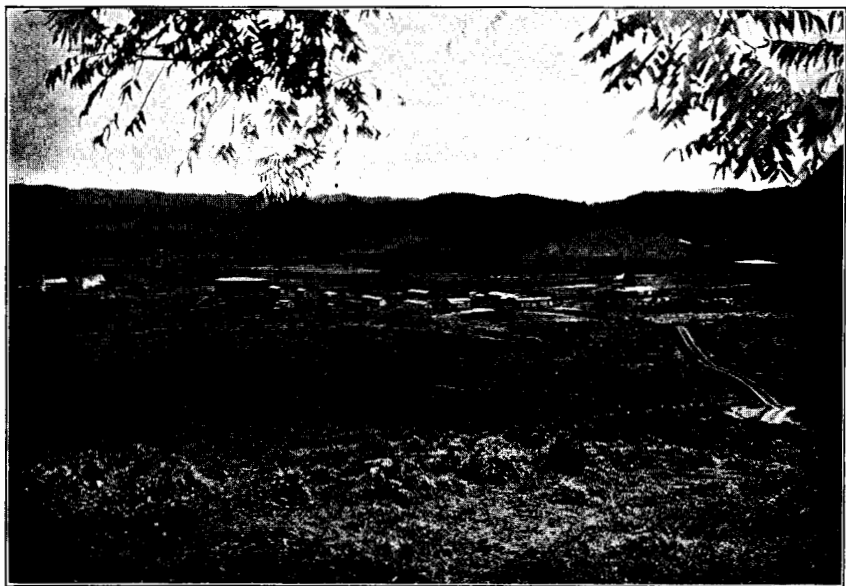


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CAMBRIDGE . MASSACHUSETTS

U . S . A



A PETROLEUM CAMP IN MEXICO

THE MEXICAN PROBLEM

By
CLARENCE W. BARRON

WITH INTRODUCTION BY
TALCOTT WILLIAMS, LL.D.



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“Á AMERICA LOCA”

BY SANTOS CHOCANO

Peruvian, and Colonel in the Constitutionalist Army in Mexico
(Late 1913)

Peoples tumultuous. Feverish countrysides.
Latin America, sunstruck and mad.

(Prehistoric)

Empires decked in the pomp of the warrior, blinded with
luxury, deafened by sound,
Stolid priests hacking out entrails and viscera — wild
sacrifices to Gods of the mound.
Martinet masters who drag out the hours in low sensuali-
ties foreign to Love,
Fatuous peoples all, like to their posts: heartless, whom
only their fancies can move.

(1520)

Then arrives Spain with her cross and her sorrows, after
her centuries seven of strife.
Phantomlike multitudes (fair gods on horses) lay waste
the Andes and strip them of life.
Pizarro and Almagro cross their keen rapiers in fratricide
strife that runs on till to-day —
Hernan Cortéz in the arms of Marina, mingles two bloods
that are marked for decay.
Offspring, a Gryphon; futile, insane —
Eagle of feather, and lion of mane.
Moorish depression comes out of the desert, clinging all
time to the strange Spanish horse.
Wailing, its sadness finds echo in Andes, mountains now
silent and dumb with remorse.

Back of the priest and his furious ritual, Inquisitorial phantoms arise.
Then, amid suffering, hunger and misery, flourishes Caste, built on terror and lies.

(1580)

Fray de las Casas by mad liberation loads on America burdens more great;
Blood of the African now is commingled with that of the Gryphon, the curse of the State.
This new decadence gives flowers anæmic, rich in their color, but odorless, stale;
Women inspiring but sensual agonies; bards who in all but their fantasies fail.

(1520-1810)

Cycles of history reading like fairy tales; viceregal brilliance of color and tone.
O the adventures of silvery eventides! Silken rope-ladder and Moorish *balcon* —
Falsest of vows given — furtivest coquetry — heads nodding “Yes” to the tryst of the slayer —
Swords sacrilegiously hiss from their sheathes in the very Cathedral and break off the prayer.
All the vile elegance, then of Don Juan —
Piety, decency, sanity, gone.

(1810)

Prophets, self-styled, raise the grito of Liberty. Over one century, lost are their cries.

(1913)

Comes, now, this meaningless, bloodletting orgy, from which our Lord God turns his pitying eyes.
Peoples tumultuous. Lands of hot fever.
Latin America, sunstruck and mad.

FOREWORD

THIS old globe is now belted with battle, in the greatest war that ever was or ever can be, to settle the problem of the brotherhood of man and of nations.

When the smoke shall have cleared away, there will be a new day for the whole world, and a new meaning to Christian brotherhood, as there will be a brotherhood of nations for the first time in human history.

In the future, national disorder must not be allowed anywhere in the world, for it leads to international disorder.

The idea that Mexico is a land to be exploited by foreign princes passed away with Maximilian. The idea that it is to be exploited for the benefit of the United States must soon go by the boards, if it has not already gone.

What is wanted is a clear path to extend help to Mexico — Mexico in its normal disorder, moral, social, financial, and political.

As a student of the war and human progress, I went to Mexico to study the oil situation. I came back with something more important —

“The Mexican Problem.” Seeking its solution, where I had failed to find it in railroad, agricultural, or mining development, I found it in oil, because oil at the seacoast could give development from high wages without making sudden upset of the economic structure of the country.

The United States had the first Mexican problem when it acquired from Mexico the Pacific Coast. It found the solution in gold; “gold at foot of tree,” in the river-beds and banks and valleys. Gold paid high wages to him who could wash it out. It returned high wages for supplies. It invited roads across the continent, knitting this old Mexican territory into civilization and the Union.

The solution was **Business with a big B**. Agriculture followed. Agriculture is not business. Agriculture is just existence. Business is expanding wages all around, — wages to labor, wages to capital; incentive to labor to accumulation, to luxury — luxury of freedom in body and mind — freedom to move the body from place to place and exercise the mind by human touch and contact!

Economic production is production in quantity. Exchange of surplus follows. This is commerce. But the fruit of commerce must not be

wholly sordid accumulation. There must be fruitage and interchanged ideas and customs. There must follow mental development.

Man if alone on the ground is below the brute. He is slave to the soil, which will yield him food only by the sweat of his brow. Then he must store it and cook it and clothe and shelter himself. Nature clothes and shelters all other animals and satisfies their taste with raw food. Why so cruel to man? Only to be kind.

Man must work. God works; angels work; devils work. There is no redemption for man, there is no progress for man or woman, except by labor — labor of heart, mind and hand. Labor of the hand must be first; it purifies the blood coursing through brain and heart. Labor of the mind must follow that the hand may be directed; and labor of the heart must come in that hand and mind, by commerce and thought, may rightly touch its fellow. Only thus mutually can there be health, help, and progress.

No other animal has luxury, better food, or better shelter, whether there are thousands or millions more. But man may have progress by every other man. The more thousands the better each may be, and the more millions in humanity the greater and the more important the

individual man. Negative this proposition and the universe of man, of humanity, is ended.

All other animals in pairs, families, or groups may be independent; men and likewise nations never can be. The chick chips its shell and instantly picks its food. Man must be led and taught. Animals have instinct. Men are denied it that they may know their fellow men.

Independence, individually and nationally, is passing away. The inventions, the mechanism, the arts, for man's progress are all here. The way is now open. Human slavery, serfdom, peonage, are passing. Democracy is rising. The last great struggle is on and fourteen nations and forty problems are in it. But it is all one, — human freedom that man may know his fellow and that mutual helpfulness may arise, individually, collectively, nationally.

Independence Day must take on a new meaning. National independence is hereafter possible only by national interdependence.

America was opened in the desire for mental freedom. Here was born political freedom, destined to encircle the world in little more than a hundred years. Here, too, were struck down the shackles from human hands laboring in slavery. From freedom of hand and mind America must

go forward, is going forward, in freedom, with heart pulsating for universal political freedom.

Human liberty can be maintained on this planet only by coördination of hand, of mind, of heart.

The heart of America is now expanding, east, west, and north; Japan and Australia, west; Canada and the British Isles to the north; France, Italy, Russia, our Allies, east! Can we forget Mexico, our nearest brother south? And she has so much to give us; fruit of the tropics, mineral and oil, wealth of a continent compressed into an isthmus, capacity for the happy, healthful, helpful labor of, not fifteen million, but fifty million people! And we so much to give her, the fruit of our political, social, mental, and machinery progress; our arts, chemistry, and financial and commercial systems! Of natural wealth she has abundance. Of helping hands, kindly direction, and organization she has woe-ful need. And who is neighbor to him that hath need?

After studying on both sides of the Atlantic the foundation causes for the war beginning in 1914, I presented the economic truth in *The Audacious War*: tariff causes, desire for territory and

spheres of influence, dominion of overland and water routes that trade might expand; lack of national morality, and "The Will to Power." I thought I knew and understood it all.

Late in 1916 I dropped in upon Dr. Talcott Williams, as he spoke at the civic forum in Brookline, Massachusetts. I wanted to get his measure and divine what line of talent he might be turning out at Columbia for financial journalism. To my astonishment I got a new angle from which to view my own ignorance as to the causes of modern wars. I had thought that, while economic conditions were basal under Germany's most audacious war and Russia's long-continued preparation for defense, certainly race and religion were at the root of troubles in the Balkans, in Turkey, and the Far East. But here again was the everlasting "bread-and-butter problem" or bread, even without butter, problem.

Dr. Williams showed from first-hand knowledge, and fifty years' reflection thereon, that our boasted Christian civilization, whatever it might be in its endings, was in its beginnings the disrupter of states and nations; that where villages and communities in the Balkans, in Turkey, in Africa, and in the Far East had existed

in comparative peace for centuries and had their parchment records and title deeds older than any in modern Europe, their whole economic bread-and-butter fabric had been upset by goods "made in Germany"; cheaper manufactures from Vienna; the Armenian had let in the Christian banker and out went the home-current wares to foreign markets, while back came the foreign goods destroying local hand industries, with no economic substitution giving local employment. The Mohammedan traced the trade connection and started to kill the Armenians, whose Christian friends had taken away their livelihood. Vienna and Berlin goods also upset the business base in the Balkans. The people could not pay the Turkish tax exactions. On came the lash; and Germany found profit in selling the guns that responded. The outside world opened Manchuria, and where peace had reigned for hundreds of years nobody had since been able to maintain law or order. The Boxer Rebellion was a similar economic protest.

There was only one possible remedy. The old order could not be put back. The nations must unite and go forward. They must insure development by organization, capital, and modern machinery, which could exist only with courts of

justice enforcing laws, order, and contracts. No other route was visible for either national or international peace.

When the demand became emphatic that my articles on Mexico, its oil fields, and its social, political, and economic problems take book form, I naturally turned to Dr. Williams to ask if he would set this forth in a preface with the conclusions he had reached for the problem Mexico presents to-day before the world.

C. W. BARRON

BOSTON, *July 4 1917*

PREFACE

THESE articles on the "Mexiean Problem," by Mr. C. W. Barron, are to my mind a clear and wise economic picture of Mexico, beyond any others that I have read — and there is very little of the recent literature of Mexico which I have not read or examined.

Not one so grasps the clear, strong fact that Mexico is a hell on earth because Mexico has no law, save here and there for the brief season that some man keeps law and order to feed his own ambition to be an irresponsible ruler and possess present power and the possibility of future wealth.

It is forty years, to a few weeks, since, as the correspondent of the *New York Sun* at Washington, I walked one night into the house of the Mexican Minister at Washington, and told him — he had n't had the final news — that all was over with Lerda, the new successor of Juarez, who had sent him to Washington, and that Diaz was in control. I saw once more the most bitter sorrow, the most bitter pang of hopeless grief a man's face can mirror — despair for the future of

one's own land. In my life I have seen this look in the face of Hungarian, Italian, Pole, Cuban, through a long list of lands, down to a Mexican on the day I write these lines.

In the forty years since I saw Señor Mariscal grip the arms of his chair, his knuckles whitening and his dark face turning a paling gray, I have never in all the many pages I have written on Mexico, and many another troubled land, had a shadow of doubt that Mexico would be where Mexico is to-day, as these letters tell, with cartridges for currency, because my boyhood and the dawning fact, thought, and writing which led to journalism were passed in southern Turkey between the Tigris and Euphrates, where the grim problem, which has wrapped the world in universal war, was at its beginning of the manifold hopes which have left but ashes.

I was a missionary's son and my father, the Reverend W. F. Williams, sent forth by the A.B.C.F.M., had that unusual thing in a missionary, an engineer's training with the knowledge of the mineralogist. The wide world was full of the rosy belief that, as in the United States and in Europe west of the Vistula, the economic basis of life was visibly rising like a new continent of human cheer and happiness,

lifted by the forces of invention, steam power, and individual initiative, so all the world was to rise in like manner and measure. When in our long rides over the mountains which rim Mesopotamia north and east, whose valleys feed its boundary rivers, boy-like, I brought him a split pebble of malachite, the rhomb of carbonate of iron, the shining black cubes of galena, the short staple of a cotton boll borne breast high as we camped by a rushing stream, and he worked out its possible water power, or I took lessons at a village loom — he was prophesying the economic expansion to come. I do no despite to his flaming zeal for souls when I record that I never saw his face beam as when he taught one of his converts how to make sulphuric acid with the unmined sulphur deposit of Mosul, and the man improved on the process in Ure's Dictionary, that compend of fifty years ago.

The copper and the lead, he pointed out to me, the oil which rainbowed some streams on what is now the edge of the Kerkuk oil fields, are still undeveloped. This convert's tiny plant was stopped because it might lead to the easier making of explosives. But the good man's two sons are thriving business men — not in Mosul opposite Nineveh, but in Providence, Rhode

Island. My father's economic vision has never taken solid shape. Like visions, the world over, have been blasted. Why? Because economic development necessarily rests on courts that enforce contracts and on order that makes savings safe and provides better currency than cartridges, Mexico's popular legal tender today. Credits are only possible when contracts are enforced. Men will work with industry only where wages and property are protected. See how Mr. Barron describes the fashion in which the brief and uncertain economic protection of an American plant has turned the peon into a steady oil-producer, self-directed, in a great and complex plant.

If there are no courts that men can trust, there can be no credits or contracts. If these are not, neither capital nor wages come. Once, in the seventeenth and eighteenth century, even for a third of the nineteenth century, before steam on sea and land swept space aside, it was possible in isolation for some industrial community to gather strength, as in islanded England or in early organized France, and this development gave strength and power to the English King's Bench writ and to the French King's "Parlement."

Apart, China had, a century ago, a sound in-

dustrial system, narrow but stable, with a population overcrowded on the coast, but possessing in the interior peace and comfort, as Abbé Huc has testified. Alone, this development might have gone on. When steam brought English and American competition, China would have reorganized its industrial system if it had had courts and a judicial system possessing integrity and an efficient government to enforce judicial decrees; but competition destroyed its industries, and the absence of the foundation of all economic systems, justice, prevented China from advancing. First, in the south of China, earliest affected by European competition, came the Tai Ping Rebellion, and the new European arms of precision gave the central tyranny of the Manchu a new power. Later, North China broke out in the Boxer revolt, economic in origin. For fifteen years past, the interior has been aflame, rising first where the great rivers bring closer European trade. China is to-day a derelict, a hulk adrift on the ocean of history, where it has weathered so many storms, its industries, two centuries ago giving lessons to Europe, to-day deteriorated or destroyed.

This is the history of all Asia and of all North Africa, of much of Latin America. So long as the

Turkish Sultan and the Moslem commonalty had the same arms, despotism could not go more than so far. When the Turkish army, a century ago, was new-armed and organized on the European model, naught could stay the despotism of Constantinople. The rugs of Anatolia and the wares of Kutaiyeh, ninety years ago the best faience of the West, have fallen from old standards. So with the solid colors of Peking wares, and the porcelains of the interior. Persia in the last fifty years has seen the art of four centuries cease as all its great caravan roads fell into disorder and the caravans carried European goods to the undoing of native industries unable to develop for lack of courts.

This has been a world movement. The inexorable principle that you cannot build a sound economic structure unless credit and contracts are sustained by courts that can be trusted, works as pitilessly as the attraction of gravitation on the bowing wall and the tottering fence, the arch of untempered mortar and the door jambs whose sill is heaved by frost. Sixty years ago I saw the process beginning in Turkey, first on the coast, later in the interior. Thirty years ago I saw the same forces at work in Morocco, in the mediæval capital of Fez, whose old Andalusian

potters and patterns were being ruined by German crockery.

Latin America has faced the same drastic pressure. A century ago all the world, when Canning called a new world into being to redress the balance of the old, looked to see the economic development of the revolted colonies of Spain and Portugal. Bad as Spanish administration was and relentless as was the censorship of the Inquisition, the printing-presses of Mexico turned out, relative to the mechanic art of the day, better work two hundred years ago than to-day. It is the older pottery of Mexico to which one turns for the far-flung influence of the faïence of Spain fashioned out of the light volcanic clays of Mexico. It is not the recent edifices of Mexico our architects study to give us what we call "Mission" architecture. Let Courts be absent and justice dubious, and the sure end of the investment of \$1,000,000,000 which Mr. Barron sketches was predetermined. When "Boston people had great hopes of traffic in the Mexican Central line they built from El Paso to connect with the City of Mexico," they were themselves so familiar with the courts of Massachusetts that they looked on the justice men trust as a normal natural product of so-

ciety. They forgot that rails must rest on more than rock ballast to be safe for profits.

Cuba, under the Platt Amendment, is secure and produces, year after year, a sugar crop nearly treble the best of the Spanish past, with rising wages because we insisted on order, courts that enforced contracts, and a sanitation which excluded pestilence. Economic prosperity, railroads that pay dividends, factories whose products meet competition, and a growing population can only come where courts are justly trusted and enforce contracts; when public health and a low death-rate maintain the vigor of the laborer, and his life, his property, and the schooling of his children are protected by a sound and efficient administration. Let these be absent and rule will become a gamble for power and money, men will buy concessions first and protection for them later, perennial disease will sap industry, and you can neither secure capital from abroad nor provide labor at home.

Japan, islanded and long able to shut out foreign competition, first by a policy of general exclusion and later by adroit internal administration, was able to reorganize its industries before they were sapped and destroyed. Its ruling class created a new judicial system which commanded

such respect that extraterritoriality and its courts were abolished at the opening of this century and native and foreigner trusted to the same justice. In other Asiatic lands special consular courts give the foreign merchant a standing advantage which destroys native credit and paralyzes native enterprise. Japan is a signal proof of the way an Asiatic land, if it be for a season protected, can reorganize its industry and create stable conditions out of which a new system can come, safeguarded and fostered by public order, courts creating confidence, and efficient sanitation.

It is no answer to say that the Japanese have special powers and a personal aptitude. Ask any man who knows the Far East as to the personal credit of Chinese and Japanese. Compare Persian and Japanese art when both were at work under similar conditions in the seventeenth century. I have known, boy and man, closely and intimately, a wide range of human beings. I have had at my table and been honored by the close personal friendship of men black, yellow, red, white, and many shades between. The Near East I know as do only those who speak its tongues, have known it in childhood, and mature years, read its literature, thrill to the genius of its various arts, and have the open heart and mind for

its faiths. At bottom, men are alike. Human beings make Humanity. Under like conditions, all act alike. Give any land and any race a fair chance and it will be as others and not otherwise.

But after old systems, industrial and economic, are undermined and overthrown, this chance can only come by building anew under protected conditions. See how English courts are bringing India closer and closer to self-government. Where would Cuba be but for our aid? Give Mexico protection for order, courts, contracts, industries, and sanitation for a brief space, — one, two, or three decades, and what is this span in the life of a nation? — and the splendid qualities of the Mexican people would do the rest. Keep order, create courts, educate a generation, turn out typhus and tropical diseases which scourge the Mexican home (some of the worst maladies are not tropical), and the courage, the loyalty, the patient industry, the quick teachableness of the Mexican can be trusted to maintain what it secures under tutelage, and to add to it.

Mexico is to-day like the great oil wells of which Mr. Barron gives so vivid a picture, a fathomless resource for the light and power of the world, and needing only the mechanism which will enable it to set a thousand keels and ten

thousand wheels in motion and light millions of happy homes.

How can the necessary order, effective courts, and national sanitation be provided for such great ends of justice?

The United States brought these things to Cuba and see the result, peace and prosperity without annexation and with complete autonomous independence for the Cuban people. Give the Mexican people the same chance, the same opportunity, a like period in which new institutions, new courts, new security, new sanitation come into being, and Mexico will show the same marvel of abounding progress.

The United States just a half-century ago saved Mexico from the foreign invader. To-day Mexico must be saved from the internal destroyer. One task was accomplished without invasion. The other may be. Accomplished it must be. Moral responsibilities know no boundary lines.

TALCOTT WILLIAMS

COLUMBIA UNIVERSITY
NEW YORK *July 1, 1917*

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THE MEXICAN PROBLEM

CHAPTER I

THE CONTRAST

APPEALS in behalf of Mexico have been before the people of the United States for more than one generation.

Fifty years ago the appeals were from returned missionaries collecting money to help spread truth and light before our fellow man and brother over our southern border.

Nearly forty years ago came the appeal for railroads. The good people of the North, and especially of New England, responded with millions and declared: "We think the investment will be profitable, but we take pleasure in the thought that the railroads will be the best missionaries. They will open opportunities for mutual and profitable development in trade, commerce, mining, and manufacturing. There is much that we can do for Mexico, and much that she can do for us."

The nickels and dimes of my early savings that had not gone to the Mexican missionary in

response to Bishop Butler's heart-moving appeals were now taken from the savings bank and subscribed for bonds of the Mexican Central and Sonora Railways — the one to open up the great tableland of Mexico from El Paso to Mexico City and the other to carry the Atchison development of the Southwest to the beautiful mountain-locked port of Guaymas on the Gulf of California. Here opened vistas for New England capital and California enterprise down the Pacific Coast and through the heart of Mexico.

SOUTHERN CALIFORNIA AND MEXICO

In conjunction with Thomas Nickerson, the great pioneer builder of the Atchison and the railroads of Mexico, I journeyed to California; and at San Diego listened to one of the best addresses I ever heard, and from a man who never made addresses. Thomas Nickerson told the Chamber of Commerce at San Diego that he was not in agreement with the Southern and Central Pacific people whom he had visited in San Francisco and who had declared that there was nothing in San Diego or Southern California except invalids, "one-lungers," and bees, and that the only prospective traffic from the harbor of San Diego was a few boxes of honey in the comb. Nicker-

son declared his faith and the faith of the people of New England in the development of Southern California and closed by saying that he was sure of one thing: that if the road did not pay, the people who had put in the money could afford to lose it.

There was no such doubt regarding the railroads of Mexico. In Mexico were mines with long records of production, fertile soils, tropical fruits, millions of people. In Southern California there were no mines, few people, and only sunshine and honey bees as a basis for American enterprise.

Although Thomas Nickerson was well along in years, we took to the saddle and rode up through Temecula Cañon and the Temescal Valley over the line of the proposed Southern California Railway and on to the irrigated gardens of Riverside, with not a house or habitation between that town and the seacoast, although sheep grazed peacefully in the broad valley of Temescal.

A few days later I was in Sonora, journeying toward Guaymas. We made "Uncle Thomas," as we affectionately called him, a pallet of straw in the stable of the ranch of Jesus Maria, and then outside, before we said good-night to the stars and rolled up back to back in our blankets

on buffalo robes, I interrogated the engineers, not only concerning mines and mining history, but as to how they knew the volume of water that might one day, in Southern California, seek to pass through that seventeen-mile narrow gorge known as the Temecula Cañon. They explained in detail how they determined the watershed area in those hills and the probable rainfall and then built the bridges and tracks at elevations in the valley well above future waters.

DISASTER AND RECOVERY

Not long after our little party reached home the rainy season began in Southern California, and the beautiful valley where the sheep had been so peacefully grazing was a lake, several feet deep and twenty miles long; out of which roared through the Temecula Cañon a river, twenty and forty feet deep, vomiting forth ties, spikes, rails, and bridges, as man's poison to be cast forth upon the plains by the seacoast.

The California Southern Railroad was gone, but the energy of the white men who built it remained. More rails were ordered, a new location, or pass, through the mountains found, and to-day the Southern California is the bright gem of the great Atchison system.

In Sonora we shot blackbirds and jackrabbits, where grasses waved high as cornfields and the hills showed mineral values. The people at Hermosillo and Guaymas welcomed us as opening for them and their country the opportunities of a broader civilization. The rails were already laid for forty miles from Guaymas, which has a harbor more beautiful than California's Golden Gate.

GREAT EXPECTATIONS

A few days later we went out on the Mexican Central from El Paso to the end of the track, which was just then starting on its path toward the City of Mexico, to lift this great land of the Aztecs and its people into fellowship and commercial life with the "Big Brother" of the North. The future of Mexico seemed as clear as the sunshine, although Southern California seemed a doubtful proposition.

Returning to Boston, I published as follows, February 15, 1882, thirty-five years ago: —

No one realizes what government, or the absence of government, can do for a people until he sees Mexico, in comparison with the United States. Arizona and the Southwest, upon an almost waterless and comparatively barren soil, are prosperous from extensive grazing and min-

ing interests, while Sonora, just across the border, far richer in water and soil and mineral, has slumbered for years, devastated by incursions of Indians from the North, and then rent with internal political dissensions, yet all the while hoping for the morrow to bring forth peace and prosperity. No wonder the Mexicans love the word *mañana*, for in to-morrow has lain their hope for years. But Sonora and Mexico are rapidly passing into a new day whence all that has been will be as yesterday, and to-morrow will be bright with promise.

The world now touches the sunshine of Southern California, eating its sun-kissed oranges, its sun-dried figs, its new seedless raisins, and the fruit of its alligator pear trees, transplanted from Mexico. Its deep valleys are raising the finest cotton; its motor highways are jewels in the crown of a State promoting intercourse over wide reaches betwixt its peoples.

HONEY AND THISTLES

The honey of human bee life is in California. In Mexico are yet the thistle, the nettle, and the hornet, the prickly cactus, sheltering the serpent, the poisonous herb shading the centipede — and the political centipede.

I was surprised a few years ago to be notified that the Mexican Central forty-year bonds, to

which I had so early subscribed, were coming due. They had been scaled down from seven per cent interest to five per cent, then to a lower rate, and now whatever has succeeded them is a wanderer in Europe with no return, and the property they are supposed to represent is sliding backward. Its rolling-stock goes into the mire, and bandits tear up the rails, shooting the soldiers of Carranza and looting and shooting the native and foreign passengers.

Scarcely a day passes that reports do not reach my desk from personal and sometimes confidential sources, of banditry, looting, and shooting, concerning which not a line can be found in the general press of the day. The almost daily occurrences in Mexico would be sensational and call for glaring headlines if the happenings were north of the Rio Grande; but nobody will buy a paper to read about lawlessness in Mexico.

RESTRICTED BUSINESS

It is generally known that the copper mines and smelters are only partially operating in the north, that travel is nowhere safe in that country, and that only in the oil fields around Tampico and south is there any real business progress.

Even at Tampico every oil refinery has this spring been closed down for a greater or less number of days, interfering with oil supplies now so necessary in the world's progress through war.

It is difficult to place the blame as between I.W.W. agitators drawing pay from German agents and petty Mexico authorities, some of whom do and some of whom do not recognize any national authority.

Washington and Mexico City do not want these disturbances reported; nor do the business interests dependent upon American credit, and whatever protection may be afforded Mexico, invite publicity concerning Mexican disturbances.

Ask any director or official of a foreign enterprise in Mexico concerning the situation and he will give evidence only behind locked doors or with the understanding that his statements are confidential and his company is not to be mentioned. He knows that he is managing the property of others in a country where there is to-day no constitution and no law; but he dare not say so publicly, for there are several alleged constitutions in Mexico, many alleged laws, and very many decrees, and there is to-day the power to suspend every constitution, law and decree.

Taxation has become only a matter of pressure to get something from anybody who has it.

A SIMPLE PROPOSITION

Yet, aside from the question of order and justice, Mexico is a simple proposition. The national expenses are less than \$100,000,000 American gold, yet a little more than half must go to the national defense. The revenues have been but seventy-five per cent of the expenses, and because it never had any credit it never piled up any outside debt. Diaz not only built up Mexican foreign trade from \$15,000,000 American gold to \$250,000,000, but he built up the national treasury from emptiness to \$30,000,000 American gold.

More than thirty years ago John Bigelow warned us that, notwithstanding the apparent peace and prosperity in Mexico under Diaz, it was a republic only in name, a slumbering volcano with a government by gunpowder only. At that time I refuted many of Mr. Bigelow's errors in his citation of facts, but history proved his main indictment. The people of Mexico have never had a chance, and the moment Diaz attempted to broaden the governing base in Mexico he was overthrown. The people have ever since

been ground between political and social theorists both in the United States and their own country.

There are seventeen million people in Mexico — ten million pure Aztecs, five million of partially Spanish origin, and two million pure Spanish and other foreigners. Where formerly it was estimated there were fifty thousand Americans there are not now five thousand.

The fact that the Spanish invader married the Aztec woman is not the curse of Mexico. The curse of Mexico is the faith that might makes right. Every schoolboy has heard the phrase "Conquest of Mexico." The idea of conquests, nationally and individually, is so strongly rooted in the world that Europe is now bathed in blood to uproot it.

THE RULE OF MIGHT

When Dr. Dernberg, formerly Colonial Minister in Germany, was in New York after the breaking-out of the Great War, he tried to convince me of the injustice of denying to Germany the right of conquest in foreign parts. He said: "What did England do a hundred years ago? What have they all done? Because Germany comes late into the family of nations, are we to

be denied our part in conquering the earth, in the acquisition of new territory, in colonial empire?"

The idea was so barbaric to my freeborn American blood that I could only laugh at Dr. Dernberg and refer him to the dark ages. Yet the only army in Europe that has ninety-nine per cent of its soldiers able to read and write supports the right of conquest and territorial expansion. Have not Paris and London within three years been promised as compensation to a fighting people, that they might possess them or hold for ransom? What is the difference when Villa promises loot as compensation to those who will attack under his leadership? Sound government is by character and not by intellect. The redemption of Mexico can never be accomplished by conquest or loot.

GOVERNMENT BY JUSTICE

India is taxing herself and fighting for European justice because this alone has given her security where before in a hundred years a hundred different dynasties rose up and attempted rule by might. That country was redeemed only when government by justice came in.

It is said that between 1821 and 1868 more than fifty rulers attempted the government of

Mexico. Mexico is too large a territory to be handled by legislative enactment from one city. Diaz himself never really ruled the whole of it. Mexico is largely composed of territories mis-named states. In these distant territories, of late, especially in the north, revolutions start and get under way before they can be reached or dealt with by the central authorities.

A just and lawful government should be established in the heart of Mexico with insured safe connection with the seacoast. From this, groups of states can be knitted in and distant parts should be treated as Mexican territory until its people can be educated and trusted with local self-government and show capacity to deal with the larger problems of nationality.

THE MEXICAN CHARACTER

At the present time the larger part of the good people of Mexico are children who want to be in debt and at the same time care-free. They want to work laughing. If they cannot laugh as they work, fighting is the next best thing. They have no other understanding of a revolution than that it is a sporty lark. They are exactly in the stage of the American country boy who on attending a new school must first find out who among the

pupils can "lick the teacher." If the teacher is the stronger — sometimes by moral force and sometimes by brute force — there is order and discipline. But if the teacher enters a contest and is downed, he is no longer head of that school and, if he is to remain, some "big boy" must keep law and order for him.

On many a hacienda in Mexico, and over many years, a skirmish, even with pistols, between the manager and his peon workers was regarded as a proper lark. If the manager got the better of it, the belligerents went peacefully back to work and everybody was happy because the boss had sustained his position.

Mexico is not a difficult proposition when once you understand the Mexican character. He is the same childlike, dependent, trusting fellow whether at work, play, or revolution. He is simply in need of a strong helping hand.

DEBT AND CITIZENSHIP

The Mexican peon is not thirsting for land or rule. There never yet were twenty thousand votes cast in Mexico for a president. The ballot will not redeem the Mexican from the peonage system in which alone he has confidence. Singular as it may appear, his independence and

his self-respect he finds in this system. If you try to give him financial independence, he is fearful and rebellious. He is afraid that you are going to discharge him; that he will lose his job without being transferred to another.

In brief a Mexican peon in agriculture, or on a hacienda, is a self-sold slave. He will not accumulate and spend his money. He must borrow of his employer and spend; and when his money is gone he is contented and happy to work under debt. But if you deny him credit or try to get him out from under the debt system, he becomes suspicious, will not work, and loses his own self-respect; you have not trusted him, you have no confidence in him; you are not his real friend, and he would like to be transferred with his "account" to some other hacienda or employer where his credit will be unquestioned.

While the peonage system may be the safety of agricultural Mexico, it can never produce independence, citizenship, and self-government.

The redemption of Mexico must be from the invasion of business, forcing upon the natives — the good people of Mexico — technical training, higher wages, bank accounts, financial independence, and the rights of citizenship and accumulation.

CHAPTER II

AMERICAN INTERESTS NO BASE OF DISORDER

THE Mexican problem can be studied better at Tampico than elsewhere in Mexico. Here the civilization and business forces of Europe and America have opened the jungle and the prairie, tapped the greatest oil basin in the world, harnessed it, piped it to the Gulf coast, and here light and enlightenment, work and wages, invite human development. Here is the American boom town of Mexico, grown to fifty thousand population, with asphalt-paved streets, business blocks, markets, and parks.

Here in turn the warring factions of Mexico fight for the privilege of protecting and taxing the developing properties about Tampico. Here the new order meets the old. The native Mexican, more than two-thirds the population of the country, gladly accepts the extended helping hand.

The Anglo-Saxon, the European and the American, are welcome throughout Mexico. "Gringo" is only a border term.

What, then, is the Mexican problem?

It is the problem of one civilization and one order, one rule and procedure, in contact with another civilization, another order, procedure and morality.

A WORLD PROBLEM

This is the problem belting the world. It is the problem of China, it is the problem in Egypt, it is the whole of the southern-eastern question. It is the issue that blazes in northern Europe.

Here the issue is complicated because the oncoming order finds not only one but two civilizations already in the field and more or less in conflict for four hundred years.

Governments in Europe are breaking up. Governments in Mexico are one after another breaking down; but the breakdown in Mexico has no more relation in its causes to the United States than has the European war, as the facts when ultimately presented before the American people must clearly demonstrate.

But it was not with any purpose to theorize on the Mexican problem that the writer took a trip across the country and the Gulf to Tampico and studied the resources of Mexico in the Tampico-Tuxpan oil field to get the facts of the existing

situation and note the factors springing therefrom related to American investments.

Tampico has a broader meaning in the American investment field than is yet generally realized. The development of the gold fields of South Africa has been important, not because of the South African war costing England \$1,200,000,000, but because the output of South African gold affected the civilization and the economic and social order of the world.

Vera Cruz, Mexico City, and the west coast of Mexico are to-day as Mexican as ever — both in order and disorder. But Tampico and Tuxpan are international and are basic in the economic and social progress of both Europe and America, and possibly of Asia.

Here is the British naval oil base. Here, before the war, were the German experts studying the future relations of German commerce to the oil supply of the world, which later may center in Mexico.

THE AMERICAN PIONEER

American pioneers, however, were first in the field and American business talent and American capital have maintained leadership without government invitation, support or even recognition.

It is a popular misconception in the United States that the people of Mexico have been, are, or are about to be exploited in the interest of the Standard Oil refineries, the Guggenheim smelters, or the Hearst ranches. Nothing could be further from the facts as related to the present situation, although both in Texas and Mexico, Standard Oil interests attempted years ago to arrest the oil development.

The wealth of the world is planetary wealth until it is lifted by human discovery, human forces, and human hands into human uses. The agricultural wealth of the world giving food to man is from the sun through the soil by labor. The mineral and oil wealth of the world is by human discovery, engineering, machinery, finance, and complex forms of human labor. Almost universally have the nations of the earth recognized right by discovery in underground wealth, and thus invited its discovery and development.

Under the administration of President Diaz Mexico was opened to the outside world, which was invited to pour in its talent, money, and skill to lift to the surface the undeveloped resources of the country, teach the unskilled labor of the land, and put Mexico, its people and its resources,

in the way of modern development and civilization.

What are now the oil fields of Mexico were formerly the "bad lands" of the jungle and the plain. The black asphalt oozes softened the soil and enmeshed and swallowed up cattle, horses, and wild animals. They were in 1900, as they had been for nineteen hundred years, worse than valueless.

Edward L. Doheny, American engineer-prospecter, miner, and pioneer developer in the oil fields of Los Angeles, California, was more than millionaire, and so also was his partner Canfield, when they entered Mexico in 1900 to prospect for petroleum. They were not freebooters, seeking conquest or the exploitation of people, laws, or government. They were looking to do in Mexico what they had done in California and with their own fortunes lift values of this old planet to the surface, under Mexican laws, treaties, and customs and with the aid of Mexican labor. Diaz and Mexico had invited outside talent and money; Boston money had built the railroad from Arizona to the port of Guaymas on the Gulf of California and from El Paso to the City of Mexico, with a branch to Tampico.

Into the jungle from Tampico to Tuxpan

went Doheny and Canfield by foot and on horseback. They located the oil seepages. They sought out the owners of the lands. First they bought 450,000 acres thirty-five miles west of Tampico and later 170,000 acres in various tracts south toward Tuxpan. They paid from sixty cents per acre upward and astonished the Mexican people by the prices paid for such unproductive lands. They were advised against such large prices by the Mexican lawyers, landowners, and statesmen.

But the Americans retorted that the price was immaterial if they found what they were after; they would not hesitate or haggle. The Mexicans named their own terms, took the cash and delivered title deeds running back through generations, some titles making a heavy volume.

The Americans cleared the jungle and made it a ranch. They built blacksmith shops, warehouses, water lines, and hospitals. They bored for oil, developed the Mexican Petroleum Company, and brought forth the biggest oil gushers in the world. Pipe lines and railways preceded and followed the gushers. British, Dutch, Waters-Pierce, and some Standard Oil and Southern Pacific interests came in, but the American interests stand at the head.



CLEARING JUNGLE FOR PETROLEUM CAMP

NO DISPUTE WITH GOVERNMENT 21

NO DISPUTE WITH THE GOVERNMENT

Nowhere have these interests disputed with the government, or refused their due taxes or co-operation with the local and national authorities. The only complaint against them was that they raised wages from less than twenty cents a day to a minimum of one dollar a day and made native Mexicans into blacksmiths, carpenters, shipbuilders, and engineers at three dollars and fifty cents a day in gold.

It has been a new economic era. It has been a development. It has not been a conquest or an exploitation either of peoples or of governments, and the same may be said of all the other interests, British and American, in mining and in agriculture, in Mexico.

The fighting in Mexico has not been with or concerning American or foreign interests. The fighting has been between local factions, leading families, political parties, the ins and the outs.

The strife has been for the possession of the citadel and the reins of government at Mexico City. There has been danger to the American interests only by reason of their location at times between the conflicting forces, but neither the American nor the foreign interests have so much

as possessed arms for their own defense. No guns are allowed on any of these oil properties nor are they desired. Their possession would be a menace, because they would be desired and fought for by the politically contending forces and the roving bands that at times overrun Mexico from north to south and east to west.

TAMPICO HARBOR

When a generation ago the Boston people ploughed the railroad line from Atchison to Santa Fé and across the great American desert into California, they had great hopes of traffic from the Mexican Central line they built from El Paso to connect with the City of Mexico, a thousand miles distant. They believed it would be a great feeder to the Atchison.

In this they were disappointed, but they still had the courage to build a branch to Tampico, hoping therefrom to make a new port for the development of the interior of Mexico. They had no thought of oil and no other thought than the wealth of the great high plateau in the center of Mexico.

For years the Atchison folders printed the Mexican lines almost as their own. To-day on the Atchison folders connections north even into

Canada may be traced, but Mexico is a foreign country upon which the railroads need not waste paper in maps or time-tables. A thumb-nail corner in the Santa Fé map shows Mexico, and on it from Mexico City to the Rio Grande on the coast is a wilderness broken only by the harbor of Tampico.

To all American lines meeting at El Paso the business in and out of Mexico has been for more than thirty years a disappointment.

It is now clear that the greatest development in Mexico may take place from the coast and through her oil wealth. From the Rio Grande to Tampico the Gulf coast of Mexico is largely an unpenetrated jungle, rich in natural resources and capable of maintaining a population of many millions.

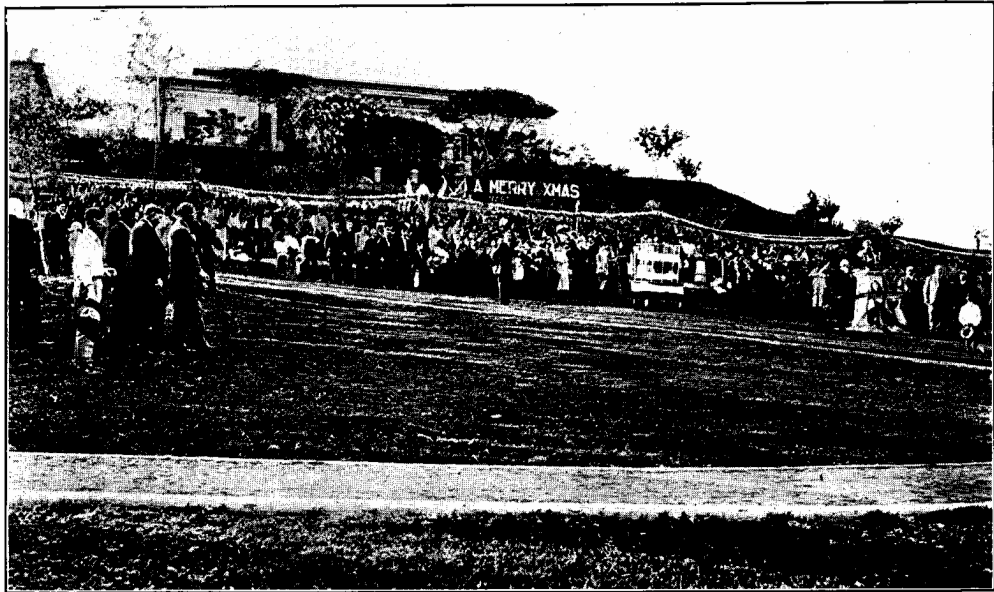
Tampico harbor is simply the mouth of the Panuco River and the city is nine kilometers from the jetties, which defend the river mouth from the lashings of the Gulf waves. Tampico is capable of indefinite development as a port. It has a large water basin to the south and another to the northwest, while from near the mouth of the river runs a government canal almost due south, defended from the Gulf by a narrow strip of land. This Chijol Canal enters the great lagoon of

Tamiahua, which is continued by another waterway near the coast almost to Tuxpan. Therefore, for almost the entire one hundred miles between Tampico and Tuxpan there is inland water transportation for barges and shallow steamers just inside the coast line.

Between the Chijol Canal and the Panuco River are the termini of the Mexican Petroleum pipe lines "tank farm" and Tankville, with altogether one hundred and three tanks, each filled with 55,000 barrels of oil. There is also a storage basin carrying more than 800,000 barrels of oil. Here are the machine shops, carpenter shops, and shipbuilding plant, piers that will automatically load the largest steamers in a few hours, and a topping plant to take the gasolene or distillate from the crude oil. About ten per cent of the oil is gasolene and its removal does not impair the fuel qualities of the ninety per cent remaining.

Here also on the east side of the river are the Standard Oil and Royal Dutch works and a refinery and topping plant of the Mexican Eagle Company. On the other side of the river are the Pierce Oil refinery, the railroad terminal, and a magnificent government wharf.

The mouth of the river is being dredged by co-



CHRISTMAS DAY AT EBANO. UNVEILING STATUE OF JUAREZ

operation between the Carranza government in control at Tampico and the oil interests, more than a dozen American companies coöperating to advance the money, the same to be repaid from taxes on a part of the increase of their business. Under this arrangement the Mexican Eagle Company, Lord Cowdray's company, advances twenty-five per cent and the Mexican Petroleum Company thirty-three and one-third per cent.

PICTURESQUE EBANO

The first oil developments began at Ebano, thirty-five miles west on the railroad from Tampico. Here the Mexican Petroleum Company has now 450,000 acres bounded on the north by the Tamesin River, and reaching almost down to the Panuco River, the general direction of which is parallel with the Tamesin River. Here is the heaviest oil, while as one goes south the oil is lighter and increases in commercial value.

Ebano is one of the most picturesque towns in Mexico, an American creation, of Mexican architecture, covering a beautiful mound rising nearly two hundred feet above the plain, now a fertile ranch, the whole reminding one of the beautiful Italian villages set on a hill; but ranch and hill were seventeen years ago a jungle

thicket with no life but that of the panther, the serpent, the parrot, and all the other animal and bird life of the jungle.

From this point the National Railways of Mexico are furnished their fuel oil. With the railroads working at their capacity in a settled country they would be consuming twelve thousand barrels a day, but at present less than six thousand barrels is taken and the proceeds are credited on the company's tax bill. The tax is about five cents per barrel for exported oil.

Until Mexico has settled down, it is not worth while to dwell upon the oil or agricultural wealth or the few millions here first invested, for the wells farther south are abundantly sufficient to fill four times the present pipe lines and four times the available ocean tonnage.

CHAPTER III

BUSINESS AND NOT POLITICS CAN REDEEM MEXICO

THE United States can never take its proper attitude in coöperative democracy toward its sister republic until two popular, yet absolutely false, impressions of Mexico are removed. These popular fallacies are: —

First, that the natural wealth of Mexico has furnished a base for contending business interests from the United States to promote Mexican quarrels.

Second, that the land question is at the bottom of the Mexican troubles.

The writer must frankly confess that for many years he believed these popular superstitions, and only his recent trip into Mexico dissipated them.

The history of the Standard Oil Company as popularly presented has been that of a record of oil monopoly checked intermittently by courts and legislatures, — a monopoly overriding individual and popular rights and promoting peace or war for financial ends.

Suspicious concerning the Standard Oil Company in Mexico have been prevalent on both sides of the Atlantic.

Many times the representatives of American oil interests at Mexico have been interrogated at Washington as to their relations with the Standard Oil Company, and each time the response has been emphatic that the Standard Oil Company was neither openly nor secretly promoting the oil development in Mexico or behind any important independent producing companies.

THE POSITION OF THE STANDARD OIL COMPANY

The fact is that the Standard Oil Company has aimed at a monopoly of markets, a monopoly of transportation, and a monopoly of refining. It has always avoided ownership in the producing field. The late H. H. Rogers used to declare that the Standard Oil Company wanted no more than an eighty-five per cent monopoly in oil; but that its fifteen per cent interest in the production was more than it desired in that line. The Standard Oil Company has prospected or mined for oil only where others could not be induced to take the risk. The hazard of mining the Standard Oil Company has always endeavored to avoid.

The Amalgamated Copper Company was a failure under Mr. Rogers because he was not a miner and hesitated to take a miner's risk in opening the Butte copper district at depth.

The men who opened the Mexican oil territory were prospectors and miners and never sought the manufacturing or distribution ends of the business. Even to-day E. L. Doheny both in California and in Mexico declares he prefers the profits of production on a large scale to the details of manufacturing or the business of retailing, which he regards as distinct fields from oil production.

The Standard Oil people are buyers of oil at Tampico and are building a refining plant there to become larger buyers of oil, and they have some producing interests south of Tuxpan. The Pierce Oil Company also has a refinery at Tampico and the British, or Lord Cowdray, interests ship from both Tampico and Tuxpan and refine at Tampico and Tehuantepec.

The Mexican Petroleum Company is the largest producing interest in Mexico, with a present production of fifty-five thousand barrels per day. The Cowdray interests are second with about thirty thousand barrels a day on present restricted shipping facilities. Other interests rep-

resented at Tampico are the Pierce Oil Company and the Royal Dutch or Shell interests and the Standard Oil Company of New Jersey. The outlook is that the Shell interests will soon be the third largest producers. But the major interests of the Pierce Oil Company and the Standard Oil companies here are in the refining of oil.

A WORLD MAGNET IN MEXICO

It is because of these interests, American and European, in the Tampico field, both as producers and refiners, and because such evidences of underground wealth can command the capital of both Europe and America and because petroleum fuel is working revolutions on both land and sea, that the development, the regeneration, and the hope of Mexico and of the Mexican people must have their base at Tampico, and not in the commerce of Vera Cruz or the inland productions of Mexico, mineral or agricultural.

No redivision of lands in Mexico, no partition of haciendas or ranches, can solve the problems of Mexico or bring her forward to the position she is entitled to occupy by reason of her natural wealth and millions of human hands ready for work.

Land is cheap in Mexico and is to be had

almost for the asking, but of what use is an acre or a hundred acres to a peasant without plough, animal power, or machinery, and, above all, without transportation or near-by markets?

In the oil regions of California, rich in soil and markets, the underground wealth is reckoned at just twenty times the value of the soil wealth.

From Tampico to Tuxpan is a tropical jungle but not, as often assumed, a miasmatic marsh. It is a jungle of luxurious foliage over soil that can grow anything in the world; but where are the markets and where the incentives for the native population to labor?

The beginnings of markets, the beginnings of transportation, the beginnings of incentive, the beginnings of accumulation, are in the uncovering of large natural or planetary wealth. Outside capital will take the risk for the prize, will employ the labor, will create the transportation, the markets, and the interchange of commodities that make foundations for modern civilization. Natural wealth outside the path of development has no value. The Mexican petroleum fields had absolutely no value in 1900 and, undeveloped, will have the same value in two thousand years that they had two thousand years ago.

To him who would study fundamentals, the

future of Mexico is already on the map at Tampico because there is here exactly what European and American civilization are demanding for the world's progress, and whatever comes, whether the development is by Great Britain or Germany or by North or South America, the wealth that thence can give light and power to the world will never be surrendered back to the chemistry of Mother Earth.

The writer traveled thirty-five miles west into the oil fields and ninety miles south beside parallel pipe lines carrying oil, gas, and water; visited the terminals, machine shops, carpenter shops, tanks, reservoirs, and shipping wharves, and saw the Mexicans with work and wages never dreamed of half a generation ago.

THE CONTRAST

Boston people put the Mexican Central Railroad into Tampico more than thirty years ago, and between that railroad and the banks of the Panuco River are still the half-naked Mexican babies, the wan mothers, the listless boys and girls, without opportunity, and the fathers without ambition to keep in repair the roofs of their low huts.

A dug-out cedar log for a canoe with a red

blanket for a sail is picturesque, but not industrially expansive. The fishing is good, and existence calls for but little energy. On the other side of the river are well-dressed Mexican families with comfortable homes, pure water, electric lights, moving pictures, wages, and opportunity for more. There are great possibilities of savings in these wages and of personal development therefrom; but throughout all Mexico there is not yet a savings bank.

The Mexicans are good workers when tools and instruction come to their hand. So far as operated, the railroad lines of the country and the railroad repair shops are manned entirely by Mexicans. There are several independent Tampico shipbuilding and repair yards all owned and operated by Mexican graduates from the repair plants of the Mexican Petroleum Company on the other side of the river.

FAITHFUL MEXICANS

When in 1913 all the Americans were called out of Mexico, the native employees of the Mexican Petroleum Company, who had been assisting in the pumping stations and in the shops, saw to it that never a stroke was missed, nor was there a barrel less oil produced, nor any

damage or harm to the company's property entrusted entirely to its own faithful Mexican workmen.

When in June, 1916, the military governor of Tampico declared war on the United States and the Mexican Petroleum Company took out nine hundred Americans on two oil steamship carriers and the yacht *Casiana*, again the pumps never missed a stroke and the Mexican employees in about ten days put 461,000 barrels of oil in the tanks and also loaded two steamers for export; nor was there any thought of interference or of attack upon the property.

Superintendent Green declared that after such faithfulness the Mexicans should continue to run the pumps and the machinery.

It is no wonder, therefore, that the party of Americans visiting Tampico in March, 1917, were everywhere welcomed with smiles or that a Mexican youth in sandals, mistaking the writer for a company manager, applied in Spanish for work, declaring that he had a wife and babies and that he needed food and clothing.

That is the need of Mexico to-day — opportunity to labor, opportunity for the family, opportunity for food, clothing, better shelter, and better social conditions.

And this is exactly what American and European capital and organization have brought to Tampico, attracted by its underground wealth, and this is what will ultimately redeem Mexico and forward her people by industrial opportunity.

INTO THE JUNGLE

Nowhere in the tropics can one make a more interesting trip than to take a swift launch or a lazy stern-wheel barge and at daybreak stir the flying-fish and the jungle parrots of the Chijol Canal, pass on through shallow Tamiahua Lake, where the waterfowls before their migration may be seen spread out in all directions for twenty miles, note the electric light of the oil pumping stations, contrasting with the distant dark mountain peaks, and glimpse through the jungle the cleared hillside fields where the British oil interests, represented by Lord Cowdray, have planted the mark of English thoroughness in field and building construction.

The water trip now terminates sixty miles south at San Geronimo, but later may reach Tuxpan, forty miles beyond. Here at a small inlet dividing the British and American developments you mount motor handcars and fly like

the wind through the canebrake and the bamboo of the jungle up hill and down and around sharp curves. Before you can get your breath you are amid the oil derricks of several American and English companies drilling on their border lines as in Texas and California.

But here the contests between contending interests must be sharper, for no man knows in this country to what extent at two thousand feet in depth a neighboring oil well may exhaust his land.

The Mexican Petroleum Company would appear to have the advantage at this point, as no other American company has yet a pipe line.

MEXICAN GUSHERS

Pausing before Chinampa Number 1, the oil was found bubbling up around the drill, and orders were given by Mr. Doheny to entertain the American party if possible on the return trip in the afternoon with the bringing in of the well. A few more strokes on the drill and the gas and oil bubbled higher, but it did not flow that day.

In this entire territory there is no pumping of wells as in California. Every well flows or gushes. Two days later, or Friday, March 16, Chinampa Number 1 "came in" and flowed for two



THE GUSHER POTRERO 4, BEFORE BEING CAPPED

and a half minutes over the crown pulley, eighty-two feet high. Then they shunted the flow into the pipe line and the later report was ten thousand barrels per day from this well, with expectation that she would later "drill herself in." This means that when cleared for action she might be a third great well for the Mexican Petroleum Company with capacity of several times ten thousand barrels per day.

As this is the one well in competitive territory, the supply at other wells of this company must be still further shut in to permit full flow here.

On the hilltop, high above the surrounding country, blaze day and night twelve gigantic gas flames relieving the pressure on the famous Casiano well of the Mexican Petroleum Company which is in the valley beyond, with beautiful surrounding hills, and probably geologically isolated in this oil country.

You climb in and out of this valley by team or in saddle and a clearer picture one would go far to see — cultivated fields, neat houses, pumping machinery moving like clock-work, but set in a tropical fruit and flower garden.

"Casiano Number 7" came in September 10, 1910, at seventy-five thousand to eighty thousand barrels a day and is now shut down to

twenty-five thousand barrels a day under two hundred and sixty-five pounds pressure; but more than double this amount could be taken from the well were there shipping facilities from Tampico. "Casiano Number 6" was flowing fifteen thousand barrels a day when it was closed in a month before Number 7 came in.

It is possibly immaterial from which well the Casiano district is tapped, for no man knows to what extent in this valley Number 7 is drawing from the territory of Number 6, as the geology in these oil fields is not analogous to anything else known on the continent. Number 7 cannot be shut in more closely without danger, for any increased restraint causes the ground to break forth with oil a few hundred feet distant.

Nearly twenty miles farther south by the Mexican Petroleum Company's railway and pipe, water and gas lines is the greatest oil well in the world to-day, — Cerro Azul, which means "blue hill," and which "blew in" February 9, 1916, and shot 1,400,000 barrels of oil into the air before it could be capped. One half of this was saved by a quickly constructed reservoir. The column of oil measured six hundred feet, and when it was shut in the delivery was at the rate of more than 260,000 barrels per day.

CHAPTER IV

WHO SHALL HELP THE ENGULFED PEOPLE?

WHEN you have traveled nearly twenty-five hundred miles by land and water to reach at Cerro Azul the greatest oil well in the world, you see in the jungle only a cleared field, near the center of which is a mound of earth not twenty feet high, set against "mountains of blue," and the only evidence of human interest is an ordinary pressure gauge embedded near the top of this earth mound.

But you stand on the top of this little mound and feel the pulsation of something almost human beneath your feet — a crater of energy that taxed the ingenuity of man for days to harness it and cap down a gas and oil pressure measuring above one thousand pounds per square inch, and flowing oil at a rate equaling about one quarter of the oil production of the whole world.

POSSIBILITIES OF DEVELOPMENT

One can but reflect that the Almighty permitted the tapping of his reservoirs of oil only

when the whole world was coming into line to receive the benefits.

The City of Mexico is one hundred and seventy miles distant southwest. With the country at peace and holding the confidence of the credit markets of the world, an easily constructed pipe line could be delivering daily several million cubic feet of gas in Mexico City for warmth, light and power to quickly obliterate the ravages of internal wars. But there the two million dollar gas plant is shut down after losing one hundred thousand dollars a year for four years, and the threat comes from the Carranza government that this plant will be confiscated unless it is put in operation. Confidence with credit is not commandeered overnight. Throughout the whole oil region, and for the safety of the country and its inhabitants, ten million cubic feet of gas are daily burned in high flaming torches.

It is not what Mexico is now doing, but the world possibilities in it, that one may see and practically feel as he stands with his feet on the Cerro Azul mound of earth and notes the force beneath that is delivering into the pipe line twenty-five thousand barrels of oil per day and is pulsating to deliver ten times this amount.

The world now needs it as never before, and Mexico needs, as never before, the outside help that this magnet of wealth can bring to it.

OIL VERSUS COAL

The English have thoroughly experimented with fuel oil and demonstrated that, used in a Diesel engine, one ton of oil, or 6.8 barrels, does the work of six tons of coal; and the normal price in England is about five dollars per ton for each, although present war prices are nearly double. Burned under boilers three tons of oil equal six tons of coal.

The demonstration was clear that the Diesel engine ship can be operated at fifty per cent of the cost of the coal burner. The war has interrupted the conversion of the world's ocean tonnage from coal to oil, but the future of oil on land and sea has been proved and can be seen from the pressure gauge on Cerro Azul; and from the same point can be seen the redemption and regeneration of Mexico, the moment a brotherly hand can be extended to her.

England and Germany both see it, for in these countries business and government work together for national development and the uplift of the people. In time Mexico and the

United States also should see it, and demand that government and business cooperate and that Mexico and the United States be mutually helpful.

We have no right to strike down the governments of Mexico one after another and refuse to the government and people financial, business, and political assistance.

The only assistance the people of Mexico have had from the United States has been business assistance in railroad, mining, and oil development.

THE GERMAN POSITION

Is it any wonder that Mexico reaches out for national assistance, first to Japan and lastly to Germany? Since returning, I have had confirmation from European sources of the report that two large deposits of German money have been made for the account of Carranza. This does not mean war upon the United States by the people of Mexico.

It is difficult to predict regarding Germany. I saw the German war machine after Sedan and Gravelotte. I visited the country a few years ago and printed that Germany was preparing for a European war and to strike both Russia

and France. Few Americans would believe it. I returned to Germany again in 1913, noted the military and financial measures, the decrees forbidding any new enterprises, and then declared that Germany could not afford a world war. Germany got her war, but says England is to blame, because if England had declared her intention to come in, Germany would never have thrown down the gage of battle.

Although plans have miscarried, it should not be forgotten that Germany is one vast business organization, intertwined with tariff, government and military power. The Germans were experting the Cerro Azul oil field and contemplated millions of investment therein before the war. It is good business for Germany to give Carranza financial assistance with a view to a standing after the war. It would be poor business for either Germany or Mexico to lay the gage of battle on the Rio Grande, for thereby the business aims of both would be defeated.

Germany looks ahead and wants business after the war. Mexico needs financial assistance and will need business development for many years to come.

OUR GOVERNMENT'S WOBBLES

The United States has had no steady business or political policy toward Mexico. It has been "Go in!" "Come out!" "Go back!" "Stay out!" The Washington declaration has been, "Down with the tariff and into the export field," and when hands have been uplifted from Mexico, our nearest and most needy field for export, Mr. Bryan has responded, "Why don't you stay at home?"

I heard it declared in Mexico, "Every Wilson policy toward Mexico has been wrong. Never has the right thing been done at the right time; but in extenuation of Mr. Wilson it must be admitted that nobody can now say what would have been the correct policy toward Mexico."

The strong policy was when Evarts wrote to our Minister Foster in Mexico in August, 1878:—

The first duty of a government is to protect life and property. This is a paramount obligation. For this governments are instituted, and governments neglecting or failing to perform it become worse than useless. This duty the government of the United States has determined to perform to the extent of its power toward its citizens on the border. It is not solicitous, it never has been,

about the methods or ways in which that protection shall be accomplished, whether by formal treaty stipulation, or by informal convention; whether by the action of judicial tribunals or that of military forces. Protection in fact to American lives and property is the sole point upon which the United States are tenacious.

This practical order from the United States enabled Diaz to keep the peace in Mexico for thirty years. He was able to tell his generals, "You will maintain order and protect life and property or somebody else will."

THE WILSON REVERSE

Then both Taft and Wilson, by words and acts, reversed the Evarts policy. "As long as I am President, nobody shall interfere with them," said Wilson at Indianapolis.

The national government in Mexico became powerless. Wilson's words were posted over Mexico. It was "open season" for all who could get the guns.

Mr. Wilson announced that it would take more than four hundred thousand men from outside to restore order.

I have reason to believe that the military report to Mr. Wilson was, "Four hundred thousand men cannot do it if directed from Wash-

ington. But forty thousand men would be too many if directed by the army officers alone."

Having blundered in and out of Mexico, it is now clearly the duty of the United States to reflect upon the situation and determine upon what basis it can extend a coöperative and effective helping hand to that unhappy country. If we do not do it, somebody else will.

There is no possible reading of the Monroe Doctrine that forbids Germany or England making the business development of Mexico or rendering financial assistance to the Mexican government and people. But when Mexico has to turn from her natural guardian and protector to European powers, the United States will be deservedly "counted out," both north and south of the Panama Canal.

THE MAN WITH THE HOE

No country in the world needs closer relations with the oil development of Mexico than the United States. The future demands not only redemption of the Mexican man of the soil, but the redemption of the American farmer as well.

Agriculture is basal in the world's progress. All industries, in both peace and war, rest upon

THE REDEMPTION OF AGRICULTURE 47

it. But "the man with the hoe" still indicts Christian civilization.

He has no eight-hour day; he competes with women and children who put no price on their labor; his surplus products are dumped, almost as refuse, his milk to the milk contractor, his potatoes to the starch factory. He has no storage for apples when, in an abundant season, they are not worth the price of the barrel. Heaven's sun itself appears to compete with him. He has never been taught that there is only one wealth for the farmer, and that is large storage backed by broad acres, quickly cultivated by machinery. His great machine, the horse, for spring and fall ploughing, "eats his head off" in an idle winter.

THE REDEMPTION OF AGRICULTURE

His redemption cannot come through the parcel post or oil-smoothed roads for city motors, or by state and national agricultural bureaus.

The redemption of "the man with the hoe" will come through the gasolene motor that will plough spring and fall, cultivate all summer, chop wood in the winter, and not "eat its head off."

The ambition of Henry Ford is a gasolene tractor within reach of the farmer. Success here

would mean more for the world than all gasoline motor development to date.

It would solve the labor problem on the farm; enable the individual farmer to hold broad acres, by quick cultivation and crops quickly stored. The result from such prosperity for the farmer would be great stores of food, steadying prices for the world.

The farm power, the food power, the sea power, the world power, cry out for gasoline and fuel oil. The Pennsylvania and Indiana oil fields are failing. California is exhausting pocket after pocket. The great oil area of the world to-day stretches from Kansas to Tehuantepec. The lightest oil is at both these extreme points. The appearance is that the great central reservoirs are in the Mexican field.

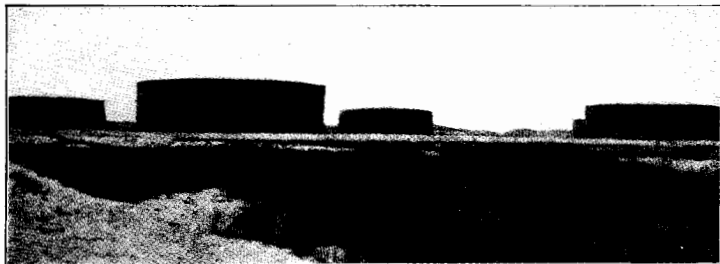
Their conservation is a world-wide necessity. Their protection is the duty of all nations.

NO OIL SANDS IN MEXICO

Very few people in the world know the geological structure of these oil fields. No one in the world to-day knows it perfectly. Nothing yet uncovered in the United States resembles the underground formation in Mexico. In California you pump from well-defined areas of oil sands



STORAGE RESERVOIR AT POTRERO — 2,500,000 BARRELS



SOME OF THE 55,000-BARREL STORAGE TANKS, MEXICAN EAGLE
OIL COMPANY

two to three thousand feet deep. The porosity of oil sand is fourteen per cent, and those wells do not average two hundred barrels a day.

Yet there are no oil sands in Mexico. About two thousand feet below the level of the sea the oil drills strike the bed of ancient oceans and from coral reefs with sixty per cent of porosity spurt the greatest oil wells in the world. No pipe line yet constructed has been able to receive the full measure of one of these gushers.

South of Cerro Azul is the great Potrero oil well of the Mexican Eagle or English company. It gives the entire forty thousand barrels per day that this company can export on present shipping facilities, but this is not half its capacity. Lord Cowdray is giving his whole time to his country at the head of the British aviation department, so essential on land and sea in winning the war, and his pipe lines and refineries work automatically on this coast. When the war is over this field may compete for his great organization and engineering talent.

THE DOS BOCAS CATASTROPHE

Above to the north, near the terminus of the Mexican Petroleum Company's railroad at San Geronimo, on the borders of the Tamiahua

Lagoon, still rises a cloud of steam from the ruins of the famous oil well Dos Bocas.

Here, in 1909, came in unexpectedly the world's greatest gusher. Through an eight-inch pipe line shot a column into the air fifteen hundred feet high by actual theodolite measurement; then the earth heaved and belched three hundred million barrels of liquid per day. How much of it was oil nobody could say. The torrential flood reached the boiler fires and soon in place of that eight-inch pipe was a heaving, seething mass, one hundred acres in extent. Soldiers as well as civilians fought the flow and flames to restrict the area of damage, but for many nights Dos Bocas lit up sea and shore for one hundred and fifty miles around.

THE HUMAN CATASTROPHE

Was this an advanced flash picture of the Mexico to follow? At Dos Bocas they worked even to save the fish of the river and the lagoon; but Mexico, abandoned by its friends and with notice to everybody else to keep out, was to become a politically heaving mass, with Mexicans, Americans, and Chinese massacred in the Mexican war flames.

China got promises. Americans, Germans,

and English filed claims and the strongest nations of the world filed theirs at Washington; but where will the millions of the good people of Mexico who want work, wages, and human progress lodge their claims or cries?

I shall never forget the sincere, earnest emphasis of Edward L. Doheny, controlling owner in the Mexican Petroleum Company, as on March 16, 1917, he declared, on his yacht Casiana heading into the "northers" on the Gulf of Mexico: "I would sink all my interest on this coast ten thousand feet deep in the sea to give the good people of Mexico right, justice, and freedom in a modern system of civilization."

CHAPTER V

WHY NO AID FOR MEXICO?

It is difficult to interest the people of the United States in the sufferings of the people of Mexico when our sympathies and pocketbooks are engaged in behalf of five million men in the hospitals of Europe, six million in prison camps, and seven million war cripples, a total of eighteen million daily sufferers, all making the strongest appeals through war-relief movements organized in the United States.

This is an appalling number of sick, maimed, and in prison, aggregating more than the total population of Mexico. There are forty million more headed in the same direction and behind there must be two hundred million in suffering families.

This is the only explanation I can give for the dulled and deaf ears upon which fall the appeals in the name of humanity to give sympathetic aid to the people of Mexico now adrift in political, financial, and social seas with no chart or compass and no directing voice except that of

President Wilson, who declares, "They must fight it out among themselves."

GERMAN TROUBLES

Nobody in this country desires any military intervention in Mexico, and the only thing that can at the present time invite it would be the German activities. All governments and forms of government in Mexico must understand the danger in this. German dynamite would do more damage to rulers and would-be rulers in Mexico than it would to the military forces of the United States.

It is said that the new Carranza constitution, with its confiscatory measures, in effect May 1, 1917, is primarily an attack upon Spanish, British, French, and Belgian interests in Mexico and only incidentally an attack upon the interests of citizens of the United States in that country.

While the new constitution decrees that there shall be no retroactive measures it declares that all wealth beneath the surface, mineral and oil, is the property of the State.

THE NEW CONSTITUTION

There are also provisions in the new constitution dealing with the amounts of land any

one individual or corporation may own. No foreign corporation may acquire land or property or water rights within fifty kilometres of the seacoast or within one hundred kilometres of the border. Any outside corporation desiring to acquire property in Mexico must under the new constitution renounce all foreign citizenship in relation to that property and agree to be subject to the constitution and laws of Mexico without right of appeal.

It will thus be seen that under the new constitution the way is open for the reigning powers in Mexico to deal with foreign interests pretty much as they please. There are unlimited powers of taxation, regulation, and of decrees concerning ownership, and the penalty for non-compliance is confiscation.

The result to British, French, Belgian, United States, and all other foreign interests must be steadily exerted "pressure," and it may be assumed that this "pressure" will be exerted far enough to produce revenues and regulations looking toward nationalization of present foreign-owned properties.

WAR ALLIANCES MAY HELP IN MEXICO

But self-interests or the law of self-preservation will cause a halt when the "pressure" faces danger in the powers of resistance.

The safety for foreign interests in the present situation is the entry of the United States into the war as an ally of Great Britain. All the allies are, therefore, now joined in the protection of the British naval oil base in Mexico.

General Joffre and that calmly poised, well-balanced brain of statesmanship in Balfour, with their military and economic associates, on the soil of the United States, mean very much for Mexico. Joffre, the heart of France touching the heart of America, and Balfour, the far-sighted, economic statesman, link the civilizations of two continents in a way that means not only peace for Europe, but peace for Mexico.

Balfour declared two years ago, when I was in England: "The world needs industrial Germany; that must not be crushed, but Prussian militarism must be blotted out that the true Germany may live." This will soon be the sentiment of the entire globe, and Mexico will not be neglected in the enfolding arms of a future universal peace.

MEXICAN PRESSURE

How Mexico "is pressing foreign interests" is illustrated in a decree from Mexico City more than doubling all the taxes on oil. The big English company and the Oil Fields of Mexico Company, incorporated in New Jersey, but selling its oil to Lord Cowdray's concern, have each in their concessions the promise of immunity from export tax for fifty years. They and all other companies are now paying about five cents per barrel American gold as an export tax, and by national decree must from May 1, 1917, pay about eleven cents per barrel export tax, or nearly twenty per cent of the gross value of the crude oil as exported. The average price of exported oil at the coast I figure is about sixty cents per barrel. Many contracts are higher and many are lower. Many interior oil wells would be glad to sell at ten cents per barrel to anybody who would build a pipe line to them.

The decree also places an export tax of one cent a gallon on crude gasolene and of one half-cent a gallon on refined gasolene. Some of the late contracts for export, notably those of the Mexican Petroleum Company, have a proviso that the buyers under contract must pay any increased taxes.

The British interests have paid their taxes under protest and will probably continue so to do. This is another claim mounting up at Mexico City and Washington, for it will be filed at both places.

THE PEACE OF CARRANZA

The claim is constantly made from Mexico City that Carranza has quieted Mexico except in mountain regions or distant places and should have financial support from the United States. Without desiring to make trouble, let me narrate some instances that refute this claim.

Riding on a flat car toward Cerro Azul in March, 1917, and within two hundred miles of the City of Mexico, the telegraph poles were noted upon which, a few days preceding, the anti-Carranzistas had hanged six Indians in reprisal for the raid of their tribe upon a village near by. The claim was that the Carranzista people had given this Indian tribe arms and enabled them to raid, pillage, and burn the village of Amatlan, the ruins of which were visible on the mountain side as we passed on the railroad a few miles away.

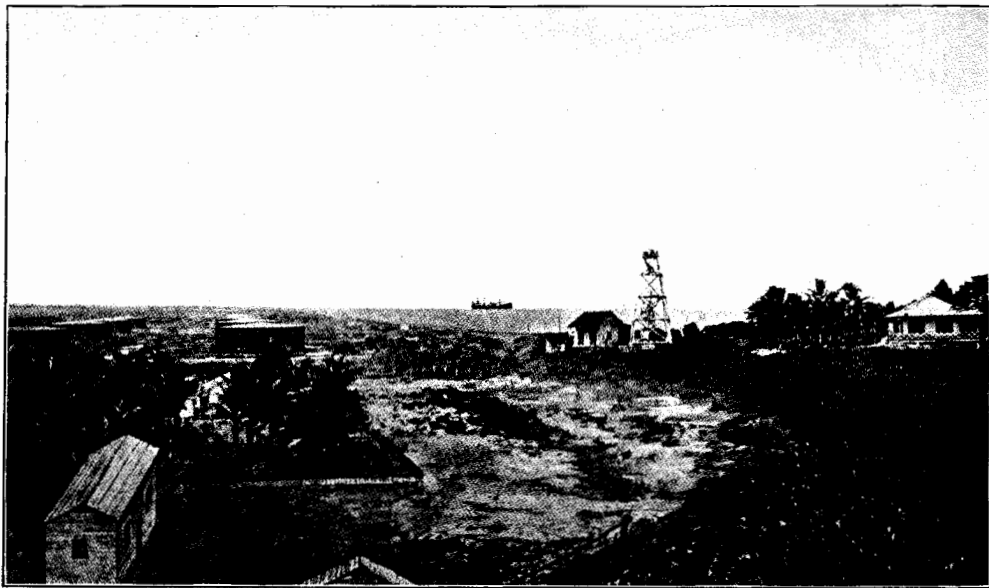
This apparently had been the largest native city or village between Tampico and Tuxpan.

I have never been able to find any account in the papers of its destruction, but the report at the railroad station was that Amatlan contained three hundred and fifty Mexican families, nearly of all whom perished. Those who were not shot were burned in the firing of the village.

Yet on this trip I met only two soldiers and two rifles; one an anti-Carranzista guard at a railroad station, and the other a picturesque anti-Carranzista general who rode with our party through the hills after we left the railroad train. It was said that he had associated with him thousands of anti-Carranzistas.

When the government troops appear, the rebels are just plain Mexican people with no arms and no organization. When the army divides into small bodies, the plain Mexican people are suddenly in the bush with plenty of cartridges and the government soldiers are ambushed or perhaps given opportunity to change sides.

Similarly, when the soldiers surround the opposition, the anti-Carranzistas are either recruited or shot. It is astonishing how many Mexican prisoners, when the question is asked, "Carranzista or anti-Carranzista?" will respond



VIEW OF TUXPAN, SHOWING STORAGE TANKS AND STEAMER LOADING CARGO OF
MEXICAN OIL FROM DEEP-SEA LOADING LINES

“anti-Carranzista” and receive their dose of cold lead without a murmur. Those who respond “Carranzista” are handed a musket.

In the latter part of April, 1917, I received word that a personal friend of mine, the manager of one of the oil companies in Mexico, had that month had a terrible experience. He started from the coast for the City of Mexico, going first north to Monterey, as the southern railroad route was interrupted by disorder. On the main line, and nearer Mexico City than the northern boundary, the escorted train was assaulted by one hundred brigands, and thirty of the passengers and their defenders were killed. There can be no denial of my report. But I have again had the news records of this country searched only to find that no one has now any interest to gather or print such news.

Carranza is still appealing for financial help north, south, east, and west when he should ask the military coöperation of the United States.

CHAPTER VI

THE FINANCIAL BENEFITS OF DISORDER

WASHINGTON notes, words, sentiments, and actions have produced quicker results in Mexico than in any other country in the world.

From various parts of Mexico, between the border and Mexico City, comes word that since Congress voted billions of money for war expenditure and began plans for an enormous army, all the "generals" in Mexico have suddenly become very polite to foreigners, especially Americans. All the threatenings from German sources in Mexico likewise suddenly become non-explosive.

There is one thing that talks in international relationships and that is the loading up of the guns. It does not make any difference in which direction the guns are aimed. Uncle Sam has not a thought about Mexico at the present time; his guns are all aimed for Germany. But for the first time all the Mexican generals and would-be generals know that Uncle Sam has got a gun, has started to load it, and is putting so many millions of men behind it that nobody can now

say with safety how much of a squint he may take around the horizon when he gets really fighting mad in the interest of universal peace.

Meanwhile, it may be well to point out for financial interests the benefit to oil producers in that country of the American policy to date of non-intervention and of general disorder.

The great oil gushers of Mexico are near the coast. They are thus of world-wide value, but there is no storage capacity in the world that might not be quickly exhausted by a full run from one of these gushers. The Mexican Petroleum Company has storage for nine million barrels, and it is full. The Cowdray interests likewise are full up to their six million storage capacity.

NATURE'S RESERVES

Nature is wonderful in concealing her natural resources until the world is prepared for them. Then it is discovered that she has all the while been hanging out invitation signs for man to dig and produce.

To-day, however, the world can see and scientifically figure the possibilities of both coal and oil exhaustion for all known sources of supply on this planet.

When petroleum was first discovered in Pennsylvania the rivers carried it to waste. Rockefeller laid the foundation for the biggest fortune in the world by borrowing money to store oil when oil had no value but was running to waste.

But Rockefeller, seeking a new stomach to bear up the burden of his hundreds of millions, must trust to "experts" and to "expert" reports on Texas and Mexican oils. The result was that Texas oils were officially condemned by the Standard Oil people upon expert testimony and the oil gushing from Spindle Top sold below three cents a barrel, with few people having the Rockefeller courage to buy storage capacity for it.

The popular superstition is that the Standard Oil interest has sought to grab the oil wealth of Mexico. If any one, however, had outside keys to 26 Broadway, he could find therein three successive "expert" reports condemning the early samples of Mexican oil as fakes.

The Standard Oil chemists reported that the oil sent from Mexico could not be nature's compound; somebody was attempting to impose upon them by injecting gasolene and sulphur into worthless bitumen or asphalt, but they

had not been chemically combined and the fraud was easily detectable.

Mexican asphaltum had no value and Mexican oils as first discovered and analyzed were largely Mexican pitch or asphalt and were officially declared good for neither kerosene nor gasolene. It was with difficulty that the railways of Mexico could be induced to change their engines from high-priced coal to cheap Mexican fuel oil.

THE SHUT-IN OIL WELLS

When farther south the gasolene values of Mexican oils were proven, the compound was shown to be just another new one of Mother Earth with the gasolene and sulphur more detached. When the day of the oil gusher arrived, one can only conjecture the result to the world had there been tranquillity in Mexico and capital and shipping easily available. It might have been the story over again of "ten thousand tons of gold" to be dumped into the ocean to save the investment base of the world.

To-day there is a proven daily capacity of one million barrels of oil between Tampico and Mexico City and there are neither pipe lines nor ships to take away one-sixth of it. A year's drilling would multiply the present drilled capacity,

and with the high porosity in the "reefs" every oil land owner would have to quickly drill his boundaries for self-protection.

A few gushers might be in position to sell their oil to a pipe line at three cents a barrel and make a million a year. It would be a wicked world-waste. The Tampico oil fields could equal the total production of the United States on about forty-eight hours' notice of facilities for storing the product.

But Mexico, politically unsettled, with only two pipe lines in operation, has her oil wealth conserved, and Lord Cowdray can report to the English shareholders of the Mexican Eagle Company that earnings are ten million dollars per annum Mexican gold, or five million dollars per annum United States gold; and the Mexican Petroleum Company can report to its American shareholders net earnings of about the same amount — six millions for the \$39,000,000 common stock the past year.

THE SHUT-IN EARS

Always hoping for the best, I can see possible benefits arising from the "shut-in" policy for Mexico — the shutting-in of its oil wells and the shutting-in of the ears of President Wilson to

all appeals for help. The oil forces of nature have been conserved not only in the interest of world development but of Mexico's slower and more substantial progress.

President Wilson has so turned his back upon the Mexican situation that his most intimate political advisers will not mention the subject of Mexico in his presence. His mind appears to them absolutely closed on the subject. There is no "watchful waiting" policy about it. That was Mr. Bryan's phrase and policy.

When one looks at the flaming war fires in Europe, he may see a reason or a Providence in the Wilson attitude toward Mexico.

Mr. Wilson may have been better informed concerning the seriousness of the European situation than the public has been led to believe. The people who have had his confidence on this subject have not had his confidence as respects Mexico, and it may be well doubted if anybody knows exactly Mr. Wilson's real position toward our suffering neighbor to the South.

There is just one American financial interest with millions in Mexico that is in thorough agreement with the Wilson policy, which is that of news suppression and the quieting of all agitation concerning Mexican affairs. But I do not

think it judicious at the present time to further enter that phase of the subject.

The United States can have no well-defined policy toward Mexico the public announcement of which would be helpful at the present time. It should be sufficient for one to reflect that the United States has girded on its armor in an Anglo-French alliance, the end of which cannot be in sight while either two of these three great nations remain alive.

CHAPTER VII

THE LAW OF COMPENSATION

THE problem of value with any investment is determined according to the aim of the management, otherwise the soul of the proprietor, owner, or manager.

An elephant and a jackass were born on the same day in the same stable, drank from the same spring of water, and ate from the same bale of hay. At the end of several years every physical fiber of each had come from the same water and the same hay, but the elephant was still more of an elephant and the jackass more of a jackass — because one was born with the soul of an elephant and the other with the soul of a jackass.

One of my newspaper associates was recently *en route* from Winnipeg to meet me in Montreal.

“What did you learn?”

He replied: “I visited all the smoking-cars *en route* to mingle with the people. They were jovial and light-hearted in the third-class smoker, but in the first-class smoker sullen, morose,

thoughtful. I believe that of all my friends in Winnipeg the war has slain four out of five.

“In the first-class smoking compartment a Canadian asked: ‘What is the compensation to Canada for all her sacrifice?’

“And a British officer growled, ‘There is in this world no compensation in sacrifice.’”

“Did you refute him?”

“How could I, with eighty per cent of my friends in Winnipeg dead in the war and my own memories of a struggle when as a youth of ten to protect my school-books, snatched from my hand by a little negro girl, I rolled in blood and dirt, for she buried her teeth in my flesh to the cheek-bone, and I carry the scar to-day? What compensation to me or to Canada?”

I had to respond: “I have never forgotten the slow, solemn words of Ralph Waldo Emerson in the Old South Meeting-House at Boston, as he drawled forth: ‘The Sandwich Islanders have a proverb that the strength of the slain enters into the arm of the conqueror.’

“Was your arm weakened or your fighting soul for right shrunken by your youthful combat? Did I not tell you two years ago that the war had rejuvenated France and raised in her a new soul? Is she not to-day the proud treasure

of the world? There are many rich men in the United States who would like to swap their money and position with the men of England who have given up their fortunes in defense of their country but have found their souls.

“The sum of human happiness to-day is greater in the British empire united and at war for liberty and humanity than ever before; and it will increase with the sacrifice.”

Then I went down into Mexico and studied an empire of natural wealth and resources, but a nation that has never yet found its soul, or a flag which represents service to humanity.

CARTRIDGES ARE CURRENCY

When the Mexican soldier finds Carranza money will not buy food, he or his woman takes the government cartridges and buys their provisions. Cartridges are currency in Mexico.

Zapata has maintained himself supreme in his state against six administrations in the City of Mexico and never imported arms or munitions. He holds a rich territory, the food of which can buy the arms and cartridges of his opponents.

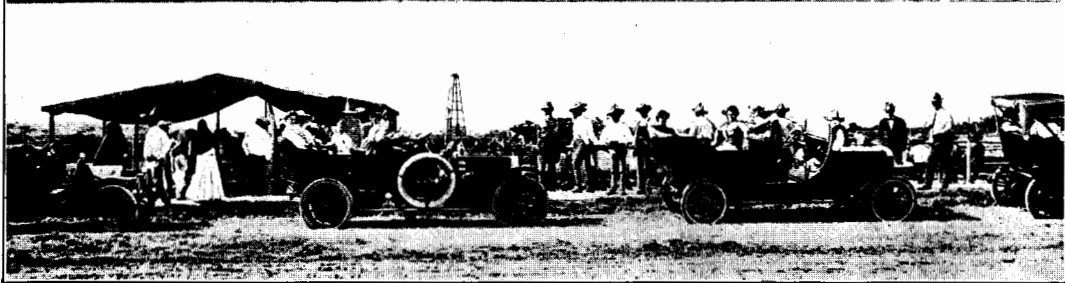
Seventeen million people on the richest mineral territory of the world, that can grow anything in the world and produce food in abun-

dance every month of the year, use their cartridges for currency; and their national soul can never be born under that miserable motto of self-interest, "Mexico for the Mexicans," which means Zapata for Zapata, Carranza for Carranza, Pelaez for Pelaez, Villa for Villa, until every part is for itself and nobody for the whole.

Returning north, I find Canada, seven million of people, on a soil that works only three or four months of the year, sacrificing state and national treasure to develop national transportation, and until this war dependent upon foreign credit, now summoning all her resources, not for Canada, which needs no defense, but for civilization and the empire of which she is a part; giving more than four hundred thousand of her best men to the battle line and over a billion of her treasure and earnings for the funds of war; and men, women, and children working every possible hour of the twenty-four.

Mexico is still seeking compensation for something she never knew she had until American enterprise developed it and with it lifted her labor toward modern civilization.

Canada, like France and Britain, has found her soul, not in the motto, "Canada for the Canadians," but in Canada for world defense.



A BARBECUE WITH AMERICANS WAITING ON THE MEXICANS

Canada is young but has the soul of an elephant.

Mexico will never be for the Mexicans or for humanity until American and European enterprise has had fair play in that country and been permitted to pay fair wages to her willing people who are longing for light, enlightenment, and education. Without education leading to usefulness there can be no patriotism.

OUR CRIME AGAINST MEXICO

Carranza is in a difficult situation. We of the United States have struck down all credit for Mexico.

Had we deliberately gone about a diabolical scheme to wreck a billion of foreign capital in Mexico, to give forty thousand foreigners over to plunder, and to decree misery, poverty, and sorrow for more than fifteen million Mexicans, we could have conceived of no more effective plan than that which we have executed toward her without ever planning anything against her.

Because the Guggenheim smelting interests could make some millions of dollars more a year with peace in Mexico, nobody must speak a word for peace in Mexico, for the Guggenheims

represent capital and the securities of their companies are in Wall Street. Because the Standard Oil people with peace in Mexico might build pipe lines therein and buy Mexican oil and make money refining it, it is better to have anarchy in Mexico than that the Standard Oil Company should have any more capital, wealth, or earnings.

Therefore, Mexico must be cut asunder, Carranza must rule or tumble down in Mexico City; Villa may overrun Chihuahua and even raid into the United States; Pelaez may govern in the oil fields, Felix Diaz may operate from Vera Cruz, Zapata may rule to the south of Mexico City, and Cantu may run Lower California.

If we had meditated a diabolical plan to ruin Mexico, and all the friends of Mexico, how successful would have been the most wicked machination if it could have accomplished the present disunited and hopeless situation!

If Mexico had been permitted to be truly free by an assisting hand from the United States, what a power to-day would be her food and mineral resources in health and help for the whole world!

We have declared ourselves brother-keeper of Mexico and have imprisoned her; and as she

tears herself within her own prison walls, we stuff cotton in our ears and give her over to the I.W.W and the crazy, illogical brains of such as Lincoln Steffens.

With many of the richer states in Mexico cut off from support to the central *de facto* government, where shall Carranza raise revenue to pay his soldiers and maintain law and order?

THE COMPENSATION OF LOOT

It is a mystery to everybody in and out of Mexico how Carranza can exist. I have very reliable reports from abroad that some German money has come into his hands. Only recently he took \$38,000,000 Mexican silver from the banks in Mexico City, and it was figured that this would last him only so many weeks and that then Villa would again be raiding over the country. When Carranza has troops and money, Villa takes to the hills, but when the money is gone and his soldiers clamor for pay, Villa appears on the scene and promises the compensation of loot; and our Mr. Wilson says that these good patriots, both of whom have been his allies, must fight it out as did our forefathers.

I wonder if Mr. Wilson's forefathers would really have sat up on the top rail of a fence and

cheered on the Indian tribes against the American pioneer bringing the white man's civilization into the jungle? Would they have called out, "Bully for you, old Puritan, over goes your meeting-house and some children in the flames! Buck up there, old Sioux, there are more scalps for you! more women to torture! more fields to burn! more plunder ahead! fight it out!"

Now, individual reader, please don't blame Mr. Wilson; he represents you, calloused and hard to the sufferings of your neighbor, rejoicing in the sacrifice of your fathers and the prosperity of your present position. You have not and you do not take any more interest in Mexico than you do in a famine in India. You think Mexico is a good joke on the Guggenheims, the Standard Oil Company, and Wall Street, but when a long war in Europe, where you are now to take the forefront of the battle, has softened your heart and the income taxes have come down to the smallest savings, you will be less of an Indian, less of a savage, less of a Mexican, yourself. You will be more thoughtful, more tender of heart, and a more worthy son of the men who first brought freedom and true democratic government into the American jungle.

The pity about it all is that Mexico was

brought so near to modern civilization under Diaz; then an explosion and a political and social catastrophe, the like of which no man in or out of Mexico had ever dreamed! Yet I don't believe there were ever two hundred thousand men under arms in Mexico. As to any invasion by the Gringos, there were never fifty thousand Americans in the whole of Mexico, and to-day there are only about five thousand.

THE DIAZ RECORD

I first met Porfirio Diaz nearly forty years ago when he was inviting New England capital into the railroad development of Mexico. He ruled Mexico with an iron hand and invited the capital of the world into its development. His policy never varied. It was to promote in Mexico every enterprise that would give his people opportunity for work, wages, and education. I have talked with all interests that ever had to deal with him and I have never heard a charge that he had the taint of graft or personal ambition. Every business interest that ever appealed to him for support found him fair and forceful for the right.

I was pleased to learn on this trip to Mexico that when he died, an exile in France, he was not

the absentee ruler with treasured or hidden millions at his command. He left seventy million dollars in the Mexican government treasury, but died a pauper, as befits an exiled patriot; and his funeral expenses were paid by sympathetic American friends who still hope that the native blood of Mexico will produce more of his kind.

CHAPTER VIII

THE "EFFECTIVOS" IN MEXICO

NEITHER oil, mineral wealth, nor concentrated land ownership has been responsible for the break-up in Mexico. Outside capital and outside engineers built first-class steel railroads throughout Mexico, opening up her natural resources to the world. Talent enough in Mexico has been developed to operate them with fair efficiency when the rifle bullets are not ringing over the rails.

All attempts to give land on shares or in fee simple to natives who would cultivate it have been failures. The mineral resources have developed a fine middle-type Mexican labor, competent to run stationary engines and do second-grade engineering work. But the Mexicans will not work well under their own countrymen. Whether it is native jealousy or desire to learn from the Anglo-Saxon race, or whether it is that innate recognition, universal over the world, of superior leadership, one cannot as yet clearly declare.

THE MEN WITH THE "SWING" AND THE "BING"

I was surprised at the high type of Americans directing affairs in the oil fields. They are the big fellows of the physical and mental stamp of our pioneer western railroad builders. They love the life, the climate, the excitement and the opportunity to do things in an expansive way. They must be quick, resourceful, and diplomatic, and they are. The natives admiringly call them the "effectivos" — the people who do things.

One could readily see that Edward L. Doheny was the driving force of the Mexican Petroleum Company, and he is this whether on the Atlantic or the Pacific, in California or New York; whether planning expansion at Tampico or expressing himself forcefully in Mexico City.

Later I shall write of this remarkable American pioneer, but at present I wish only to say that he and John D. Rockefeller share in common the one transcendent quality that makes a business strong and great. It is said that Rockefeller in his judgment of men never selects a round peg for a square hole. His men always fit their places. In this respect his judg-

ment is almost uncanny. Doheny shows the same remarkable quality in his selection of men. Is there a new engineer just located somewhere on the work: Doheny must run across him, ask a couple of questions, learn the correct spelling of his name, and it is all over in two minutes. He will tell General Manager Wylie a little later the seven qualifications of that engineer and his two deficiencies which are to be watched.

And Wylie is the man with the "go" and the "swing" and the "bing." He inspires and fires the whole line. His eye will detect a misplaced culvert on a railroad, a small leakage, or a large wastage. He knows his cost sheets in detail; but Doheny knows the round result in every quarter. No long letters and no correspondence are wanted by these head men. Results only are asked for, and the correspondence is telegraphic at a cost of somewhere between ten thousand and twenty thousand dollars a year.

Americans are not born for position; they make them. The ambitious young man should seek his opportunity near the left-hand of power. The right-hand man of Wylie is Paddleford, but he began on his left as physician. He demanded activity and Wylie sent him down the line — "Flick is the boss driller, but you can help in

detailed reports." The result was Paddleford as General Superintendent, building railroads, pipes lines, and pumping stations.

Captain Green, the local superintendent at Tampico, is rightly titled. He was formerly with our army in the Philippines, where he mastered Spanish, and, therefore, in Mexico he can talk two languages at once — polite Spanish to the court and officials, and forceful English at the same time to the men under him. He is two hundred and fifty pounds of effective dynamite and a jaw that means fight if necessary.

MINTING OIL

The expanding part of the Mexican Petroleum Company's property at the present time is the topping plant at the Tampico terminal of the pipe line, said to be the largest topping plant in the world. Smith, at the head of it, was formerly with the Waters-Pierce refinery. He is several inches over six feet and the Mexicans under him look like children. Of the more than fifty thousand barrels produced daily half goes through the topping plant, which, without impairing the value of the oil fuel, takes a half-dollar's worth of gasolene — wholesale price of distillate at Tampico — right out of the crude oil barrel and at

ninety per cent profit. This plant should soon be topping all the oil production. It is better than a gold mine so long as gasoline keeps up in price; it is a mine with the gold minted as a by-product. Yet the buyer who transports it, further refines it and makes distribution, gets almost as much more out of it. Doheny believes in division as the proper way to attain results in addition.

Nevertheless, the Mexican Petroleum Company is completing a two-million-dollar refinery at New Orleans, which should soon be in operation.

MINING OR REFINING

And, speaking of oil refining, my mind is still working over the problem of where the wealth from oil in the future is to be, whether from the mining or the refining end.

The Standard Oil people, operating only in American territory and desiring to mine only ten or fifteen per cent of the oil they transport and refine, have taken in dividends, and created in value, more than five billion dollars from the transportation, refining, and marketing of oil. This is a sum five times our recent national debt. It is also the sum of the cost of prosecuting our

Civil War. It would dig a dozen Panama Canals, and it represents more than one-third of the values that legislation has permitted to remain in the entire transportation system of the United States. But where are the "Coal Oil Johnnies," the original diggers for oil and their early millions?

The Standard Oil Company made its millions where millions are always made, in material service to the widest number of consumers. The "independent" producer in the United States formerly had one main customer. He never had half a dozen people bidding for his oil. The producer of fuel oil to-day has the world for his customer so far as he can reach the world by pipe lines or ships. Still his customer must be a refiner or a fuel oil burner. But it is a wicked waste to-day to burn the unrefined crude oil from any oil field in the world.

A forty-two gallon barrel of crude Mexican oil is worth only about sixty cents on the Gulf of Mexico. Ten per cent of it is gasolene and there are many Mexican oils from which a good deal more than ten per cent in gasolene can be taken. In the topping plant at Tampico it is separated at a cost of less than one cent a gallon for the gasolene, and the wastage in handling this gallon

is only one-half of one per cent. Gas from the oil wells heats the oil to a temperature of three hundred and twenty-five degrees, and in the condensation the gasolene is drawn off. Some contracts with the Mexican Petroleum Company have run below sixty cents, but the average received at Tampico for a barrel of oil can be brought up to above ninety cents by the topping plant, which, when finished to top all the oil, will have cost far less than one million dollars. Across the river the Pierce Oil refinery takes in crude oil from the Mexican Petroleum Company and gets two per cent in beautiful paraffin cakes. In all there are thirty-five commercial products in petroleum, and they sub-divide into many more commercial uses.

There is a great future for Mexican oil in the refining business. There is yet more money now in the transportation and refining and merchandising of Mexican oil than there is in the value of the oil itself at the seaboard.

SHIPPING

The Mexican Petroleum Company has put more than twenty millions in cash into development within Mexico, and with its majority owner, the Pan-American Petroleum & Trans-

port Company, will soon have a like sum in shipping. Building plans at present under way will round out a fleet of twenty-two ships with two hundred thousand total tonnage, costing about seventeen million dollars, and the whole could be sold to-day, lock, stock, and barrel, completed and uncompleted, for a good deal more than thirty million dollars. There are, besides, five chartered ships abroad promised for the close of the war, bringing the fleet up to twenty-seven ships.

The Mexican Petroleum Company does not own its ocean-going oil carriers, but has put more than three million dollars into refining and storage plants in the United States.

Such is the demand for ships in oil transportation that the Union Oil Company of California is relieving the situation by filling its South American contracts at Tampico instead of Southern California, as the Panama Canal so shortens the shipping distance.

DIVIDENDS

The demands upon the Mexican Petroleum Company for expansion, for increased shipping facilities, for storage, and for refining are so tremendous that in my judgment the stockholders

ought to be fully informed of the rich possibilities before them and invited to forego all dividends until these can be declared as Standard Oil dividends have always been declared — from overflowing treasuries. Money in oil ships, oil refining, and oil storage facilities will in the end return to the patient holders from twenty-two to fifty per cent per annum. When competition in transportation and refining has lowered this return, Mexican Petroleum stockholders should take their dividends. Meanwhile, the profits will be added to the value of the shares. There is only one place in the world where a gold dollar is worth and is quotable at two gold dollars, and that is in the treasury of a profitably expanding company.

CHAPTER IX

OIL EXPANSION

THE submarine, the aeroplane, the modern warship, the pleasure automobile, the motor truck and the oncoming farm tractor are all possibilities from petroleum development.

War is a tremendous consumer of oil and gasoline and is drawing down the stocks of oil above ground throughout the world. War's demand has doubled the retail price of gasoline this side of the water and multiplied it three- and four-fold on the other side, where it is permitted to be used in peaceful pursuits only to a limited extent and under government regulation.

In England no oil is permitted to lay the dust on the highways. If you have official business, you are permitted a limited amount of gasoline at seventy-five cents per gallon. It should thus be measurably clear that industrial development from oil is held back by the war. The world has use, outside the war area, for all the oil that can be produced and transported for a long time after the arrival of peace.

Nevertheless, it may be useful to note a few

facts concerning naval development under oil supplies, because such development opens the way to tremendous merchant shipping developments from oil after the war. Without fuel oil the United States government could never have designed for its first line battle cruisers a boiler installation with one hundred and eighty thousand horse-power.

NAVAL OIL DEVELOPMENTS

The projected battle cruisers of the United States could not be reproduced if required to use coal nor can they be remodeled for burning coal.

One of the modern monster war cruisers may use fourteen thousand barrels of oil in twenty-four hours. Although the United States Navy is now using but a million and a half barrels per annum, the estimate of the Navy Department is that it will be using nearly seven million barrels within six years. It was declared six months ago at Westminster: "If we could describe what the recent push has meant in the way of petrol, it would stagger Parliament."

Assistant Secretary of Navy Roosevelt has declared: "It may be set down as a definite conclusion that the navy cannot revert to coal-burning vessels."

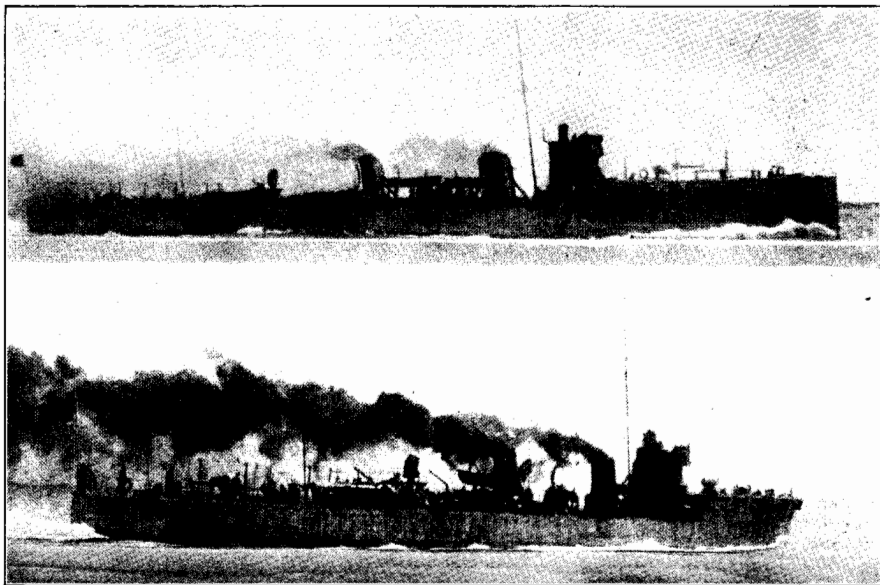
Fuel oil for the navy, he says, has given increased speed and cruising radius, control of smoke-screens, reduced fire-room forces by fifty-five per cent, increased the efficiency of refueling at sea twenty-five per cent, given ability to sustain maximum speed for long periods of time without clogging the furnaces, flexibility in speed, and finally greater safety from submarines, as in modern American ships the fuel oil is disposed along the bottom to cushion the blow of exploding torpedoes.

Considering this subject, the United States naval consulting board has reported that "the Mexican oil fields are probably the most extensive deposit of oil anywhere in the western hemisphere, if not in the world. To-day Great Britain renews her oil fuel from Mexico, and is assured thereof only so long as she maintains undisputed control of the seas."

OIL STATIONS FOR SHIPS

Some economists and financiers figure that the development of the oil industry is measurably dependent upon the development of oil supply stations throughout the world, notably at the great shipping ports.

You may contract in London for annual sup-



TWO BRITISH DESTROYERS—ONE RUNNING ON COAL, THE OTHER ON OIL

plies of coal at any shipping port in the world, and the price before the war was not far from five dollars per ton.

Coincident with the building of Diesel engine ships must be the establishment of oil supply stations around the globe, so that steamship owners and shipping agents may contract for oil supplies as they now contract for coal.

The Daniels idea of an oil base in California for the United States is an absurdity. What is wanted for our navy is American commercial oil stations. No navy can use oil in amount comparable with the uses of commerce, and only commerce can sustain oil stations around the globe.

EXPANSION IN MEXICO

Before the European war the eyes of the world outside of the United States were focused upon the Panama Canal and the nearest oil base thereto for ships.

The United States has officially opened its eyes a bit to the question of oil for its naval ships, and not long ago appropriated sixty thousand dollars to investigate fuel oil and gasoline for naval requirements and naval storage; but while the United States now is, and has been

from the beginning, the biggest oil producer in the world, nobody seems to have taken the slightest interest in building up a mercantile marine for the United States on the basis of the cheapest and largest oil supplies on our side of both oceans.

While the British government announces in Parliament that its mercantile shipping is within five or ten per cent of what it was at the beginning of the war, except so far as it is commandeered for war service, and at the same time declares that its naval forces are so rapidly expanding that at the close of this war it will have a tonnage equaling the entire naval tonnage of the rest of the world, it is not unmindful of the future in its mercantile shipping, especially in relation to improvements and developments in connection with oil supplies.

While the British navy is probably taking twenty thousand barrels a day from the Mexican Eagle Company, a British steamship company is negotiating with the Mexican Petroleum Company for a very considerable part of its production in the future.

The Mexican Petroleum Company may elect to deliver the oil at Tampico or elsewhere around the world on six months' notice. Of

course no producing company would now contract to ship around the world. When peace relieves the shipping situation, the development in oil shipping and in fuel oil ships will be tremendous.

EXPANDING SHIPMENTS

The Pan-American Company now has twelve steamers working for the Mexican Petroleum Company, and nine more are due this year. Six should be delivered this summer and ten thousand tons a month should be steadily added to the company's shipping facilities. Three ships aggregating thirty-two thousand tons are due next year.

The Union Oil Company has seven steamers taking Mexican Petroleum Company oil through the Panama Canal to South America, and the Standard Oil Company of New Jersey has five ships taking its oil north.

In 1916 the Mexican Petroleum Company produced 12,400,000 barrels of oil and sold 10,600,000 for \$8,825,000, or a little above eighty-three cents per barrel. The cost, including bond interest, taxes, and depreciation, was twenty-five cents per barrel. The production for 1917 should equal fifty thousand barrels a

day, or 18,250,000 barrels and it should realize not far from one dollar per barrel.

If I were writing a financial article, I should immediately figure that, deducting the interest on Mexican Petroleum eight per cent preferred stock, there should remain for the \$40,000,000 Mexican Petroleum common stock, and United States government war taxes, not far from thirty per cent; but as I am not writing a financial article, but on the Mexican situation in general, I give the following as the best estimate I could get in Tampico of the probable movement of Mexican Petroleum Company's oil in 1917:—

4,000,000 barrels to South America by the Union Oil Company.

3,000,000 barrels into New England.

3,000,000 barrels to the Standard Oil Company of New Jersey.

2,500,000 barrels to the Magnolia Oil Company (a Standard Oil subsidiary in Texas).

2,000,000 barrels to New Orleans and Florida.

2,000,000 barrels to the Atlantic Refining Company.

1,000,000 barrels to the Prudential Company.

1,000,000 barrels in "tops."

I give the above table to show the wide distribution of this expanding company, whose production is, in my judgment, only in its beginnings.

The contracts for the "tops" or distillate call for barrels of fifty-gallon capacity.

To date the Mexican Petroleum Company has produced about eighty million barrels of oil, of which more than fifty-five million barrels have come from the Casiano well at a pressure of two hundred and sixty-five pounds and with the valve unchanged during the seven years of its operation and the pressure undiminished — and Cerro Azul is younger and greater, but can be more closely shut in.

CHAPTER X

PIONEER WORK FINISHED

THE expansion of the Mexican Petroleum Company in its beginnings was by land acquisition. Such expansion may now be considered as ended. Some people figure that more than three-quarters of the oil values in this Mexican field are under the Mexican Petroleum Company's six hundred and twenty thousand acres and that they represent a potentiality of at least five billion barrels in production, a sum ten times the world's annual consumption. But no man can set limits or boundaries upon this oil territory.

Doheny truthfully says, "Geology is a joke in Mexico; values are where you find them. . . ." And Doheny has led in finding values both in California and Mexico.

His first purchases in Mexico were in August, 1900, although prospecting was begun by Doheny and Canfield in the May and June preceding. They were American pioneer inventors and soon found a cheaper method of prospect-

ing than in crawling and cutting their way through the jungle. They announced they would pay five pesos to anybody pointing out the location of "tar spots." They were inundated with "tar spots" and readily took leases on thousands of acres. So pressing were the Mexicans to realize money that royalties were sometimes paid several years in advance, and when they would no longer pay extended advance royalties, titles were forced upon them.

EXPANDING ENGINEERING

The same forces that engineered the construction are still engineering the company's expansion in and out of Mexico. How successful this engineering has been to date may be illustrated by the fact that Manager Wylie estimated for the first eight-inch pipe line a capacity of twelve thousand five hundred barrels a day, with pumping stations twenty miles apart. By putting the pumping stations fourteen miles apart, the pipe line capacity was advanced to twenty thousand barrels a day; then the pumping stations were improved and the oil was a little thinner than expected and the eight-inch pipe line was soon carrying thirty-five thousand barrels a day. But improvements and expansion continued.

Now the two pipe lines carrying oil are delivering seventy-five thousand barrels a day at the Tampico terminal, and sixty thousand barrels a day are being exported, along with more than one hundred thousand barrels of gasoline per month. Orders have just been given to burn oil at the pumping stations and the topping plant, releasing the third pipe line, which is now used as a gas line, so that it can be used to transport oil. This may bring the company's capacity for delivery at Tampico to above one hundred thousand barrels per day.

The engineering enterprise in the Mexican Petroleum Company resembles the history of our western railroad pioneers, who laid their rails on the prairies in advance of the settlers. The Mexican Petroleum people actually had the audacity to build railroads and pipe lines in advance of their wells and upon the basis only of the oil seepages.

A million and a half dollars went into the first pipe line and two million and a half dollars into the railroad and pipe lines to Cerro Azul, all in advance of any oil well.

When the great Casiano well came in, September 11, 1910, a million and a half barrels of oil had to be burned to keep it from the rivers,



PEON HOUSES BEFORE OIL DEVELOPMENT BEGAN

where it might have done incalculable damage, but the company's engineering forces put up fifty-five thousand barrel tanks at the rate of one every four and a half days. Last year Cerro Azul shot a million and a half barrels into the air before it could be controlled. But here again the company's forces saved, by earth dams, more than half of this, and then for safety burned the overflow. There is no evidence as to the number of oil gushers that may burst forth in the future, but knowledge of how to handle them has increased.

And speaking of the standard fifty-five-thousand-barrel steel oil tanks, the reader may be interested to know that they are thirty feet high and one hundred and fifteen feet in diameter, are usually surrounded by an earth dam to save the oil in case of accident, and have usually a bottom valve through which the oil may be drawn off if a bolt of lightning fires the tank.

The Mexican Petroleum Company on its thousand acres of ground at "Tankville" and at its Tampico terminal has one hundred and three of these tanks, but the eye will meet them at almost any railroad shipping point in the United States.

The first complete monthly shipments were

in January, 1913, when two hundred and forty-seven thousand barrels left the wharf at Tampico. By October, 1916, the shipments had reached eight hundred and ten thousand barrels. Now they are above a million and a half barrels a month.

PIPE LINES, RAILROADS, MOTOR WAYS, AND WATERWAYS

This American concern has nearly half the pipe-line mileage in the country. It has three eight-inch pipe lines from Tampico to the Casiano well, sixty-five miles distant. Thence two eight-inch lines to Cerro Azul, twenty-two miles, and an eighteen-mile line to Tres Hermanos, a total of two hundred and sixty-four miles. The oil is kept moving by seven pumping stations operated by gas from a line to the Casiano well, but the stations are equipped with oil-burning apparatus, now to be put in commission as already noted above. The oil gushes at such a temperature that it flows without reheating.

There are one hundred and nineteen miles of four- and six-inch water mains, and the company is opening other water supplies.

Over these lines, well buried in the earth, runs

the company's fenced-in private motor road, for eighty miles, with surveyed right of way to the Tuxpan River, one hundred and twenty-five miles in all.

There is no speed limit on a private line and the company's officials claim their trucks and motors do business over this road cheaper than the business could be handled on a railway; but be it remembered this company makes its own gasoline of sixty-three specific gravity, at a cost of less than a cent a gallon.

The company also parallels this highway most of the distance, or to San Geronimo, by its own motor boat line and water route. From San Geronimo south it operates a thirty-five mile railroad to Cerro Azul, and has nineteen miles further surveyed for construction. It has also five miles of standard gauge road at Ebano; but not a passenger coach on any line. It is all business. The pleasurable way of travel in this country is by the company's motor boats, for it has a very complete line of marine equipment, including the yacht Casiana, usually at hand to take out all Americans when so ordered by the United States or Mexican de facto governments.

The company has been as far-sighted and

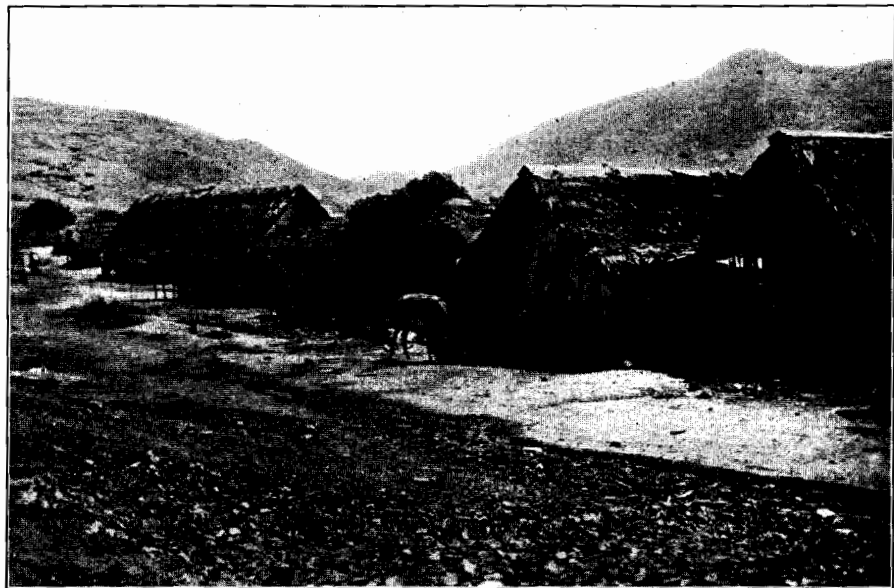
ahead of its rivals in its Tampico terminals as in its oil land acquisitions. In tanks, storage, river-frontage shops, machinery, and loading equipment it holds the ground and leadership. I figure it has more oil in pipe lines and storage than it sold last year, and perhaps as much as its 1916 production — twelve million four hundred thousand barrels.

The great pioneer work of acquisition, production, construction, finance, and organization has been accomplished in seventeen years, and the patient owner should reap handsome rewards in the next seventeen years.

A CAUTION

But there is one caution I may give him, and that is not to be alarmed concerning reports from Mexico and Tampico, whence there is very little reliable news in the despatches of the day. Indeed, the two worst informed countries concerning each other's affairs are those countries lying either side of the Rio Grande.

The American hears little that is good or true concerning Mexico, and the Mexican hears little that is good or true concerning the United States. The governments of both countries seem equally interested in suppressing the real



RESIDENCES OF PEONS

news. All the foreigners interested in Mexico and its development are afraid to speak concerning their properties or their operations for fear of misconstruction either at Washington or Mexico City, and harmless, inane, or weakly stupid news reports are allowed to pass censorship. We have all sorts of "frightful" German reports; now it is Villa moving on Tampico and, as I write, comes the report that shipping is tied up at Tampico by a strike of oil handlers. One would think, to read the press reports, that there was a similarity between the work of longshoremen loading ships in New York harbor and thousands of Mexicans loading oil ships at Tampico.

I stood at the loading-station on the east side of the Panuco River at the Mexican Petroleum Company's terminal opposite Tampico and witnessed one of the big oil ships slowly draw up to the wharf for its load of oil. There must have been a very large party on the pier, for it consisted of myself, two Mexicans, and Dr. W. W. Hills and his wife. The doctor was explaining to me his remedies for resuscitating the men at Cerro Azul when in the fumes of that gusher the American engineers were working day and night to shut in the torrent of oil, — how as fast

as a man began to stagger he was grabbed by the doctor's assistants and quickly dragged away from the well so that the doctor might promptly restore him by gas antidotes, — and before he had finished his explanation the two Mexicans had moved a giant hose to the ship's side and the ship was being filled by gravity from a tank on the hill, some fifteen hundred feet away. The next day the ship departed with her sixty-five-thousand-barrel load.

But what is the poor newsman to do with a press report when it arrives. It may or may not be true. In this case there was no strike of oil ship loaders, but for a few days there was trouble and a labor strike at the Pierce Oil refinery and at the Mexican Eagle refinery, but the true news could not be given. Now, if you were a newsman on the firing line, would you send forth a report, if permitted, indicating delays in some oil shipments from Tampico, or would you wait till order had been restored, the censorship lifted and then telegraph a history of no value?

NORMAL DISORDER

The point, however, I wish to make for investment interests should be clear. Mexico as

a country is not in a state of normal peace, but of normal disorder — disorder that has prevailed more or less for a hundred years, except during the reign of Porfirio Diaz. Correct news reports are not readily available, and the business investor should know his risks, should understand that he cannot be guided by newspaper reports, and should fully understand that Mexican values are selling at large discounts in the world markets, but that in the end they will be properly demonstrated and properly protected by American or European interests, and will some day be properly quoted.

CHAPTER XI

WHY THE PAN-AMERICAN COMPANY CONTROLS MEXICAN PETROLEUM

AMERICAN financial interests are now more keenly alive than ever before as respects their responsibilities toward investors. The opening-up in Alaska of the greatest copper bonanza the world has ever seen sent Kennecott Copper mining shares into the fifties and made a wide distribution. J. P. Morgan & Company and their associates might have been tempted to dispose of all their shares to the public and let the public take the risk of a continuation of the bonanza ore, which could be mined and marketed at less than five cents per pound when it was being sold at above twenty-five cents a pound.

Morgan & Company, however, realized their responsibilities and sought insurance for Kennecott's future by acquisition of the Braden Copper mines of South America, which, when developed, will insure a large copper output at low cost, and also by acquisition of more than one-third of the shares of the Utah Copper Company, the world's

greatest copper mine, whether measured by output or by earnings. It is no longer considered sound American finance for shareholders as partners to run away from each other, especially when the partners are the managing owners.

The Mexican Petroleum Company has a bonanza in Mexico, the life of which no man can limit, but insurance of property in Mexico, and especially insurance of stability in political, social, and government conditions would carry a high premium rate.

Mr. Doheny believed the best way to attain the desired insurance for an investment future for his associated interests in Mexican Petroleum was to merge the control of the company in a new organization, which could open up a broad base of oil production in California and supply ships and shipping facilities for both California and Mexican oil around the world.

It was also in contemplation at the time the Pan-American Company was organized to make combination with other oil companies that their oil distribution might be combined. At present, however, the proposed union with the Union Oil Company, the Associated Oil Company, and other oil interests has been laid on the shelf, and the Pan-American Company has started a very

extensive development in California, opening up two big properties there, the Bell Ranch of ten thousand acres and the Ojai Ranch of eight thousand acres.

THE INVESTMENT BASE

While the Mexican Petroleum Company has \$12,000,000 non-cumulative eight per cent preferred stock, about \$40,000,000 of common stock, and about \$4,000,000 of bonded indebtedness, the Pan-American Petroleum & Transport Company is organized with a large outline for expansion as occasion warrants.

It has outstanding \$10,500,000 seven per cent preferred stock, convertible into common at the rate of \$115 par value for \$100 par value of common stock, but the amount of authorized preferred stock is \$25,000,000. It has an authorized common stock (par \$50) of \$125,000,000, but at present there is outstanding only \$30,494,750.

The Pan-American Company is the part of the enterprise expanding by ocean transportation, California development, etc., and has in its treasury seventy-five per cent of the eight per cent preferred stock of the Mexican Petroleum Company and forty-five per cent of the Mexican Petroleum Company's common stock.

With its shipping interests it is in position to pay dividends upon its common stock without waiting for dividends upon Mexican Petroleum common. It will thus be seen that the investment basis in this combined oil enterprise is in Pan-American and the speculation is in Mexican Petroleum. Indeed, it is figured that for Mexican Petroleum to pay more dividends than Pan-American, Pan-American must first pay sixteen per cent, or eight dollars upon its fifty-dollar shares. There is present expectation that Pan-American will begin dividends upon its common stock this year. The Pan-American Company has three sources of revenue and the Mexican Petroleum Company substantially one.

THE PAN-AMERICAN COMPANY IN CALIFORNIA

In southern California gasoline is used with great liberality. The broad state highways and asphaltum roads invite it. To visit the Bell Ranch of the Pan-American Company I took a little motor trip of two hundred and sixty-five miles, going from Los Angeles to Los Alamos, which is on the Bell Ranch property, and back to Santa Barbara in a day. I learned that four-hundred-mile motor trips for a single day were not uncommon in southern California. The

ladies think nothing of going fifty or one hundred miles as a morning drive for a distant noon luncheon.

Doheny bought the Bell Ranch for \$1,800,000 and turned it over to the Pan-American Company. Boston people previously had an option on two thousand acres of this property at \$1666 per acre and forfeited on it. Doheny bought the whole for less than the previous price of a part. This was the largest untouched oil property in the State of California. Derricks are being erected here one thousand feet apart, or one derrick to twenty-five acres. There are known to be four thousand acres of oil lands in the property and oil has been proven the full width at one end. The balance has not yet been proven. The whole is two and a half to three miles wide and seven and a half to eight and a quarter miles long. The Union Oil Company is on the west, the Standard Oil Company on the east, and on the north the Palmer Union brought in a fifteen-thousand-barrel gusher, for which, of course, they were unprepared, as gushers in California are not common. They shut it in and later found that it had departed as a gusher. Most of the California oil is obtained by pumping. It is expected that the wells here will do two hundred

barrels a day. Number 3 well was visited, which is down twenty-nine hundred feet and is doing one hundred and fifty barrels a day. Eleven derricks have been started. Oil sands here have about fourteen per cent porosity. The Union Oil Company pays eighty-five cents per barrel on the ground for oil and takes it into its own pipe line.

SOME CALIFORNIA OIL STATISTICS

The cost of a well and equipment here is figured at fifteen thousand dollars, and at present prices for oil it may net forty-five thousand dollars the first year. Figures have been made that show possibilities of four hundred wells drilled on this property in two years to cost six million dollars, but to earn three times this sum per annum. This would be more wells than were ever drilled on any one property in the State.

The Ojai Ranch, several miles farther south, cost about seven hundred and fifty thousand dollars. Oil was discovered in California in 1859, and Thomas A. Scott, of the Pennsylvania Railroad, was interested in this property about 1865, but he was looking for kerosene, and the heavy oil found here was not then of value. Scott was interested in the first projected railroad from

San Diego, and construction was begun there in the sixties, but no rails were ever laid by that railroad enterprise. When the Boston people came to build the Southern California road they avoided litigation by keeping outside the old Scott right of way.

Senator Bard of California was interested in this Ojai property, and it is from the Bard Oil Company that the Pan-American now gets title to about two thousand acres of surface and all the mineral rights of the valley, about seven miles long and two and a half miles wide. On the Sulphur Mountain side of this valley are oil seepages that are declared to be the greatest in the State. On the other side of the valley the cleavage of the hills reveals the entire geological formation so that it can be followed for many miles. The oil in this territory varies from fourteen to thirty-four gravity and the wells are from four hundred to four thousand feet deep.

PRODUCTION COSTS IN CALIFORNIA

The average California oil well will yield from one hundred to two hundred barrels per day, and six hundred barrels is a big well. Oil wells running from five to fifteen barrels have been automatically pumping in southern California for

many years — something of a contrast to what one sees in the Mexican oil field. Old oil wells are being remade here and new machinery will be installed and new wells driven. Well number 36 on the side of Sulphur Mountain already furnishes a beautiful lubricating oil with gasolene and no asphalt. It is thirty-four gravity and is worth at the present time about two dollars per barrel, although most of the heavy oil in this district is worth about seventy-five cents a barrel.

Whether an oil well is large or small, the cost of oil production at the well cannot be over ten cents per barrel; and oil can be pumped one hundred miles at a cost of one cent a barrel.

The Pan-American people are at work on experiments to make a cheaper gasolene motor oil and also on improvements to the “cracking” process. Cracking oil is not a new invention but it is the basis of all the reports and promises from Washington for cheapening gasolene. A heavy crude oil is cracked by being heated to a temperature of eight hundred degrees under pressure with hot steam. Oil of eight and a half gravity is thus converted into an oil of sixteen gravity and will flow like water. In the process oxygen and hydrogen are separated and new

chemical compounds are formed so that in reality a new combination produces a new and lighter oil. It is said that oil can now be cracked at a cost of three and a half cents per barrel.

The Pan-American people realize the obligation resting upon them to expand the market for oils in every possible direction.

The report of the Federal Trade Commission, that found Standard Oil interests still dominating the price of gasolene, should again emphasize how so-called anti-trust laws are responsible for the abolition of competition and really prevent the lowering of prices.

The Washington report shows the division of gasolene marketing into eleven territorial areas, nine of which are said to be dominated by various Standard Oil companies, which produced more than sixty per cent of the gasolene in 1915 and made sixty-five per cent of the total sales.

I have always been annoyed in shifting my motor gasolene purchases from one oil company to another to find that very soon the price for my gasolene was regulated by the Standard Oil price and that, notwithstanding any market conditions or supplies, when the independent oil man had hooked me on as a customer he was very shortly giving nothing but Standard Oil

prices, yet claiming no connection with Standard Oil.

I noted that in California gasolene had fluctuated from twenty-two to twelve and back to twenty, and in southern California I declared, "Here I shall find the truth," as gasolene is sold on street corners by more than a dozen independent producing and refining companies competing with more than one hundred Standard Oil stations.

Yet when I inquired as to prices and conditions of competition, I found that prices were uniform and that competition was geographical — a man bought his gasolene at the nearest gas corner. Gasolene users do not, as in the East, maintain underground gasolene tanks in or out of the garage to any considerable extent. They buy at the gas corner and it does not pay to run a car very far to buy its fuel.

Throughout California, and most notably in Los Angeles, the most conspicuous store is the gasolene supply store. It is almost always on a corner vacant lot, often set in a small attractive garden, into which the car moves for its supply, the curbstones being cut down on both sides of the corner. These houses are one-story buildings of glass and wood, similar to the headhouse or

potting-room of a green house. Roof and sides are painted conspicuously — the Standard Oil Company's always in red, white, and blue colors and other companies' in uniform trade-mark colors. All kinds of oil supplies are attractively arranged on the shelves within, and polite attendants in white suits remind you of a combination between a certified milk dairy and a well-kept green house.

COMPETITION BY SERVICE

What interested me most was the problem of how all these corner oileries could compete with the Standard Oil Company, with its organization, system, and unlimited capital. I promptly found the answer — they did not compete at all. The Standard Oil Company fixed the prices and everybody else made the same price. There is no difference in gasolene of the same specific gravity, whether made by the Standard Oil Company of California or the Ventura Oil Company of Boston and Los Angeles. The California people brought up in the oil regions know the fraud of any advertiser who declares that his gasolene will carry a car more miles than the gasolene of his neighbor, if it is of the same gravity.

The competition was entirely in the service

and by location, and I was astonished that the Ventura and a dozen other companies could maintain oil supply stations over so wide a territory in competition with unlimited capital. It is a matter of enterprise in management; but the prices are fixed by Supreme Court decisions and anti-trust legislation, both practically forbidding price competition.

Every oil producer and every oil seller knows without any argument what he is up against — that the Standard Oil Company can sell oil in as large quantities, as well refined, and at as low a price as he can afford and if need be a little lower.

INDEPENDENTS NOW HOLD UP OIL PRICES

The safety of the independent, therefore, is the umbrella price of the Standard Oil Company. He cannot hope to cut out the Standard Oil Company business. He has neither the capacity, the supply, nor the capital for a contest of endurance. Self-interest requires that he sell at the same price. He cannot get more. He may therefore hold his own by the location of his supply stations. If he attempts to get less he only lowers the general price and hurts himself and every other independent producer, and does not bring

a frown or a wrinkle upon the face of smiling Standard Oil.

The "trust octopus" is seconded and supported in price and service by all the independents. Any one of them can put the price down if he wishes. In that case, his enemies would be the suffering independent producers and not the Standard Oil Company, which usually finds a still larger profit in lower prices and broader markets.

The position of the Standard Oil Company is exactly that of the big copper producer, the big steel producer, or any other large vendor of a raw article. The producer knows, if he knows anything about business economics, that the advancing price restricts the consumption and a lower price enlarges it. What he wishes is the largest possible distribution consistent with profits. Distribution is governed by the minority and the accumulation of supplies lowering the price which all producers are mutually interested to sustain. At the lower price consumption is broadened, the supply is decreased, and if the leading producer does not advance the quotation, exhausting supplies will do it automatically.

On an advancing market producers accumu-

late supplies which automatically check the advance.

There is perfect action of the law of supply and demand at top and bottom, but intermediately there is the law of self-interest placing the so-called trust and the independent upon exactly the same basis — mutual maintenance of price and profits; with competition only in service.

“DON'T ROCK THE BOAT”

The Supreme Court decisions, the regulations by state and United States governments and “anti-trust” laws, all pressing from the outside, force all producers into absolute mutual understanding without any agreement written or oral.

They absolutely boycott the government decree and that without conspiracy or combination. They understand the law, “Don't Rock the Boat.”

When the government shakes its finger at the large company and tells it to compete and destroy the smaller companies and decrees aid and comfort to the smaller producing company to destroy the larger one, it makes impossible the competition which under the law it seeks to enforce.

COMPETITION BOYCOTTED

There is little difference in human action either side of the world. On the western side of the Pacific the Japs have attempted to dictate to unarmed China. The Chinaman does n't so much as wink. He just lays down his chopsticks and refuses to buy, serve, or eat a piece of Japanese fish, and the Japs see the point of distress and starvation before the Chinese feel it. The Japs threatening the Chinese make them a unit without other understanding than that of mutual self-interest.

Throughout the United States the oil producers and selling agencies boycott the government edict and refuse to cut each other's throats in price competition. The Standard Oil Company can laugh at all Supreme Court decrees. They continue to live under the law which by the same breath demands that they compete and destroy the small man and go to jail for doing it.

The result throughout the United States is higher prices for oil; for when the Standard Oil Company had a monopoly, it had a responsibility concerning rising prices, and would conserve supplies, pass them from surplus territories

to exhausted territories, stimulate production to prevent erratic movements, and balance the markets to prevent wide fluctuations.

Now the government has stepped in as a regulator, and the Standard Oil Company has no responsibilities; its valuations have multiplied fivefold, and Mr. Rockefeller is worth more hundreds of millions than he ever dreamed of, and this by legislative and Supreme Court decree and his own helplessness.

Washington has decreed in the oil business, the copper business, and the steel business a capital socialism — where the weak protect the strong and the strong must permit it.

CHAPTER XII

DOHENY — LORD OF OIL

MORE than sixty years ago two boys were born about twenty miles and three years apart in the State of Wisconsin. They were destined to be thoroughly American boys, but the parents of both were born in Ireland. One became Lord Shaughnessy, the head of the Canadian Pacific, and the greatest power for good to-day, both in war and peace, in the northern half of the North American continent. The other was Edward L. Doheny, lord of oil in the southwest of North America. Shaughnessy and Doheny, although born in the same State and so near each other, and of parents from the Emerald Isle, never met until within a year. Yet for many years Shaughnessy had watched Doheny's progress in the Southwest, for Shaughnessy wants oil in the future for one hundred Canadian Pacific ships.

I pen these lines in absolute independence of both, for if they had any power over me or any knowledge that I am writing this, the full limit of censorship against any personal encomiums

would be placed upon me. I asked Doheny in Mexico what I might say concerning the situation, and he replied: "Nothing about me or especially about my properties. We can take care of ourselves, but help the people of Mexico if you can."

DEVELOPED BY THE PLAINS AND THE HILLS

Edward L. Doheny is of public interest because he spans in his life and activities the western pioneer, bivouacking on the prairies and seeking the development of wealth from the mountains and the plains, and the new era of heat, light, and power which is coming from mineral oil.

When Doheny graduated from the high school in Wisconsin, he knew his botany and his mineralogy like the American youth of advanced education; but to-day he knows it as do few people in the world. His life on the plains taught him to know the sage brush of the desert for its roots holding the sands against the winds and its blossom yielding up to the bees the most delicious honey. He knows all the flowers of the hills and the mountain side and he knows the rocks and the minerals they cover as do few men. He knows how these minerals were deposited, their

dips, the sedimentary deposits, shales, and sands, and the basaltic and volcanic upheavals.

He dwells in a garden with one of the largest collections of palms that any man ever gathered. He knows every palm whether he sees it in his garden or on the desert. Somehow he respects the botanical names of more than a hundred palms, probably because they have no common names, but he manifests a contempt for the geological names as applied to minerals. He declares that geological names never yet found minerals or oil, nor have the geological professors been very successful in directing any one how to find them.

INDEPENDENT OF MAN OR BEAST

For many years Doheny slept on the plains and in the mountains with his rifle by his side, and he always knew exactly where his boots were, where every piece of his pack lay and what were his resources and the journey before him. He never carried water or timber if he knew where to find it. But he carried the tools in his kit that could cut or file a piece of steel, mend a rifle, and insure him independence of any man or beast on top of Mother Earth.

He believes that the minerals were originally

deposited almost universally on the earth's surface and were then ploughed by glaciers and torn by upheavals and leached and redeposited into cracks or deposits of various forms; yet you get them where you find them. But when you reach the end of the deposit, don't gamble too much money in looking for a continuation of that deposit or for the next one. He says that when you dig a well and get water, you won't find oil, and when water comes in, that is the end of your oil.

Frank A. Vanderlip, of the National City Bank, about a year ago paid a million and a half, or one hundred dollars an acre, for fifteen thousand acres covering the San Pedro mountain, an ocean point on the Pacific not far from Los Angeles. It has beautiful views from the hilltop into valleys both sides and out over the ocean. But Doheny had first looked at it for several days and paid one thousand dollars a day for the privilege. He found there were some oil seepages on the property, but the district did not indicate to his practiced eye that he could get his money back with a profit from either oil or land sales. But Doheny could slip over the mountains to the northeast and buy the beautiful Ferndale Ranch for another summer home for Mrs. Doheny, with its running waters, palms and orange groves,

and consider it a good investment because it was worth it without regard to the oil derricks looming on the hillside in the distance.

SUPREME FAITH IN OIL

Between the Ferndale Ranch and Sulphur Mountain we rested for a few moments to note the oil-bearing shale on the face of both mountains at the head of Ojai Valley; one dipping south and the other dipping north. Some of the party looked for trout in the brook, but Doheny noted a ten-inch curl of black oil ooze out from the spring by the brookside and flow down stream.

“Look at that,” he shouted. “That is worth more than all the trout in all the springs and streams in America. You can put trout in the stream, but you can’t put oil in the ground.”

Then we passed on through the cypress and the yew trees and filled our pockets and mouths with sun-kissed oranges, and then down the valley of the Santa Clara, noting the oil derricks on the south mountains across the valley, some of them belonging to the Ventura Oil Company and some of them to Doheny, for Doheny’s interests in California about equal his interests in Mexico.



NEAR TRES HERMANOS

The main ranch or home farm of Doheny is ten miles out of Los Angeles, eight hundred acres on the mountain side, and still it is not the extensive gardens, orange groves, fish hatchery, duck ponds, cemented driveway up the mountain, or his developed underground river, or the beautiful blue lilac bushes, that interest Doheny to the greatest extent; nor yet the opportunity here for a vigorous outing, a seven o'clock breakfast, and a beautiful view across the valley. It is the little seepage of oil in the sidewalk that indicates that again Doheny sits atop of wealth that he can sometime at his good pleasure mint into gold and human uses.

Doheny not only knows men, but he believes in men of the right sort. T. A. O'Donnell, a director of the Pan-American Oil Company, Doheny declares to be the best oil operator in California. He says he will get twice as much oil out of a well as other operators. When an oil well stops with O'Donnell it is going again in an hour. With some other people an oil well may be going again within two or three days, but the fellow that keeps his oil well going will get the oil, because the oil is all the time flowing toward him.

YOUTH AND ENTHUSIASM STILL WITH HIM

Doheny is an enthusiast. When he goes into a thing, he is in all over, hands and feet. He will travel longest with the swiftest and the strongest, swim or ride with the youngest, and sleep more or less in any part of the twenty-four hours. He will absorb more and his interest and his sympathies will be of the broadest because his studies and his sympathies reach from the stars of heaven to the lowest mineral deposits and his interest is all the while in humanity and its onward progress.

In the forenoon, over on the side of Sulphur Mountain, he dipped his fingers in the thirty-four gravity oil oozing from well Number 36 and exclaimed enthusiastically: "Is n't that fine? Is n't it better than soup or something to eat? Just smell it! It is a soft, lubricating oil with no asphaltum." And he dipped up a pan of it and we all had to note it, smell it, and admire it. Then he took a wisp of oil waste from the automobile and wiped his hands as clean as those of a woman and was off in the motor to dip into another oil well and note its color, its thickness, and its gravity.

As I write this in the East, comes the report

from that Number 36 oil well that its flow has increased to twenty-five barrels a day; and it is just what Doheny said it was, — pure, lubricating oil, with no asphaltum, but a little higher grade at thirty-seven gravity.

EARLY IN BUSINESS

At seventeen years of age Doheny was with a United States government surveying party in the Indian Territory. As a side line, he took to trapping wild animals. Many a wolf-skin he cashed in at the trading-post, but he early showed his independence. When trapping one winter with a friendly Indian, one of Doheny's pelts was claimed as taken from a wolf nearest the Indian's trap. Doheny protested. He said the hunting law might well be that a dead animal belonged to the nearest trap, but snow on the ground showed that that animal came from his, Doheny's, trap.

The Indian stood by the law and Doheny stood by the fact and they separated. Doheny declared that no rule of the hunt could give his kill to another trap when it was clearly shown by the snow tracks it did not belong there.

Doheny was soon again in business for himself. With a partner he bought at auction over sev-

enty head of government horses for about five dollars each and drove them into Kansas; and all through the summer months he was breaking in the horses and selling them to farmers at twenty-five dollars a head. Doheny and his partner felt sure they had done the greatest stroke of their lives. Each then thought that if he could get an income of one thousand dollars a year he would be rich.

But the lure of the mines followed the lure of the forest, and Doheny was soon up north prospecting for gold, and for many years he mined and prospected through the Rocky Mountains, especially in New Mexico and Arizona. He was running a good sized mine in New Mexico and making ten dollars a ton when the McKinley tariff put him out of business.

His ore had a value of about fifteen dollars a ton, and he could smelt it at El Paso at five dollars a ton and get ten dollars a ton profit. The McKinley tariff put a duty on lead ores and made Monterey in Mexico the greatest smelting center in the world. The El Paso people could not get their lead flux except at heavy duty and therefore had to charge Doheny fifteen dollars a ton.

This sent Doheny to southern California. His

quick eye detected some black stuff being hauled over the streets to a furnace. He made investigation, and soon he and Canfield had leased ground and with shovel and hand windlass were opening the Los Angeles oil field. It was hard work and there was a long fight ahead of them, but they won out and the Los Angeles oil field proved up exactly what Doheny had declared it would yield; and many of Doheny's old Los Angeles wells are still automatically pumping.

INTO OIL

This was Doheny's first venture in oil, and oil has been in his blood and bone ever since.

Doheny is distinctively a prospector and not a gambler. He would not play a game of cards for a ten-cent piece. He never took a drink in his life, and he never smokes. But as a prospector he will hit the rock and do his drilling to the end of the lead; but when he reaches the end, the prospect is determined and no blind gambling or groping in the dark follows — he quits.

NO GAMBLING

I could take you to one place in California where the Standard Oil Company has spent

\$2,500,000 with not a cent to show for it. Doheny was previously in that district and it cost him just \$8000 to put down his well and learn that any further expense would be gambling. He had paid his \$8000 and gotten his information. The Standard Oil Company put \$2,500,000 in the same district later and still has no further information.

But just afterwards Doheny heard of a promising piece of oil land offered for option. He inquired and learned that an adjoining property was known to be better. He took a third observation and learned that the cream of the district was held for \$2,250,000, while the poorer part could be had for one or two hundred thousand dollars. He promptly took the option on the best part, paid down his ten per cent, drove his wells and paid the balance, \$2,000,000, out of the product from the wells. He quit that district \$8,000,000 to the good.

Then he opened another district and took out another \$8,000,000. He was the pioneer in the Bakersfield district, drilling the first well and selling the first product from the district. In the early days of Bakersfield he was selling oil at \$1.25 a barrel to twenty-one other drilling outfits. With the two oil fields he is now opening up

for the Pan-American, Mr. Doheny will have opened up eight oil fields in California.

STANDING BY

From the Fullerton and other districts in California he got the money to make his start in Mexico, where at the beginning he had only an eight per cent interest, but assessments of \$750,000 from 1902 to 1905 did not trouble him. When the Texas oil gushers made Mexican oil practically worthless for a few months, Doheny stood by, just as Rockefeller did in Cleveland, and bought when nobody else would buy, believing that the future would demonstrate the values. Doheny's Mexican Petroleum interest went up to nearly forty per cent as his associates sold out.

Doheny has always stood by. In the panic of 1907 he kept millions on deposit that his properties might be protected against any accident. Five years ago he disposed of some properties for more than \$10,000,000, and half of the money went into Mexican Petroleum. I don't think that he values his Mexican interests financially as high as his California interests, but the social problem in Mexico interests him more and takes greatest hold upon his sympathies.

Tampico was a cattle shipping point with less than twenty thousand people when he began operations there. To-day it has a population of fifty thousand, and wages that were twelve and one-half cents are now one dollar for ordinary labor and three dollars and fifty cents gold for skilled labor. When in June, 1916, nine hundred refugees were taken from Tampico on two tank steamers and the yacht Casiana, the expense was sixty-seven thousand dollars and the American government offered to repay, but Doheny refused to accept. From October 14, 1915, until April 15, 1916, there was famine in that land for the native population. The warring forces had taken all the food out of the country and sent it to Vera Cruz, whence it had been shipped to Texas and sold for war supplies.

Doheny bought it in Texas and shipped it back in the same packages to Tampico and fed the native Mexicans with it so far as the American consul certified they had need for food.

Doheny is a delver in statistics, and these ground him in his faith in the great future for oil in the uses of the world. He believes that the time will arrive when coal locomotives can be used profitably only in the coal regions. It has been demonstrated that an oil-burning engine



HUASTECA PETROLEUM COMPANY SUPPLYING NATIVES WITH FOOD BROUGHT BY ITS TANKERS FROM THE UNITED STATES, DURING WAR TIMES IN MEXICO

can carry a train from New York to the Pacific Coast and back to New York without refueling.

Of course the expected railroad development in the oil line cannot take place during the war time, when the American oil reserves are being drawn down two million barrels a month. Nevertheless, oil-burning locomotives are operating in twenty-one States on fifty-three roads, and on thirty-two thousand miles of road, and consuming forty-two million barrels of oil per annum.

STUDIES PAST, PRESENT, AND FUTURE

It is not only oil in the future and the man in the future that interest Doheny, but the oil of the past, the man of the past, and the animal and mineral life of the past.

Five years ago Doheny and Canfield used to note deposits of bones in asphalt about eight miles out from Los Angeles, whence tons of asphalt had been taken for road making. "What a fool rancher to lose so many sheep in tar beds," they said; "why did n't he fence out the sheep?" Then somebody noted that there was not a sheep bone in the lot. In came the scientists to solve the riddle.

Now bones of the elephant, the ground sloth,

the mastodon, the bison, the horse, the camel, the bear, the coyote, and the giant wolf are mounted or are being mounted for the Museum of History, Science and Art in the Exposition Park of Los Angeles, and there are fifteen thousand boxes of bones still unsorted. As many as thirty skulls of the saber-tooth tiger or cat, together with fifty skulls of the giant wolf, were found in a space of less than four cubic yards.

Mother Earth here hermetically sealed up the animal life of many hundred years ago, and the museum and the ranch La Brea, of twenty-five acres, now the property of the State, will be of interest to the scientist and the student for many hundred years to come. From this place came the skull and skeleton of a woman eight thousand years old. Many animal contests must have occurred about this water and tar hole, for animal bones are found chewed, and some partially healed.

To Doheny, the man of the plain and the mountain, deep and broad delver in Mother Earth, these bones, the life of the past they reveal for man, — beast and vegetable life, — have the deepest interest; for Doheny seems to have the genius's insight into the history of the past,

the meaning of the present, and the hope of the future.

Yet Doheny does not work altogether by eyesight. His associates note that he will not make important moves on the chessboard of business until the time or something within him seems to be right, and then he moves swiftly, surely, and independently. But until the spirit moves within him, nothing can stir him.

WATCHMAN! WHAT OF THE NIGHT?

Working within his soul at the present time is the question of the future of Mexico. He cannot see it clearly. He can see Los Angeles, in the center of the uncounted wealth of southern California, reaching toward a million population, and note the meaning of an automobile to every five people in the town. He can rejoice as telegrams come from Tampico reporting that the dredging and the river current in the three months this spring have deepened the bar channel from seventeen feet to over twenty-six feet. He is pleased that men of Tampico are now getting more than ten times the wages per day they received before he went there. He is happy to note that every one of them was so well cared for at the Mexican Petroleum Com-

pany terminal that, when in April the I.W.W. workers stirred up revolt in four oil refineries at Tampico, there was not a whisper of trouble among his men. They told me at the Tampico terminal that under proper direction, with good food and care, the Mexican workers could be relied upon for anything, and in an emergency would work thirty-six hours or forty-eight hours on a stretch with their meals brought to them, and that they were loyal and true.

What troubles Doheny is how these good people of Mexico, speaking one hundred and fifty-three tongues, can be merged into a nation, with soul life, prosperity, and family and national happiness.

That is the Doheny problem! That is the United States problem! That is the Mexican problem!

THE END

