PIONEERS LED BY DANIEL BOONE

THE TEXACO STAR

SPRING 1949

MIRACLE OF AMERICA

A nation is revealed by the common actions of its people. This young lady is solemnly enjoying her ice cream. Maybe her dad takes pleasure in a baseball game. Her mother may get a bang out of bridge. Perhaps her married brother is saving up to buy a house. Each, within the framework of freedom, is pursuing happiness. This issue of THE TEXACO STAR explores the origin and growth of American freedom. Today, we face a challenge which would take from us our ice cream, our bridge games and double-headers, our homes. Above all, it would destroy what they represent—freedom.

THE TEXACO STAR

Spring, 1949

VOLUME XXXVI NUMBER 2

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A PUBLICATION OF THE TEXAS COMPANY

For Stockholders and Employes

W. S. S. Rodgers, Chairman of the Board of Directors; Harry T. Klein, President; M. Halpern, B. E. Hull, J. S. Leach, R. Ogarrio, C. E. Olmsted, R. L. Saunders, James Tanham, and Torrey H. Webb, Vice Presidents; Oscar John Dorwin, General Counsel; W. G. Elicker, Secretary; L. H. Lindeman, Treasurer; Ernest C. Breeding, Comptroller, 135 East 42nd Street, New York 17, New York . . . Published by the Public Relations Department, Philip C. Humphrey, Manager; Wilfred B. Talman, Editor, Company Publications Division; J. Lawrence Filson, Assistant Editor; Ellis Prudden, Martin T. Gengerke, Associate Editors. Printed in the U. S. A.

PICTURE CREDITS: Front Cover, courtesy Washington University (color photography by Fernand Bourges); Inside Front Cover, Philip Gendreau; Page 3, A. Devaney, Inc.; Page 4, A. Devaney, Inc. (lower, by Josef Scaylea); Page 5, Philip Gendreau (top), A. Devaney, Inc.; Page 6, Culver Service; Page 7, Culver Service (top left, bottom right), The Bettmann Archive; Page 8, The Bettmann Archive (top), Ewing Galloway; Page 9, Philip Gendreau (top), Ewing Galloway; Page 10, The Texas Company, drawing by Howard Sloane Zoll, Robert Yarnall Richie; Page 11, Robert Yarnall Richie; Pages 12-13-14-15, O. Winston Link; Page 16, Jack Kabat; Page 17, Robert I. Nesmith; Pages 18-19, Ben Schnall; Page 20, Culver Service (top), The Maytag Company, General Electric Company; Page 21, The Tyler Studio; Pages 22-23, Arabian American Oil Company; Inside Back Cover, A. Devaney, Inc.

Brief AND TO THE POINT

ASSEMBLY LINE VS. PARTY LINE—Early this year the 100,000,000th American automobile rolled off a Detroit assembly line. That's something for the folks who make our cars to be proud of. Right now there are 33,300,000 private passenger cars rolling along American highways. That's something for us all to shout about. Those who oppose the American way have yet to produce a single contribution to our high standard of living. But they shout loud and long. On the basis of past performance, present performance, and the realistic promise of future performance, we'll take the assembly line over the "party line."

★

FOR A BETTER TOMORROW—Twenty-five cents of every dollar now being spent on research by private industry in America is spent by oil companies, according to a recent survey. Sounds like competition stimulates ingenuity and a never-ending search to raise our standard of living. That sort of thing makes Communists awful mad.

★

WE TAKE THE HIGH ROAD—Every Summer 60,000,000 Americans "hit the road," statisticians estimate. They take their vacations motoring all over the face of the nation and spend about $6,000,000,000 having a good time and learning about America. About $1,200,000,000 of that is spent on gasoline, oil, and garaging along the way.

★

A NEW-LOOK COAT—Engineers on the Brooklyn-Battery vehicular tunnel (the world's longest), now being built in New York City, have figured out a way to give concrete surfaces a nice smooth look. They simply coat the steel forms which hold the concrete while it hardens with Texaco Soluble Oil. Result: a new look in concrete.

★ ★ ★ THE COVER ★ ★ ★

OH, PIONEERS!—The destiny of America lay beyond the seaboard farms and settlements, beyond the mountains and the forests. Hardy men and women, led by seasoned guides like Daniel Boone, pioneered the future by striking into the wilderness. They faced "disputed barricades" and contended with nature. Slowly, they made a nation. No one served the nation's destiny more usefully than Daniel Boone. He is depicted on our cover at his memorable task.

The original of this painting, *Daniel Boone Escorting a Band of Pioneers Into the Western Country*, hangs in Washington University, St. Louis. The artist, George Caleb Bingham (1811-1879), has only recently been granted the critical and popular recognition which his vivid pictorial record of frontier life in the Mississippi Valley deserves. His paintings reveal his acute observation and his deep feeling for the settlement and development of the West.

THE IMPORTANCE OF PROFITS

By W. S. S. RODGERS

Chairman of the Board of Directors

IT IS HARD to imagine what our lives might be like if there were no "profits."

The incentive to risk savings and expend energy on a business enterprise—to invest with the expectation of making a profit—is a fundamental motivating force in our system.

The progress our nation has made over the years stems from the right and ability of Americans to make a profit. Unfortunately, the immense vitality of the American way—and the promise of an ever-better life which it affords in contrast to other systems—seems to be lost sight of in some quarters today.

It is an elementary fact of economic life that the productive capacity of this country depends upon the availability of sufficient capital funds. It is also a fact that when the need for capital increases, it is necessary to use profits for more and more of these funds.

In 1948, corporation profits as a whole were in the neighborhood of $20,000,000,000. Many persons in the country are saying that profits are "too high," and are distorting the significance of these figures to promote their personal objectives. What they don't mention, of course, is that nearly two out of every three of these dollars have been, or will be, reinvested in business.

The petroleum industry generally, and The Texas Company specifically, provide outstanding illustrations of these economic facts.

Today, the petroleum supply-and-demand picture is in balance. Yet, only a little more than a year ago, there were spot shortages of petroleum products in many places. To correct these supply deficiencies, it has been necessary for the industry to spend heavily on exploration and development of producing properties, on new and modernized refineries, on new tank ships and pipe lines, and on improved marketing facilities.

As was true of the oil industry generally, The Texas Company's earnings in 1948 were at an all-time high. Huge sums, however, were needed by the Company for expansion, modernization, and replacement of facilities.

In 1948, Texaco's investment expenditures were approximately $235,000,000, and are estimated in 1949 at $275,000,000. These amounts, totaling $510,000,000, will exceed the Company's charges for depreciation, depletion, and amortization during the two-year period by approximately $365,000,000.

Charges for depreciation, depletion, and amortization are based on original costs. As the cost of finding new oil and replacing obsolete and worn-out facilities has more than doubled since 1939, sums provided by these charges are insufficient for the financing of necessary replacements of obsolete and worn-out properties.

Two other customary sources of new funds are new equity capital and borrowed money. Equity capital currently is limited and costly, and, if the Company's credit is to continue sound, the amount of new borrowed capital which can be brought into the business must also be limited.

The Company, therefore, had no alternative but to finance its expansion and improvement program with money principally drawn from earnings—or profits.

The Texas Company's net profit for 1948 was $165,980,980. Expressed in terms of 1939 dollars, however, earnings in the past year were $77,561,206 because the corporate dollar in 1948 was worth only 46.7 cents compared with the dollar's worth in 1939.

The dollar has become less and less valuable in recent years. Worth 63.7 cents in wholesale transactions conducted during 1946, it declined in purchasing power to 50.7 cents in 1947, and by 1948 had descended to a fiscal level at which it was worth less than half of its value in 1939.

Scaled to this measure, the *real* earnings of the Company during 1948 are seen to represent only 6.07 per cent return on invested capital as against the 13 per cent return based on the Company's *reported* earnings.

The present necessity of reinvesting a very large percentage of the Company's earnings has also affected the stockholders. Cash dividends declared to the stockholders in 1939 amounted to 66.14 per cent of the Company's earnings for that year, while in 1948 cash dividends declared to the stockholders amounted to 24.47 per cent of the Company's 1948 earnings. While the actual cash dividends declared per share in 1948 were at the rate of $3.00 per share as contrasted to $2.00 per share in 1939, the lower purchasing power of the dollar in 1948 resulted in less real value to the stockholders.

It should be evident from these figures, that those who decry "profits," and dividends, are consider-

(*Please turn to Page 24*)

This Is America . . .

"SWEET LAND . . ."—Framed in the roll of verdant hills, the typical Pennsylvania village pictured above has the trim look of common sense. Worship and toil join hands here

AMERICA is the weathered grain of hand-hewn clapboards running opposite your eye. It is the dooryard drone of electric wires singing in the Summer heat.

In the city, it is the flood tide of home-going workers pouring from giant office buildings.

It is the ancient delta twilight living again in the poignant wail of a blues trumpet.

From coast to coast, swinging across the land on endless errands, the snaking freight train is America.

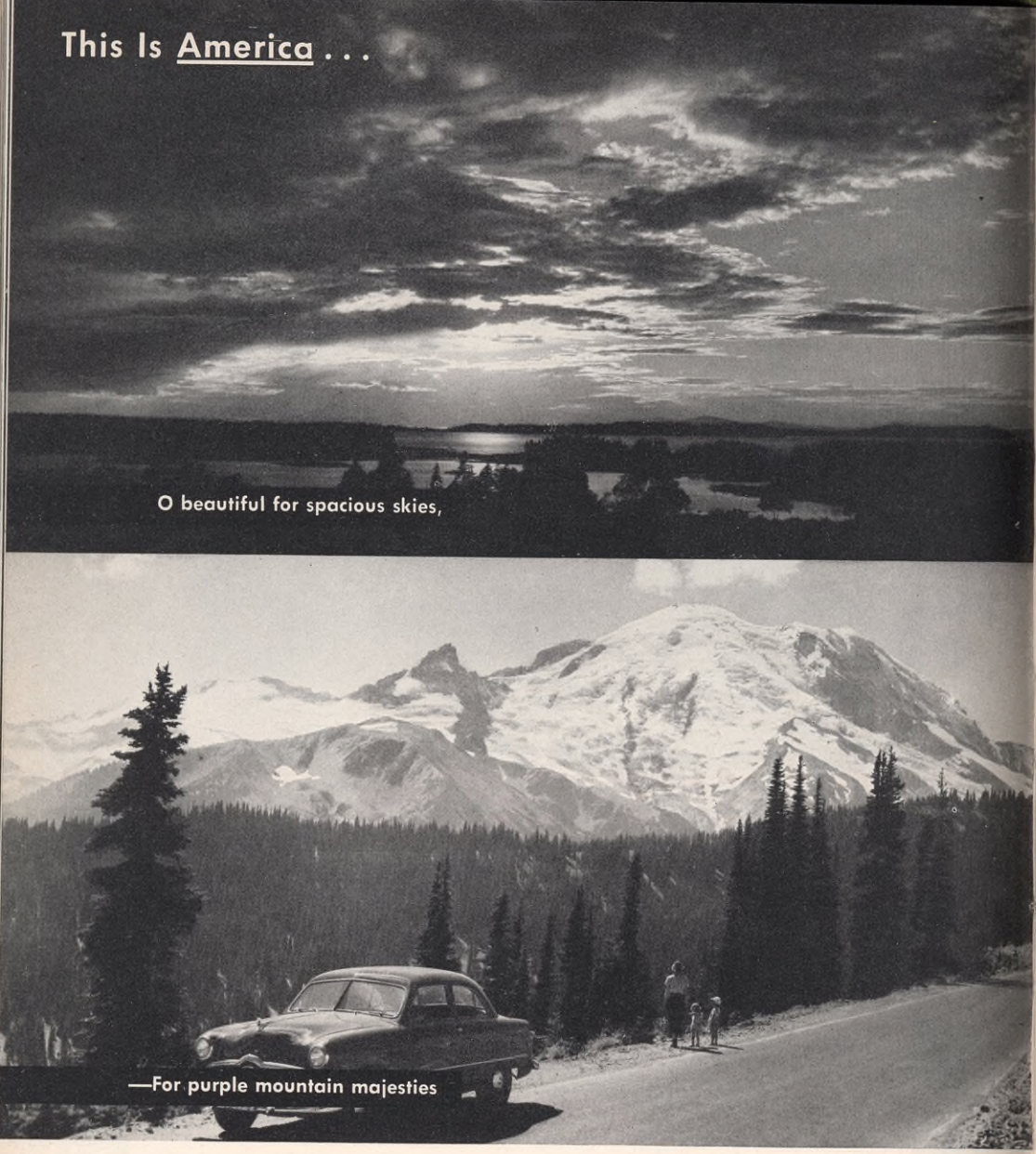
The American image is something new, minted fresh each day in the boundless imagination of American ingenuity. Taking your cue from the lyric outpouring of Walt Whitman, you can fix your eye upon any sight, or turn your ear to any sound, in the land and come up with something representative of America.

The Pilgrims left their mark upon the land. The heritage of early New England is found not only in the prim whiteness of a way of building a home, but more importantly in the nation's council halls, which bear the mint mark of the New England town meeting.

The westering frontiersman nicked a tree and cut a niche in our national history. He took our forebears beyond the narrow margin of coastland. And his mark has remained upon his sons who move on toward endless new horizons of science and industry.

(Please turn to the following page)

This Is America . . .

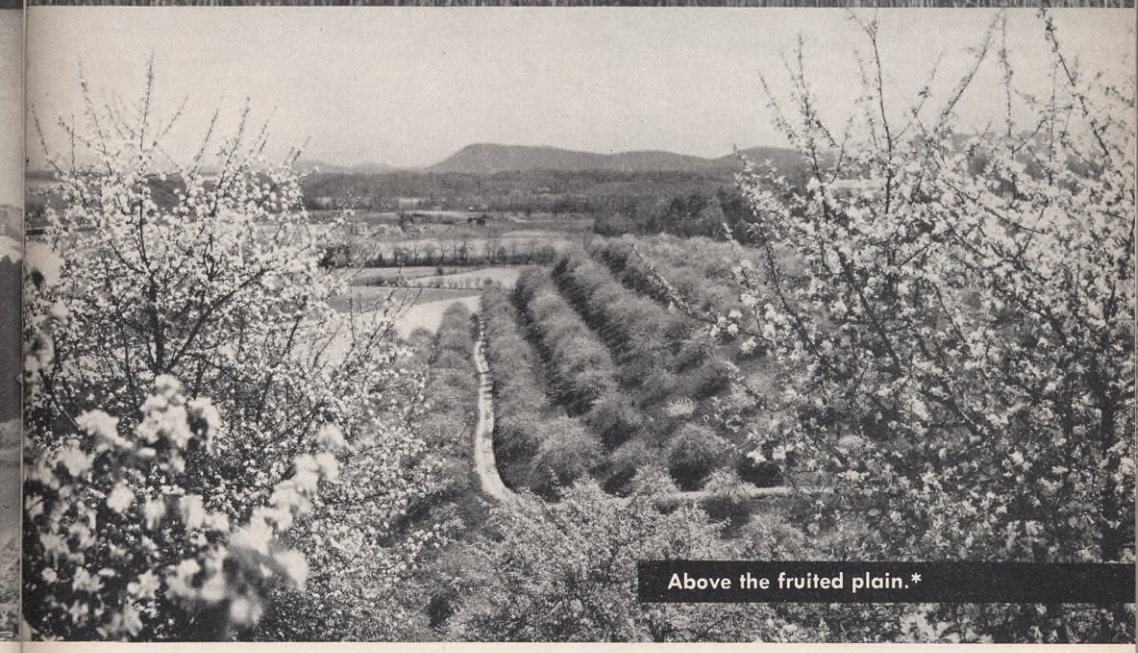


O beautiful for spacious skies,

—For purple mountain majesties

GIVEN FREEDOM, the American people have freely expressed themselves. They have cleared the land and made fine farms; they have bred great herds of cattle; they have developed immense reserves of oil and other natural resources; they have devised the industrial epitome, the automobile assembly line.

In the glittering, new glass-block and stainless-steel buildings of industry you see the same gleam of ingenuity which gave America its industrial might. For America is a land where the quality of daring is encouraged, the urge to intelligent risk is fostered, and the opportunity to profit is furthered.



When morning stalks the broad immensities of America, the new day's light rediscovers the mark of the people—the hope, the courage, the faith which made a great nation.

The shadow of a man falls on a tilled furrow; the shadow of another man glides along a sidewalk—the man behind each shadow is an amalgam of many hopes, many nationalities, many set-backs but more victories.

He is an American.

*From *America, the Beautiful*, by Katherine Lee Bates; reprinted by permission.

This Is America . . .

AT "THE GOLDEN DOOR"—With hope and wonder they came from ancient lands to help build a new nation

. . . of the PEOPLE

"GOVERNMENT *of the people, by the people, and for the people.*"

"Of . . . by . . . for."

Three simple words. Yet, they are the essence of the greatest experiment in freedom in history.

No other nation in the past, no other nation today, has dared to trust the individual to the extent that we do in the United States.

An American can tell off a monarch. He can own property and vote a President out of office. He can live where he wants and choose the job he wants.

The Government serves him—he does not exist merely to maintain the pomp of royalty or the grim power of a dictator. If he wants a representative in the Government who sings hill-billy songs, that's his privilege. If he wants a businessman or a teacher or a scientist to run his public affairs, he has the right to choose accordingly.

This great latitude of freedom didn't arrive overnight. Men died to put the idea of personal liberty into action. Men died to preserve it.

Who were these men who joined an army, lost a life, built a nation? There was a man from Sweden, a boy whose father came from England, a husband whose speech had a soft Irish lilt, a brother who had long since left a Bavarian village, a Pole who farmed the American soil with care. . . .

America is a land *of* the people. It exists *for* the people. And the secret of its strength is this: in freedom begins responsibility, and the American dream of complete freedom has been made real *by* the people. It took work, not wishing.

VALLEY FORGE—Desolate and freezing, the valiant band held on that Winter, and their dream endured

GETTYSBURG—This nation has united in belief that government of, by, and for the people shall exist on earth

GOD'S LONELY MAN—Roger Williams believed in the right of a man to worship God as he sees fit. Banished by the Puritans, Williams founded Providence, R. I., and practised "liberty of conscience"

"HOME IS WHERE . . ."—The first place the English permanently hung their hat in America was Jamestown. Early in the settlement's tragic history, women arrived to become the wives of the settlers. Thus, in the Virginia marshlands, the American hearth became a fact and family roots were planted. Today, the American hearth is still the heart of the way we live. It is the key to American living—from the aery reach of a Manhattan penthouse, nestled atop a swarming apartment building, to the lonely farm dwelling which knows its neighbor only as a feathery twist of smoke in the distance. The American home is unique. From the moment the men of Jamestown welcomed their brides-to-be, our high standard of living has been in the making. Men and women of other countries have brought hope, and courage, and love to the making of our homes

RAINBOW'S END—The Forty-niner was typical of the rugged individualist who risked his life, conquered the West, and got his gold the hard way. He leaned upon no one, kept his own counsel, worked his claim

FAITH, HOPE, AND BRAWN—For a long time, a family's front yard ended where the forest began. Eternal vigilance was necessary, for beyond the dooryard a foe might lurk in the shadow. Neighbors grouped together for mutual protection, and the forest receded where plows bit the soil. Villages formed, and centers of population gave rise to community spirit—to meetinghouses and schools. But, people being people, there were those who plunged into the forest beyond the clearings. In the wilderness they hewed out the elbow room they wanted. They made a nation by daring to go ahead; they left a tradition which, ever since, has found Americans daring the frontiers of land and knowledge. The whack of an axe echoing in the wilderness set a rhythm which can be heard today in the staccato beat of a riveting machine on a skyscraper

This Is America . . .

"WE HOLD THESE TRUTHS"—When Americans declared their independence, words had to be backed with musket fire. America's fight for unalienable rights became a beacon for oppressed people everywhere

. . . PURSUIT OF HAPPINESS

RARELY has a doctrine of government given to the people of a nation an idea so filled with promise as "the pursuit of happiness."

Man's happiness is an eternal will-o'-the-wisp. It is an ideal which grows and changes as we grow older. It is a shadow which races ahead of us—the extension of our own image.

The real glory of American democracy is that it urges man to slip the bonds of necessity and seek a larger reward. Happiness is an ideal which wears the shape of perfection.

A roomful of people would reveal it, but no one could define this thing we have been guaranteed—the pursuit of happiness.

That young man in the corner wants a convertible coupe; his sister, a home and youngsters. The spare, gray-haired man looking at the closing market figures wants a cabin cruiser so he can go fishing.

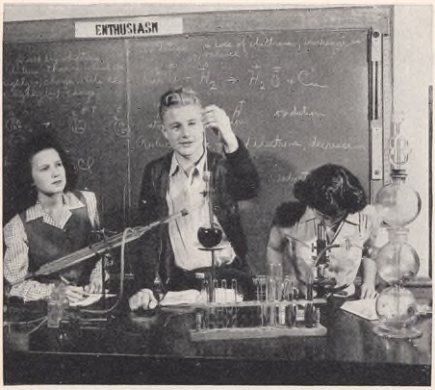
The cleric sitting under the lamp merely wants a new roof for his church.

"I want to be happy. . . ." Not many years ago this simple plaint was a popular song. But even song writers, men of undoubted wisdom, have failed to nail down this urge in concrete terms.

Now, in our imaginary room, everyone has a different idea of how to pursue happiness. The methods for tracking down this nebulous perfection are as many as the people in America.

On highways where tourists roll along from coast

WORK AND PLAY—The American worker (left) chooses the way he wants to earn a living. He produces more than world neighbors and enjoys a healthy balance of leisure time (above), which astonishes many nations



AN INFORMED PEOPLE—Democracy's greatest weapon has been education. "Let the people know," Jefferson insisted. In schools and colleges millions of young Americans receive the stimulating experience of education

MASTER OF HIS FATE—In the privacy of the voting booth, the American citizen sketches the outline of his future. Few simple acts in history have acquired the proud magnificence of the free voter marking his ballot

to coast you will find the pursuit of happiness—the urge to get out and see the country.

You will find it in the simple expectancy of a throng of people waiting to see a new Bing Crosby picture.

Nothing will demonstrate the complete individuality of the pursuit of happiness so much as the collector who searches for rare stamps, or ancient coins, or old books, or phonograph records.

And what of 80,000 people sitting in a cold, late-Autumn rain cheering their favorite football teams to victory?

The pursuit of happiness is strange indeed.

On Sunday morning it is solemnly dramatized by millions at worship.

And no one has voiced it more plainly than the infant who announces himself to the future with a small, impatient cry.

ACCENT ON YOUTH—America's a great place to grow up in. It is a young nation and has an affectionate tolerance for young ideas, a wealth of opportunities for its youth, respect and concern for both young and old

WELL BEGUN—The newborn infant awakens our awe and reminds us of the benisons of our freedom as Americans. We give him, as we were given, a precious inheritance. It is the crux of our ideal, root of home and family

This Is America . . .

PORT ARTHUR WORKS—Texaco's largest refinery exemplifies the industrial genius which our democracy fosters

"Liberty, Parent of Science and Industry"

When free men joined to make a new nation they declared industrial as well as political independence. America's industrial might stems from the motto inscribed on this coin

A BETTER TOMORROW—The free inquiry of industrial research speeds progress and serves the American people

MADE *in America* was once a challenge—the fighting symbol of men dedicated to freedom.

Time and again, in the dark days before the American Revolution, groups of liberty-loving men demonstrated their feelings by wearing only clothes of American manufacture.

George Washington climaxed the era of revolt and signaled the beginning of American industrial independence by appearing at his inaugural clad entirely in "American cloth."

Today, *Made in America* is still a challenge. In world markets it is the hallmark of the world's leading industrial nation.

Also, it is a daily reminder of the industrial might which has served America in the preservation of its democracy.

Almost from its beginning, the world's first democratic government encouraged the development of its home industry.

Hamilton's famous *Report on Manufactures* gave impetus to the development of American manufacturing. It proposed that the Government should concern itself with the growth and welfare of business.

Today, American industry is one of the wonders of our time. By day and by night great mills, factories, and refineries turn out the products which have contributed to the high standard of living we enjoy.

As a leader in all respects, the petroleum industry is an outstanding example of the growth and the scope of American industry today. It represents two very important contributions to our way of life: progress and service.

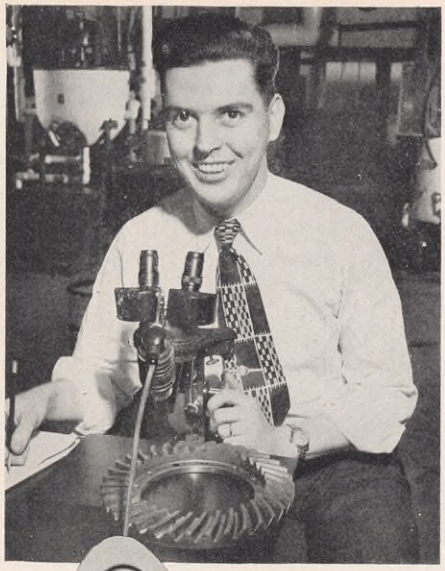
From its inception in 1859, the oil industry has been in the forefront of progress. It is aware of its community responsibilities as a good neighbor. And, because it is highly competitive, it aims ever higher in its effort to give the consumer the most and the best for his money.

In two World Wars, the petroleum industry has rolled up its sleeves and given fully of its energy and ingenuity. Its huge investment in producing, refining, and distribution facilities was a significant factor in the triumphs of democracy.

After World War II, it drove ahead with unceasing effort to meet the unprecedented demands for oil in peacetime. Operating in the philosophy of the men who pioneered against towering odds, the oil industry sought its own capital, applied its own know-how. Free of subsidy, it met the overwhelming demand for petroleum products.

Liberty fostered the growth of the oil industry. The beliefs of free men stimulated its vigorous growth. Like democracy, this great industrial enterprise was *Made in America.* —J. T. M.

THIS IS *AMERICA*—Behind the skeletal framework of the familiar drilling rig lie 90 years of progress and service. The oil industry, which now numbers more than 34,000 separate companies, has long contributed to the well-being, the comfort, and the prosperity of the nation



STAR CLOSE-UPS

YOUNG

GEORGE WASHINGTON may never have slept on Mt. Beacon, but the young Texaco scientist pictured at the left and his bride did, one night last August.

It was a practical solution to the immediate problem of shelter that confronted the couple the day they arrived at Beacon, New York, which is situated on the Hudson River 65 miles north of New York City. Beacon nestles in the shadow of the summit for which it is named. During the Revolutionary War, signal fires laid on Mt. Beacon warned General Washington of the approach of the British.

That first night spent in a tourist camp atop Mt. Beacon was followed by a week of residence in other cabins less close to the stars. It was a busy week for the new arrivals, John B. ("Jack") O'Neil and Mary, his wife.

Jack, who had received his Master of Science degree in Chemistry at Boston College the preceding June, was new on the job as a chemist at Texaco's Beacon Laboratories. Both he and his wife were new at apartment hunting. By the end of the week, however, they had set up more con-

AMERICAN

ventional housekeeping in an apartment in a private house in Beacon.

A Chemist in the Laboratories' Grease Research Department, Jack O'Neil is engaged in basic studies of gear lubricants and in developing new gear-lubricant formulas. A portion of his time is spent in the microscopic examination of gears (see picture at left) that have been lubricated with experimental greases and test-run. Other research departments at Beacon are: Analytical, Chemicals, Engineering, Fuels, Lubricants, and Physical.

Jack is one of a team of more than 800 men and women—many young in years and all young in outlook—whose chief aim is the development and improvement of Texaco products, and whose youthful spirit and energy impart a campus-like atmosphere to Beacon Laboratories.

Chemist O'Neil, representative of the young technical employes at Beacon, is pictured on these and the following two pages in scenes that show him on the job now and as a brand-new member of the Texaco family last Fall.

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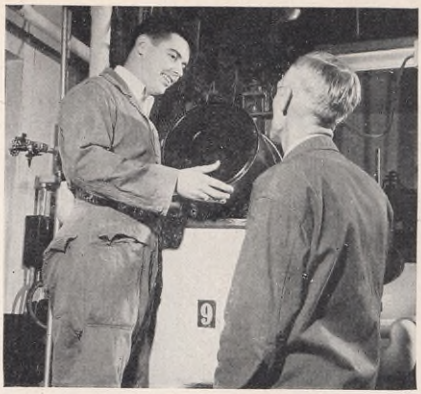
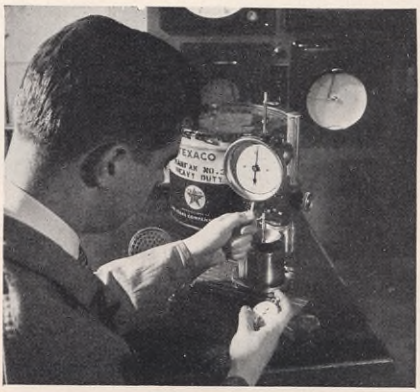
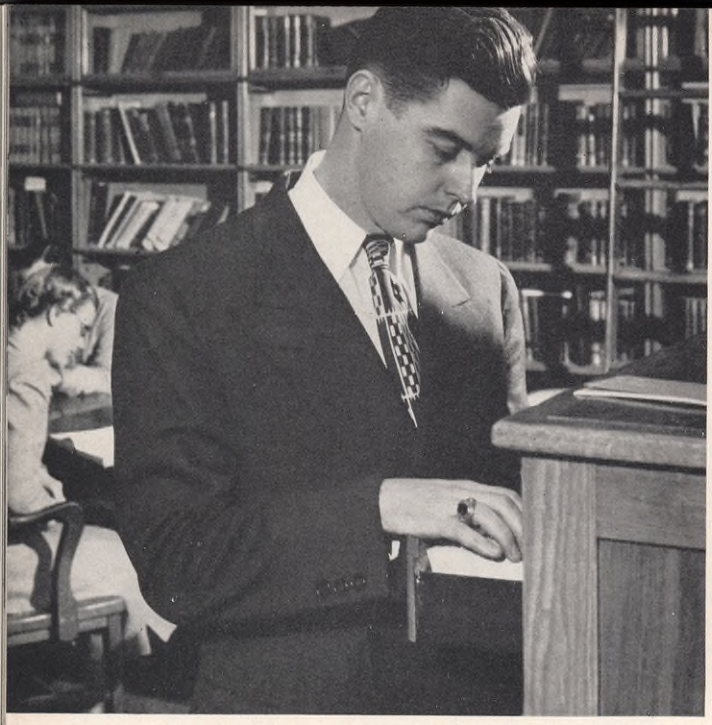




(Above) Helping to charge up a kettle used in making experimental grease was an initial experience for O'Neil. (Below) He determines grease consistency scientifically



When research on gear lubricants calls for a study of published data, Chemist O'Neil is well served by the library, which contains more than 9,400 volumes

At a Grease Research Department project conference, Jack O'Neil takes his place with other

Jack O'Neil and bride-to-be Mary Darling, Boston College campus, June, 1948

STAR CLOSE-UPS

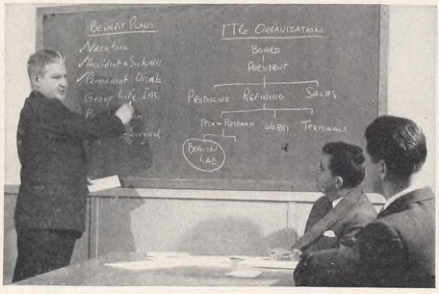
YOUNG AMERICAN

(Continued from the preceding page)

Born and brought up in Whitman, Massachusetts, Jack O'Neil attended the public schools there. "My main interest was in radio," Jack relates, "until I took chemistry in high school. 'Chem' seemed to come easy, and my teacher encouraged me to consider it as a career. I spent a year in post-graduate studies at high school."

Jack entered Boston College in the Fall of 1941. He was drafted in March, 1943, and served in the Far East as an Army meteorologist.

He returned to civilian life in January, 1946,



When Jack joined the Texaco family, employe benefit plans were outlined to him in Industrial Relations Dept.

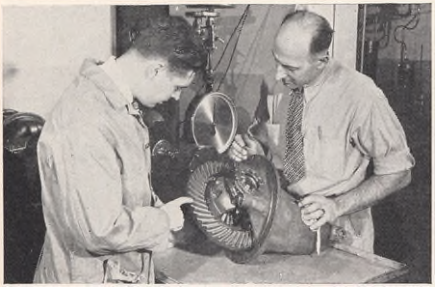
"Welcome to Beacon Laboratories!" Superintendent Carl E. Cummings extended official greetings to Jack O'Neil

Texaco scientists who are his co-workers. O. P. Puryear, Supervisor of group's activity, sits at head of table. Meetings are held frequently

By the time her husband gets home in the evening, Mary O'Neil has dinner ready. She has a job in a local bank

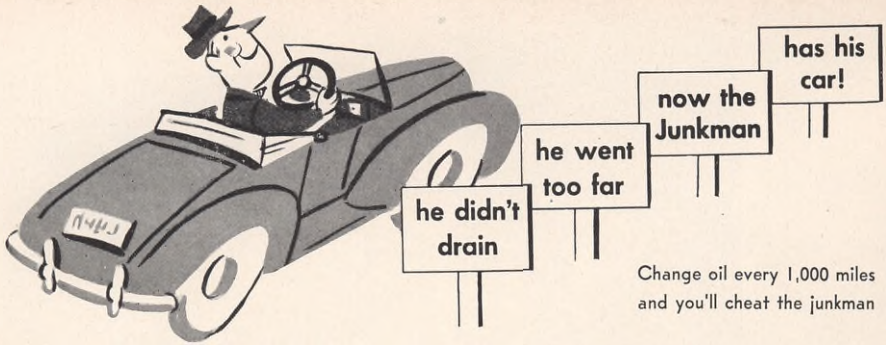
reëntered Boston College, and received his B.S. degree in August, 1947. He studied for his Master's degree between September, 1947, and June, 1948. In July, 1948, he married Mary Darling of Rockland, Massachusetts.

Twenty-six years old, Jack O'Neil is one of millions of young Americans whose education was interrupted by war service. He is also typical of the American youth with a scientific bent who, after completing his formal education, finds a means of capitalizing on his ability and training in private American enterprise.



With Technician Foreman Fred Herdt, O'Neil inspects truck differential which had been Texaco road-tested

Letter from home. Week-ends often find the O'Neils, New Englanders, away on visits to their folks in Bay State



Change oil every 1,000 miles and you'll cheat the junkman

WHY CHANGE OIL EVERY 1,000 MILES?

"AND why *should* I change my oil every 1,000 miles?" The motorist who asks that question *that way* has to hear automotive death rattles before he'll buy a change of oil.

"Dollars for gasoline, but not one cent for maintenance," is his reckless motto, right to the limit of his car's endurance.

He is the repairman's friend, and the junkman's most reliable supplier. Probably, he is not a regular customer at Texaco service stations.

Ask a Texaco dealer "Why should I . . .," and he'll tell you that the 1,000-mile oil change is the cheapest insurance you can buy for your automobile. It cuts time-and-money loss on engine repairs and reduces fuel consumption.

Raise the objection: "But, the manufacturer of my car recommends changing oil every 2,000 miles," and he'll say: "Sure, but that's under perfect driving conditions—and how often do you have them?"

Every Texaco dealer knows that even under so-called *perfect* conditions, there's no dust-free air—and dust comes into the combustion chamber through the carburetor. There's no protection from condensation of heated gases in the crankcase, and nothing to remove iron dust which powders from the engine parts.

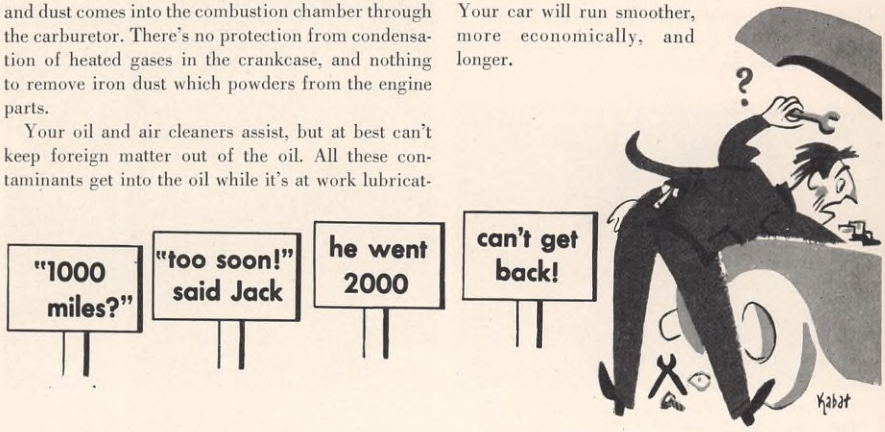
Your oil and air cleaners assist, but at best can't keep foreign matter out of the oil. All these contaminants get into the oil while it's at work lubricating, cooling, and cleaning the engine, and they thicken up the oil like molasses in January.

Motor oil has to travel through small and complicated passages to get to the working parts of the engine. The dirtier the oil, the longer it takes to get around. And the longer oil is left in the crankcase, the dirtier it gets.

Run a car continually at its indicated top speed, and you shorten its life. Work a motor oil beyond the point where it is clean enough to lubricate effectively, and you court costly engine failure.

Maximum use can mean abuse, and can hasten the day when a car will give only minimum efficiency. Extending the mileage between oil changes to, let's say 2,000 miles, would save the average motorist about $10-12 a year on oil. But, one repair job brought on by faulty lubrication might run over $300—the amount saved by 30 years of stinting your crankcase. It hardly seems worth taking the chance.

Change oil every 1,000 miles, or every 60 days, whichever occurs first. Your car will run smoother, more economically, and longer.



The cheapest insurance you can buy for your automobile is a drain, flush, and refill of the crankcase with fresh motor oil at 1,000-mile intervals. There is no finer oil for the refill than Havoline Motor Oil, which is on sale at Texaco dealer stations everywhere

LILLIPUTIAN "LAB"

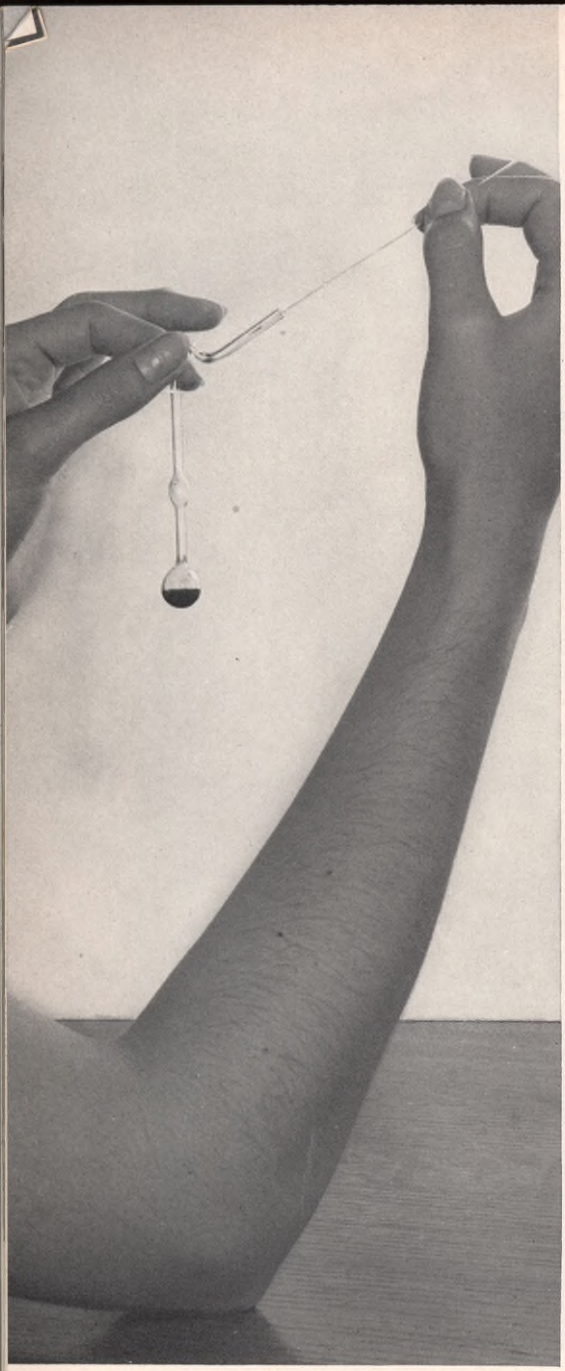
SCIENTISTS at Texaco's Beacon (New York) Laboratories have found that they can separate as many as 100 different fractions from a single drop of oil. Employing pipettes smaller than a needle, drop-sized beakers, and balances designed to weigh almost nothing, an entire "lab" could be packed into an undersized overnight bag.

This is Texaco's microchemical laboratory. Techniques well-known in crime detection have been adapted to find and analyze costly and elusive chemicals and oils.

In the picture at the left, a young lady chemist is holding a fractionating flask. At a refinery, fractionators towering 10 to 12 stories into the air employ the same principle. This flask produces the same or better results—qualitatively—in three inches.

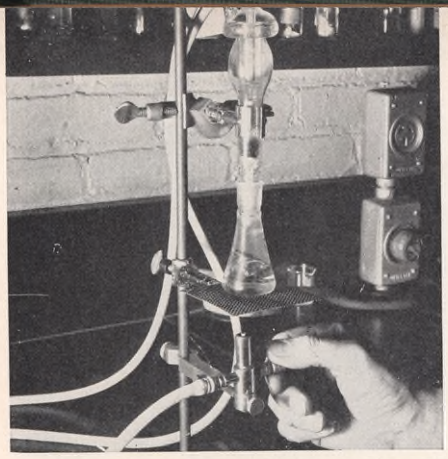
A minute sample of distilled oil is being drawn into a pipette by capillary action and will be sealed into the tip of the tiny tube to determine the all-important boiling range. Since each of the thousands of known and unknown chemical compounds present in petroleum boil at exact temperatures, the boiling point is the first clue to establishing the composition of the sample.

New discoveries, vast savings in time, money, and effort; and, most important, better fuels and lubricants for Texaco's customers, are the results gained in the Lilliputian laboratory at Beacon.

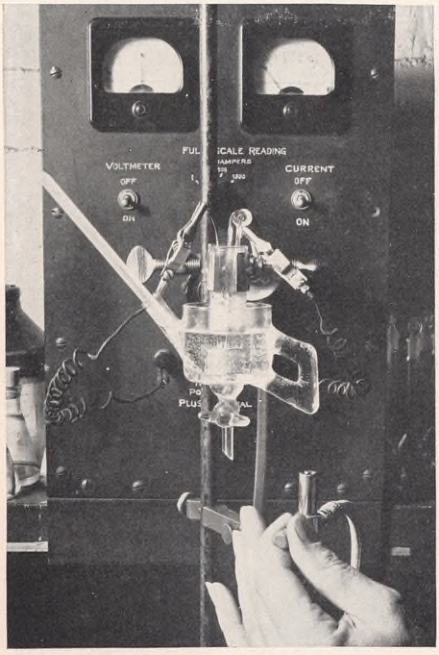


This flask held by a young lady chemist at Beacon Laboratories reproduces the fractionation obtained at Texaco refineries with units that are 10 to 12 stories high

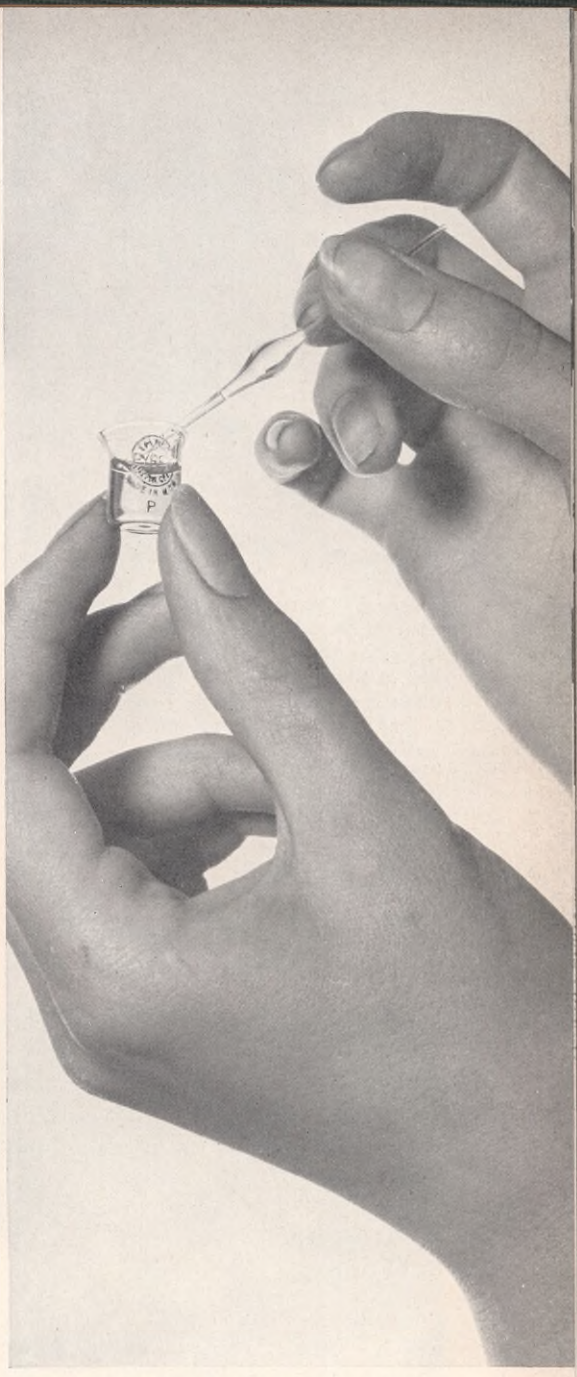
A new kind of sludge filter. Right hand (above) is placing "precipitating reagent"—a chemical that removes metals from solution to bottom where they can be collected—into a sample. Porous glass filter in the "arm" on left of beaker permits withdrawal of liquid after precipitation has taken place. The beaker holds a thimbleful



Micro-extraction. This technique permits the chemist to determine how much of what is to be found in any given piston deposit. After this analysis is made, he can identify the type of dirt or varnish on the piston and determine how much it weighs. Once this is known, composition of oil can be changed and improved as required



Weighing the problem. This technique helps the chemist to determine microscopic amounts of metallic contaminants in an oil. To find and weigh this metallic sludge, the petrochemist electroplates the metallic constituents onto a platinum electrode, as shown above. Since weight of the clean electrode is known, it becomes easy to determine the weight of contaminant, which may be as little as a thousandth of a gram. In microchemical research no sample is too small to be considered



Lilliputian beaker holds less than 1/4 a teaspoonful—more than enough for microchemist's needs. Miniature pipette delivers the necessary minute drop of reagent

No More BLUE MONDAYS

GIVE your washboard to Spike Jones, Mother, we're buying you a washing machine.

Yes, let the old corrugated scrub tool play its swan song in the rhythm section of a hill-billy band, because there's nothing for it to do around the kitchen now that technology has mechanized the blues out of washday.

Since the first mechanical "washer" designed for home use was built in the 1870's, American inventive genius has steadily reduced the drudgery of Blue Mondays. Laundry equipment specialists have cut so many corners from the Monday chore that sudsing the family duds is now truly as easy as rolling off a log.

The modern housewife who has a washing machine can say farewell to arms-up-to-the-elbows in hot solutions of strong soap and water. She need wade no more across swampy floors or blunder through choking fogs of laundry steam. Her Mondays are no longer passed pushing soggy sheets back and forth across the harsh surfaces of a washboard.

On laundry day, in short, a modern woman's work is never done . . . by strain and toil.

The Good Old Days? Aye, there's the rub, for what modern housewife would join this scrub team at their steamy toil?

Many a home today has an automatic laundry machine whose deft start-to-finish handling of the clothes and linens almost permits the housewife to exclaim, "Look, no hands!"

These highly-efficient units, which wash and dry a laundry with a minimum of human supervision, may also be found in the community laundries of large apartment houses, and in the growing number of neighborhood automatic laundries.

This power washing machine streamlines the usual washday grind and makes laundering child's play for this mother and her little helper

A Texaco product is main lubricant in this General Electric automatic washer

A higher standard of living for millions of American housewives is represented by the washing machines which roll off The Maytag Company's assembly lines at Newton, Iowa

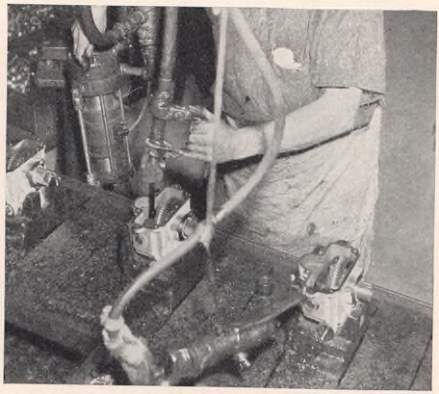
Less expensive and in wider use are the non-automatic power washers which require more tending, but which remove the major exertions from the washday operation.

"Doing the wash" the modern way lightens the burden of physical effort, and releases precious *living* hours to the housewife. She can play with the baby, read, listen to the radio, sew, shop—do whatever she chooses—while the wash washes itself.

Petroleum, universal aid of the machine age, smooths the function and increases the life-expectancy of the washing machine. For years, The Texas Company has been a supplier of lubricants to a number of washing machine manufacturers.

Working together, the washing machine people and the petroleum industry have taken Blue Monday in hand and given it back to the housewife a brighter and more livable day.

A multi-duty Texaco Washing Machine Lubricant is here being installed in the wringer head of a Maytag washer



Preparing this Maytag transmission for heavy washday duty, a worker fills the case with a Texaco lubricant

Long Island's "Desert Outpost"

General view showing ex-Army buildings rehabilitated by Aramco for Training Center near Riverhead, L. I.

Trainees rest from lessons on Arab speech and customs, and enjoy an American custom—pitching horseshoes

Aramco employes training for service in Arabia relax in Training Center lounge after day of study and lectures

It hasn't got a "Flirtation Walk," a football team, or a Victory March, but the Aramco Foreign Service Training Center at the eastern end of Long Island, near Riverhead, has a serious educational mission which, in miniature, reflects the highest goal of learning—to increase human understanding.

The "campus" of the Arabian American Oil Company's overseas training center is a former Army pilot-training field which was abandoned in 1946. Texaco's associate leased and rehabilitated a number of the buildings that originally were part of the Suffolk County Army Air Base, and commenced its unusual educational program last November.

The purpose of the training program is to indoctrinate prospective American overseas employes in the history, customs, and every-day speech of the Saudi Arabians. Behind the program lies the fundamental policy which guides Aramco folks in the land which was once the heart of the Islamic Empire:

"We are in Saudi Arabia as the guests of King Ibn Saud."

Tact and know-how have been the chief ingredients of Aramco's progress in developing the important oil reserves of the Arabian peninsula. Experts in foreign affairs—Government officials, journalists, educators—have commended Aramco's good-neighbor progressiveness.

The Aramco orientation program on Long Island aims to extend the progress already made in Arabia by training future American workers in Saudi Arabia to have an understanding of the land and the people.

The course is brief—six weeks—and intense. Emphasis is placed on colloquial Arabic speech. Up-to-the-minute techniques are used to familiarize trainees with the common phrases they will need to know to get along with ease and convenience while on the job with their Arabian co-workers.

Such phrases as "Please hand me the wrench," or "Please turn the valve," along with the usual courteous exchanges, constitute the basic speech which the trainees are taught.

Arabic is one of the world's most difficult languages to master, and the Aramco short-course does not attempt to give other than a working group of phrases to its "students."

Simplified vocabularies, expert linguists from Saudi Arabia, and records for imitative pronunciation are all employed in the course. The language training will simplify the work of the trainee when

Expert Arabian linguists train Aramco's prospective foreign service employes. Emphasis is placed on simple terms and colloquial speech. Native dress adds authentic touch to courses in Arab customs

he gets to Saudi Arabia, where he will have from six to 15 Arabs under his direction for training in American production methods.

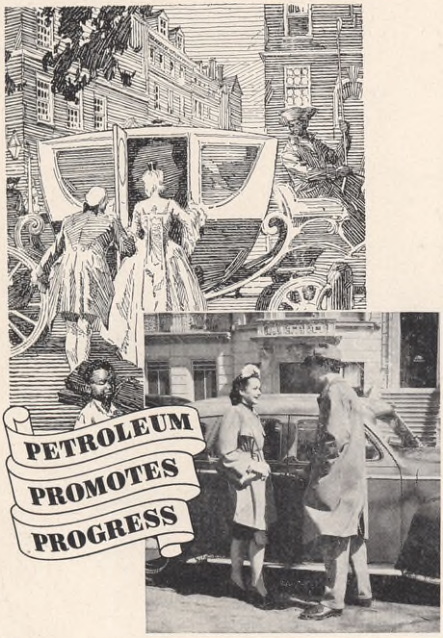
The trainee at the Aramco Foreign Service Training Center also learns Saudi Arab history, geography, customs, and laws. He is taught, for example, that Arab women must never be looked at or photographed, and that Arabia was once the Middle East's richest trading center.

Study at the Training Center has an authenticity which is emphasized by the presence in their native costume of some of Aramco's young Saudi Arab workers. They have been brought to America by Aramco for advanced training in their specialties. While here, they are teaching at the center, giving American trainees first-hand instruction in Arabian traditions and customs.

Initial enrollment at the center was 20. By midsummer, 120 trainees—the maximum enrollment—will be learning rudimentary Arabic at the former Army Air Force training field.

During the Summer, the terrain and living conditions at the center are somewhat like those the Aramco employes will find in Saudi Arabia. The land is flat and sandy, and the wind blows across the seashore dunes. The main difference is that the center has no air conditioning, whereas the quarters the men occupy in Saudi Arabia are artificially cooled.

An Aramco plane, the *Flying Gazelle*, lands at the Training Center. Planes are serviced here for overseas flights



THE IMPORTANCE OF PROFITS

(*Continued from Page 2*)

ably overdrawing the proportions of the "evil."

Even a cursory examination of the facts reveals that *real* profits are not ascending at the rate of inflated prices, that the dollar registered as profit by The Texas Company during 1948 had a real value slightly less than half that of the pre-inflation dollar of 1939.

Any realistic consideration of profits must also include the recognition that they represent something other than "incentives" and "motives" to industry today.

Profits reinvested in business help America to keep on growing. By helping to provide tools and other equipment, profits have given America the highest employment levels in history. Profits enable this country to keep its industrial might intact and assure our security both as individuals and as a nation.

DEVELOPING THE WORLD'S BACKWARD AREAS

The following editorial is reprinted from the New York World-Telegram, *by permission:*

PRESIDENT TRUMAN'S "bold new program" for making the benefits of American scientific and industrial progress available to improve the world's underdeveloped areas need not be regarded either as fanciful or unduly ambitious—if it is undertaken on a sound business basis.

We cannot use American tax dollars to relieve the ill-clad, ill-fed, and ill-housed of every land, because we do not have that kind of money. We certainly would go broke if we tried to make the whole world's backward areas a vast WPA project.

We owe our present position to the initiative and genius of American enterprise, operating under a Government of laws and on the principle that investments in labor and capital are entitled to legitimate returns.

The President's new program can succeed only in the same favorable atmosphere, and only with a proper distribution of responsibilities between Government and business.

To remain strong, we must deal with our friends overseas on a reciprocal basis. We should not try to impose our ideas on any nation not prepared to receive them. We can, and should help those willing to help themselves and work with us. Our enlightened investment capital is doing this today in various parts of the world.

This nation, from its birth, has rejected the Old World concepts of colonial imperialism. It is better than exploiting the many for the benefit of the few, we have found, to share our capital and know-how with those who wish to share their undeveloped resources with us. In so doing, we help them, ourselves, and the rest of mankind.

A good example is presented by the farsighted operations of the Arabian American Oil Company in Saudi Arabia.

"Aramco" paid $28,000,000 to the Saudi Arabian government in oil royalties in 1948. The figure is expected to mount year by year as the vast concession is further developed. The company plans to spend $500,000,000 in drilling and construction projects, including pipe lines, in the next five years. But Aramco is doing much more than just exploit the rich oil deposits it has found under the sand of the Arabian desert.

Arabian workers are being taught to do all the things which now must be done by imported technicians. Malaria control and other sanitary measures have been introduced. A modern hospital, the best equipped in the Middle East, has been provided for the Arab workmen.

Agriculture is being developed through irrigation. Projected cement and asphalt plans will bring good roads. The Saudi Arabians are using some of the money they've received to build a 350-mile railroad, and a deep-water port and railhead on the Persian Gulf. The life of a people which has seen little change in thousands of years is being revolutionized by this coöperative American-Arabian effort of mutual benefit.

The program is succeeding because it has been sound in conception and execution. Both Americans and Arabians went into this enterprise primarily to make a profit—and for both it is paying off. Any undertaking not linked to mutual hope-of-profit will fail.

By encouraging this type of private initiative, the United States Government can contribute greatly to development of backward areas of the earth without imposing extra charges on American taxpayers.

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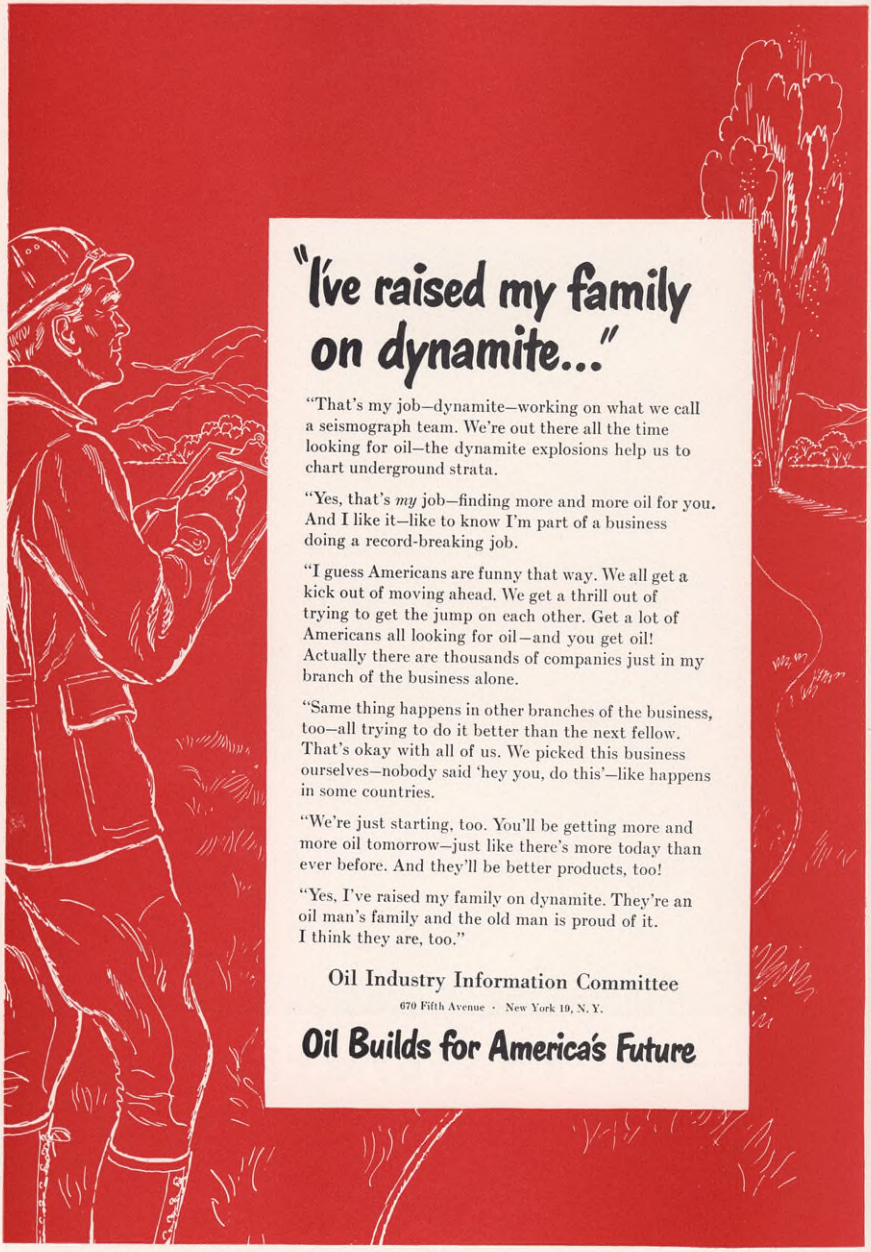
"—Let's go for a ride"

A spin in the country . . . a picnic . . . a trip to the beach. No matter where, we hop in the car and go there. We've got plenty of elbow room in this country, and the automobile gives us a chance to move around in it. No worry about crossing a city limit, the county line, a state border. We don't have to be certified by a central committee to go to the next town. Green fields and shaded lanes beckon—so we go. We call this *democracy*—some people call us *slaves*. We learn to think for ourselves. We think it's fun to move about freely . . . so, "Let's go for a ride. . . ."



"I've raised my family on dynamite..."

"That's my job—dynamite—working on what we call a seismograph team. We're out there all the time looking for oil—the dynamite explosions help us to chart underground strata.

"Yes, that's *my* job—finding more and more oil for you. And I like it—like to know I'm part of a business doing a record-breaking job.

"I guess Americans are funny that way. We all get a kick out of moving ahead. We get a thrill out of trying to get the jump on each other. Get a lot of Americans all looking for oil—and you get oil! Actually there are thousands of companies just in my branch of the business alone.

"Same thing happens in other branches of the business, too—all trying to do it better than the next fellow. That's okay with all of us. We picked this business ourselves—nobody said 'hey you, do this'—like happens in some countries.

"We're just starting, too. You'll be getting more and more oil tomorrow—just like there's more today than ever before. And they'll be better products, too!

"Yes, I've raised my family on dynamite. They're an oil man's family and the old man is proud of it. I think they are, too."

Oil Industry Information Committee

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Oil Builds for America's Future