in Chicago is also added to the Company's production line, bringing in such brands as American Family Soap and Flakes. A new plant is built at Baltimore, Maryland.

- 1931 Sabates, S. A., Havana, Cuba, soap and candle manufacturers, and the Portsmouth Cotton Oil Refining Co., of Portsmouth, Virginia, are purchased. The new Long Beach, California, plant begins West Coast production of soaps and shortenings.
- 1932 Procter & Gamble patents improved cartons to prevent the sifting out of fine powdered or granulated soaps.

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- 1933 A new Hedley Plant is opened at Manchester, England; the first plant to be built abroad. Dreft, the first synthetic detergent for home use, is introduced. The Company begins marketing Drene Shampoo through a new Drug Products sales organization.
- 1934 Death of William Cooper Procter, President since 1907, Chairman of the Board since 1930.
 Introduction of Sweetex, an "emulsifying shortening" sold in bulk, helps the baker and housewife obtain more tender and better-eating cakes and other baked products.
- 1935 Purchase of the Philippine Manufacturing Co., Manila, P. I.
- 1936 A new method of processing synthetic detergents is patented by the Company.
- 1937 The 100th anniversary of the Company is celebrated. Plant by plant, product by product, the Company has expanded until 100 years after its inception, there are two plants in Cincinnati, Ohio, one plant each in New York; Baltimore, Maryland; Chicago, Illinois; St. Louis, Missouri; Dallas, Texas; Portsmouth, Virginia; Macon, Georgia; Kansas City, Kansas; Long Beach, California; Hamilton, Ontario, Canada; Newcastle-on-Tyne, and Manchester, England; Havana, Cuba; Manila, Philippine Islands. In addition, the Company owns oil mills at Atlanta, Georgia; Augusta, Georgia; Charlotte, North Carolina; Greenwood, Mississippi; Jackson, Miss.; Corinth, Miss.; Little

Rock, Arkansas; Macon, Georgia; Montgomery, Alabama; Uniontown, Alabama; Selma, Alabama; Raleigh, North Carolina; Louisville, Kentucky; Baltimore, Maryland; and two mills in Memphis, Tennessee. The Company has also built at Memphis, Tennessee, the largest mill in the world for the making of sheet cotton used in the manufacture of rayon and other cellulose products.

- 1939 Procter & Gamble obtains rights to use a new continuous process for separating fats into fatty acids and glycerine with the recovery of increased amounts of glycerine. Key to this process is the hydrolyzer. This, together with a revolutionary process for making soap from fatty acids, replaces the kettles and cuts days from soap production.
- 1940 The new Hedley plant in London, England, begins production.

Quincy, Mass., plant is put into production to serve the New England area.

The Procter & Gamble Defense Corporation is organized at the request of the United States Government, on what amounts to a non-profit basis, to assist in the armament program.

1941 Dallas, Texas, soap manufacturing plant starts production.

After considerable research and development, a new solvent process is perfected to dissolve-out oil from soya beans.

The Wolf Creek Ordnance Plant at Milan, Tenn., begins operation three months ahead of schedule. Soerabaja, Java, soap and shortening plant is ready for production.

1942 Employees of the Wolf Creek Ordnance Plant at Milan, Tenn., are awarded the Army-Navy "E". The Gulf Ordnance Plant is begun by the Company at Prairie, Miss.

The Company patents a new Ivory Soap of improved solubility, appearance, and freedom from warping.

1943 The Procter & Gamble Defense Corporation assumes the management of the Milan Ordnance Depot, adjacent to the Wolf Creek Ordnance Plant.

The employees of the Chemical Pulp Plant of the Buckeye Cotton Oil Co., at Memphis are awarded the Army-Navy "E" and an honor star is added to the Milan "E" Flag.

1945 Spic and Span Products, Saginaw, Mich., is acquired with its brand, Spic and Span.

The Procter & Gamble Company of Canada, Ltd., is reorganized with complete Canadian management.

The Company patents synthetic detergents with increased washing power due to the incorporation of a small amount of a newly-discovered "builder".

1946 The Company buys and completes a large solvent extraction plant for soya beans at New Madrid, Mo. The Procter & Gamble Trading Company resumes operations at Cebu, P. I. A patent is granted, covering the Company's new synthetic detergent, Tide.

1947 In the Company's 110th year, research facilities are almost doubled in an addition to the Manufacturing, Administration and Research Building and to a Chemical Laboratory Building at Ivorydale.

A 5-story building for the manufacture of Toiletries is erected at the St. Bernard plant.

The solvent extraction method is used to process commercial quantities of cottonseed oil and meal-cake. Prell, a new shampoo in a tube, is introduced to national markets.

The Philippine Manufacturing Company plant at Manila, P. I., destroyed during the war, is reopened.



