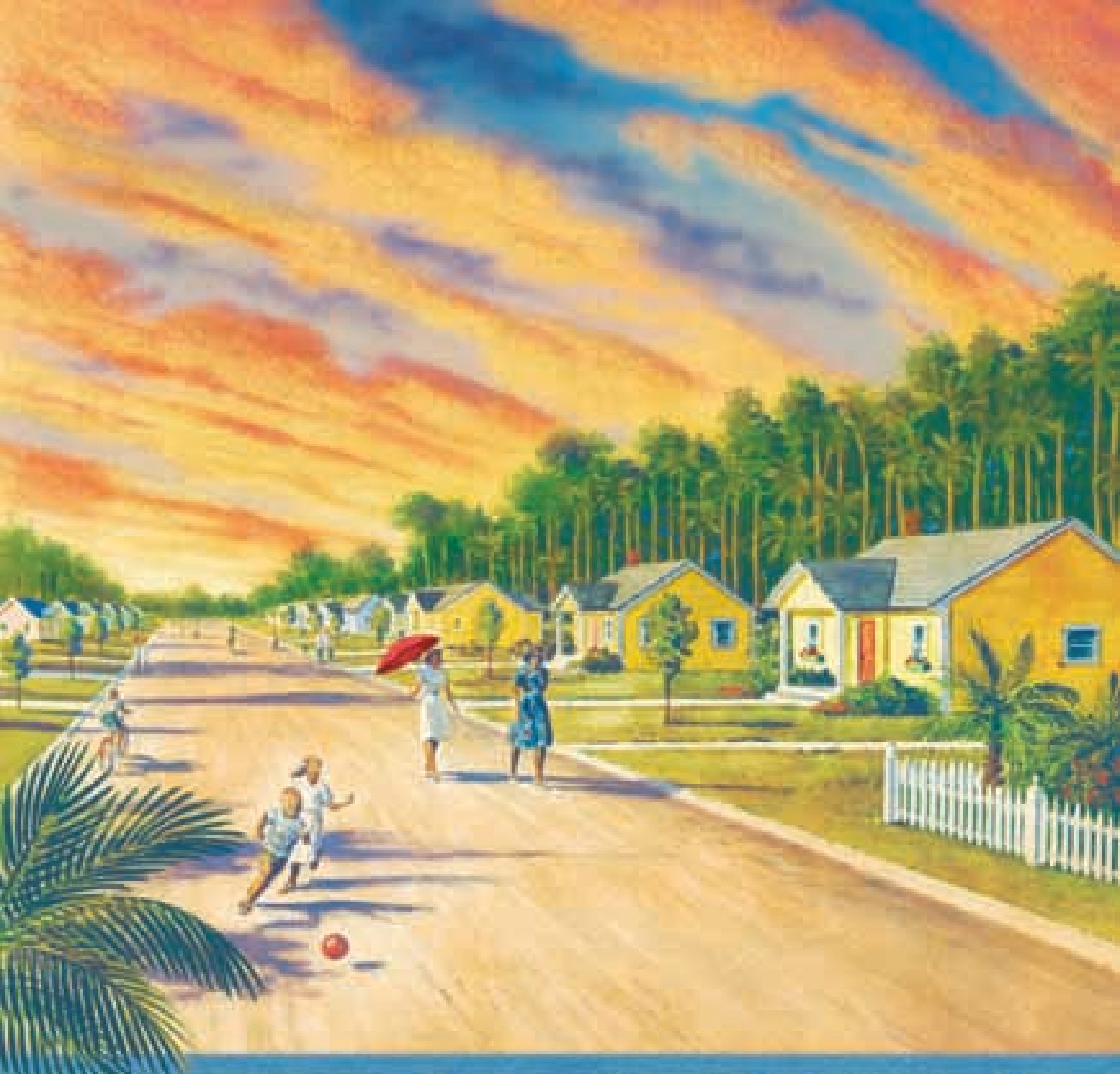

# FORDLANDIA

THE RISE AND FALL OF HENRY FORD'S FORGOTTEN JUNGLE CITY

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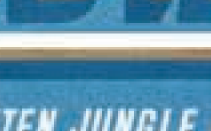


INTRODUCTION

# NOTHING IS WRONG WITH ANYTHING

*January 9, 1928:* Henry Ford was in a spirited mood as he toured the Ford Industrial Exhibit with his son, Edsel, and his aging friend Thomas Edison, feigning fright at the flash of news cameras as a circle of police officers held back admirers and reporters. The event was held in New York, to showcase the new Model A. Until recently, nearly half of all the cars produced in the world were Model Ts, which Ford had been building since 1908. But by 1927 the T's market share had dropped considerably. A half decade of prosperity and cheap credit had increased demand for stylized, more luxurious cars. General Motors gave customers dozens of lacquer colors and a range of upholstery options to choose from while the Ford car came in green, red, blue, and black—which at least was more variety than a few years earlier when Ford reportedly told his customers they could have their car in any color they wanted, "so long as it's black."[1]

From May 1927, when the Ford Motor Company stopped production on the T, to October, when the first Model A was assembled, many doubted that Ford could pull off the changeover. It was costing a fortune, estimated by one historian at $250 million, because the internal workings of the just-opened River Rouge factory, which had been designed to roll out Ts into the indefinite future, had to be refitted to make the A. Yet on the first two days of its debut, over ten million Americans visited their local Ford dealers to inspect the new car, available in a range of body types and colors including Arabian Sand, Rose Beige, and Andalusite Blue. Within a few months, the company had received over 700,000 orders for the A, and even Ford's detractors had to admit that he had staged a remarkable comeback.[2]

The New York exhibit was held in the old Fiftieth Street Madison Square Garden, drawing over a million people and eclipsing the nearby National Car Show. All the many styles of the new model were on display at the Garden, as was the Lincoln Touring Car, since Ford had bought Lincoln Motors six years earlier, giving him a foot in the luxury car market without having to reconfigure his own factories. But the Ford exhibit wasn't really an automobile show. It was rather "built around this one idea," said Edsel: "a visual demonstration of the operation of the Ford industries, from the raw materials to the finished product." Visitors passed by displays of the manically synchronized work stations that Ford was famous for, demonstrations of how glass, upholstery, and leather trimmings were made, and dioramas of Ford's iron and coal mines, his blast furnaces, gas plants, northern Michigan timberlands, and fleets of planes and ships. A few even got to see Henry himself direct operations. "Speed that machine up a bit," he said as he passed a "mobile model of two men leisurely sawing a tree, against a background of dense forest growth."[3]

Though he was known to have opinions on many matters, as Henry Ford made his way through the convention hall reporters asked him mostly about his cars and his money. "How much are you worth?" one shouted out. "I don't know and I don't give a damn," Ford answered. Stopping to give an impromptu press conference in front of an old lathe he had used to make his first car, Ford said he was optimistic about the coming year, sure that his new River Rouge plant—located in Ford's hometown of Dearborn, just outside of Detroit—would be able to meet demand. No one raised his recent humiliating repudiation of anti-Semitism, though while in New York Ford met with members of the American

Jewish Committee to stage the "final scene in the reconciliation between Henry Ford and American Jewry," as the Jewish Telegraphic Agency described the conference. Most reporters tossed feel-good questions. One wanted to know about his key to success. "Concentration on details," Ford said. "When I worked at that lathe in 1894"—the carmaker nodded to the machine behind him—"I never thought about anything else." A journalist did ask him about reports of a price war and whether it would force him to lower his asking price for the A.

"I know nothing about it," replied Ford, who for decades had set his own prices and wages free of serious competition. "Nothing is wrong with anything," he said, "and I don't see any reason to believe that the present prosperity will not continue."[4]

FORD WANTED TO talk about something other than automobiles. The previous August he had taken his first airplane ride, a ten-minute circle over Detroit in his friend Charles Lindbergh's *Spirit of St. Louis*, just a few months after Lindbergh had made his historic nonstop transatlantic trip. Ford bragged that he "handled the stick" for a little while. He was "strong for air travel," he said, and was working on a lightweight diesel airplane engine. Ford then announced that he would soon fly to the Amazon to inspect his new rubber plantation. "If I go to Brazil," he said, "it will be by airplane. I would never spend 20 days making the trip by boat."[5]

Ford didn't elaborate, and reporters seemed a bit puzzled. So Edsel stepped forward to explain. The plantation was on the Tapajós River, a branch of the Amazon, he said.

Amid all the excitement over the Model A, most barely noted that the Ford Motor Company had recently acquired an enormous land concession in the Amazon. Inevitably compared in size to a midranged US state, usually Connecticut but sometimes Tennessee, the property was to be used to grow rubber. Despite Thomas Edison's best efforts to produce domestic or synthetic rubber, latex was the one important natural resource that Ford didn't control, even though his New York exhibit included a model of a rubber plantation. "The details have been closed," Edsel had announced in the official press release about the acquisition, "and the work will begin at once." It would include building a town and launching a “widespread sanitary campaign against the dangers of the jungle,” he said. “Boats of the Ford fleet will be in communication with the property and it is possible that airplane communication may also be attempted.”[6]

In the months that followed, as the excitement of the Model A died down, journalists and opinion makers began to pay attention to Fordlandia, as Ford’s Brazilian project soon came to be called. And they reported the enterprise as a contest between two irrepressible forces. On one side stood the industrialist who had perfected the assembly line and broken down the manufacturing process into ever simpler components geared toward making one single infinitely reproducible product, the first indistinguishable from the millionth. “My effort is in the direction of simplicity,” Ford once said. On the other was the storied Amazon basin, spilling over into nine countries and comprising a full third of South America, a place so wild and diverse that the waters just around where Ford planned to establish his plantation contained more species of fish than all the rivers of Europec ombined.[7]

It was billed as a proxy fight: Ford represented vigor, dynamism, and the rushing energy that defined American capitalism in the early twentieth century; the Amazon embodied primal stillness, an ancient world that had so far proved unconquerable. “If the machine, the tractor, can open a breach in the great green wall of the Amazon jungle, if Ford plants millions of rubber trees where there used to be nothing but jungle solitude,” wrote a German daily, “then the romantic history of rubber will have a new chapter. A new and titanic fight between nature and modern man is beginning.” One Brazilian writer predicted that Ford would finally fulfill the prophecy of Alexander von Humboldt, the Prussian naturalist who over a century earlier said that the Amazon was destined to become the “world’s granary.” And as if to underscore the danger of the challenge, just at the moment Ford was deciding to get into the rubber business, the public’s attention was captivated by reports of the disappearance of the British explorer Colonel Percy Fawcett. Having convinced himself, based on a combination of archival research, deduction, and clairvoyance, of the existence of a lost city (which he decided to name “Z”) just south of where Ford would establish his plantation, Fawcett entered the jungle to find it. He was never heard from again.[8]

In the case of Ford, who had all the resources of the industrial world at his disposal, journalists had no doubt about the outcome, and they reported on his civilizing mission in expectant prose. *Time* reported that Ford intended to increase its rubber planting every year "until the whole jungle is industrialized," cheered on by the forest's inhabitants: "soon boa constrictors will slip down into the jungle centers; monkeys will set up a great chattering. Black Indians armed with heavy blades will slash down their one-time haunts to make way for future windshield wipers, floor mats, balloon tires." Ford was bringing "white man's magic" to the wilderness, the *Washington Post* wrote, intending to cultivate not only "rubber but the rubber gatherers as well."[9]

Since the sixteenth century, stories of El Dorado, an Indian king so rich that he powdered himself with gold, lured countless fortune hunters on futile quests. The word *quixotic* has its origins in a story set on the Spanish plains, in the same century when Europeans were first entering the Amazon. It's often applied to those entranced by the promise of jungle riches, as certain of the existence of the object of their pursuit as the Man from La Mancha was that the windmills he tilted at were giants. "I call it Z," said Colonel Fawcett of his fabled city, "for the sake of convenience."[10]

Ford, though, turned the El Dorado myth inside out. The richest man in the world, he was the gilded one—the "Jesus Christ of industry," one Brazilian writer called him, while another called him a New World "Moses"—and salvation of Brazil's long-moribund rubber industry and the Amazon itself was to come from his touch. The "Kingdom of Fordlandia," however, was decidedly secular, and its magic technological. Ford's move into northern Brazil took place on the cusp of two eras, as the age of adventure gave way to the age of commerce.[11]

Their time passing, explorers acted as Ford's John the Baptists, walking through a fallen land and heralding its deliverance even as they faded from the scene. Theodore Roosevelt's *Through the Brazilian Wilderness*—an account of the former president's last jungle expedition, taken in 1914, just a few years before his death, to survey a heretofore uncharted Amazon river—predicted that the treacherous rapids that nearly cost him his life would eventually provide enough hydropower to support a "number of big manufacturing communities, knit by railroads to one another." Francis Gow Smith, a member of New York's Explorers Club, was in Brazil searching for Colonel Fawcett when news got out that Ford had secured his Brazilian concession. In a lengthy dispatch from the field, Smith described his near lethal encounter with the "King of the Xingu"—a rich and ruthless rubber baron on the Xingu River who "typifies the feudal tyranny of plantation methods in Brazil just as his new competitor" Henry Ford "typifies North America's industrial enterprise." The "jungle millionaire" terrorized his "peons," keeping them in a state of perpetual debt, locking those who dared to challenge his authority in stockades, beating them unmercifully, and leaving them to lie for hours on the ground as vampire bats "feast upon their blood and hordes of ants gnaw at their bare skins." Henry Ford "has never met his jungle rival," Smith wrote, but his "Brazilian project will be the wiping out of the King of Xingu's rubber monopoly, the liberation of his peons and the dawn of a new day for Brazilian prosperity."[12]

THE AMAZON IS a temptress: its chroniclers can't seem to resist invoking the jungle not as an ecological system but as a metaphysical testing ground, a place that seduces man to impose his will only to expose that will as impotent. Nineteenth- and early-twentieth-century explorers and missionaries often portrayed the jungle either as evil inherent or as revealing the evil men carry inside. Traveling through the region in 1930, the Anglican lay leader Kenneth Grubb wrote that the forest brings out the "worst instincts of man, brutalizes the affections, hardens the emotions, and draws out with malign and terrible intention every evil and sordid lust." Theodore Roosevelt's account of his expedition, which first ran as a serial in *Scribner's*, likewise painted the Amazon as a malevolent place, where things "sinister and evil" lurked in the "dark stillness" of its groves. Ancient trees didn't just fall and decompose but were "murdered," garroted by the ever tighter twists of vines. Roosevelt described the jungle as being largely "uninhabited by human beings," portraying its challenges as nearly wholly natural, even preternatural, captured in gothic depictions of "blood-crazy" fish and "bloodsucking" vampire bats. The jungle was "entirely indifferent to good or evil," he wrote, working "out her ends or no ends with utter disregard of pain and woe." For those readers not familiar with the theology that hell is the absence of God, the Rough Rider left little doubt as to the analogy he was implicitly drawing: he began his tale with a detailed seventeen-page description of treacherous serpents.[13]

Even more recently, those who survive encounters with the jungle primeval are often compelled to search for some larger meaning in its severity, holding it up as a touchstone to expose the charade of human progress. "We are challenging nature itself and it hits back, it just hits back, that's all," said the German film director Werner Herzog of the hardships he encountered in making his 1982 film *Fitzcarraldo*. Herzog's notorious attempt to replicate the compulsion of his title character, played by Klaus Kinski, and pull a 340-ton steamship over an Amazon mountain (the movie is based on the life of Carlos Fermín Fitzcarrald López, who had the good sense to dismantle the boat before proceeding) leads him to ponder the ethical vacuity of the natural world: "Kinski always says [nature] is full of erotic elements. I don't see it so much as erotic. I see it more as full of obscenity. . . . Nature here is violent, base. I wouldn't see anything erotical here. I would see fornication, and asphyxiation, and choking, and fighting for survival, . . . just rotting away. Of course there is lots of misery but it is to say misery that is all around us. The trees here are in misery, the birds here are in misery. They don't sing, they just screech in pain."[14]

But Henry Ford, along with the men and women he sent down to build his settlement, proved tone-deaf to these kinds of musings, to the metaphors and clichés that entangle much of the writing on the Amazon. There was a stubborn literalness about the midwesterners, engineers mostly but also lumberjacks and sawyers, many of them from Ford's timber operations in Michigan's Upper Peninsula. Confronted by the jungle, they didn't turn philosophical. When they looked up in the sky and saw vultures, those rank, jowled carrion eaters that induced in other Amazon wanderers a sense of their transience, they thought of Detroit's pigeons. Life in the dense river forest was hard on many of the Ford staff. Boredom could be overpowering, and a few succumbed to disease and death. Yet rather than provoking thoughts of morality or mortality, the Amazon tended to instill melancholy in Ford's pioneers, a desire to re-create a bygone

America, an America that the Ford Motor Company played no small part in dispatching.

While he avoided the more feverish adjectives often attached to the Amazon, Ford nonetheless saw the jungle as a challenge, but it had less to do with overcoming and dominating nature than it did with salvaging a vision of Americana that was slipping out of his grasp at home. That vision was rooted in his experience growing up on a farm in Dearborn and entailed using his wealth and industrial method to safeguard rural virtues and remedy urban ills. He was in his sixties when he founded Fordlandia—or Fordlândia in Brazilian Portuguese, the circumflex indicating a closed, pinched vowel, the final three letters pronounced "jee-ah"—and the settlement became the terminus for a lifetime of venturesome notions about the best way to organize society.

Ford's idea of a worthy life was chivalrous, especially in its promotion of ballroom dancing. But it was distinctly not adventurous, in contrast to the privations of war, frontier living, and jungle exploration that someone like Theodore Roosevelt celebrated for their ability to strengthen character. "The man who works hard," Ford once said, "should have his easy-chair, his comfortable fireside, his pleasant surroundings." And so in the Amazon, Ford built Cape Cod–style shingled houses for his Brazilian workers and urged them to tend flower and vegetable gardens and eat whole wheat bread and unpolished rice. Coming upon Fordlandia after a trip of hundreds of miles through the jungle, the US military attaché to Brazil, Major Lester Baker, called Fordlandia an oasis, a midwestern "dream," complete with "electric lights, telephones, washing machines, victrolas, and electric refrigerators." Managers enforced Prohibition, or at least tried to, though it wasn't a Brazilian law, and nurseries experimented with giving soy milk to babies, because Henry Ford hated cows. On weekends, the plantation sponsored square dances and recitations of poetry by William Wordsworth and Henry Longfellow. The workers, most of them born and raised in the Amazon, were shown documentaries on African and Antarctic expeditions, including Admiral Richard Byrd's 1929 journey to the South Pole, as well as shorts promoting tourism in Yellowstone Park and celebrating the new, streamlined Lincoln Zephyr. "Henry Ford has transplanted a large slice of twentieth century civilization" to the Amazon, reported Michigan's *Iron Mountain Daily News*, bringing "a prosperity to the natives that they never before experienced."[15]

Over the course of nearly two decades, Ford would spend tens of millions of dollars founding not one but, after the first plantation was devastated by leaf blight, two American towns, complete with central squares, sidewalks, indoor plumbing, hospitals, manicured lawns, movie theaters, swimming pools, golf courses, and, of course, Model Ts and As rolling down their paved streets.

Back in America, newspapers kept up their drumbeat celebration, only obliquely referencing reports that things were not progressing as the company had hoped. But there was one note of skepticism. In late 1928, the *Washington Post* ran an editorial that read in its entirety: "Ford will govern a rubber plantation in Brazil larger than North Carolina. This is the first time he has applied quantity production methods to trouble."[16]

It still takes about eighteen hours on a slow riverboat to get to Fordlandia from the nearest provincial city, as long as it did eighty years ago when Ford first sent a crew of Michigan engineers and lumberjacks to begin construction on his town. I've made the trip twice, and the second time it was no less jolting after hours of passing little but green to round a river bend and come upon a 150-foot tower bursting from the forest canopy holding aloft a 150,000-gallon water tank. Decades of rain have since scrubbed off its cursive white Ford logo, yet at the time of its construction the tower was the tallest man-made structure in the Amazon, save for a pair of now dismantled smokestacks that had been attached to the powerhouse. It was the crown jewel of an elaborate water system that daily pumped half a million gallons of filtered and chlorinated water drawn from the river to the town, plantation, and ice plant. Miles of buried pipes fed into indoor sinks and toilets, sewers carried away household waste, and fire hydrants—still a novelty in even the largest Latin American cities—dotted the town's sidewalks. The water system was run by an electric plant made up of steam boilers, generators, turbines, and engines salvaged from decommissioned navy ships stripped down to scrap at the River Rouge plant a few years earlier, Ford being a pioneer in industrial recycling.

Fordlandia stands on the eastern side of the Tapajós River, the Amazon's fifth largest tributary. Flowing south to north and intersecting with the Amazon about six hundred miles from the Atlantic, the Tapajós is a broad river, with sloping sandy banks that give way to a gradual rise, and at no point on the trip does one feel that the jungle is closing in. It is home to a staggering number of fish, insects, plants, and animals. Yet the valley's big-sky openness often instills in travelers a sensation of tedium. "The prevailing note in the Amazon is one of monotony," thought Kenneth Grubb, "the same green lines the river-bank, the same gloom fills the forest. . . . Each successive bend in the river is rounded in expectancy, only to reveal another identical stretch ahead." But then one beholds Ford's miragelike industrial plant. "When the view is had from the deck of a river steamer," wrote Ogden Pierrot, a U.S. diplomat stationed in Rio, "the imposing structures of the industrial section of the town, with the tremendous water tank and the smokestack of the power house, catch the view and create a sensation of real wonderment."[17]

As my boat made its way to Fordlandia's dock, the wind cut the jungle humidity, which, in any case, really wasn't that bad. Up a hill from the river's edge stood the town's Catholic church, built after the Ford Motor Company abandoned the place. Ford's managers allowed priests to visit and minister to the population but refused the request of the local bishop to establish a permanent mission and run the town's schools. Farther back loomed the famous water tower, along with the empty lumber mill and power plant. Everything was peaceful and calm, and indeed much more suggestive of Ford's easy-chair arcadia than nature red in tooth and claw. It was difficult to picture the chaos that befell this shore eight decades ago.

The first years of the settlement were plagued by waste, violence, and vice, making Fordlandia more Deadwood than *Our Town*. The death rate from malaria and yellow fever was high. Bending to hack away at the underbrush with machetes, scores of frontline cutters died from viper bites. Those who fled the plantation brought with them tales of knife

*"Landmarks are absent," wrote the lay Anglican leader Kenneth Grubb about his travels around the Amazon in the late 1920s, "and there is nothing by which progress can be marked." Fordlandia's water tower was a rare exception.*

fights, riots, and strikes. They complained of rancid food and corrupt and incompetent overseers who defrauded them of pay and turned the forest into a mud hole, burning large swaths of the jungle without the slightest idea of how to plant rubber. In what was perhaps the biggest man-made fire in that part of the Amazon to date, burning leaves floated to the far side of the river as ash wafted across the sky, turning clouds of the rainy season sky into a blood orange haze. Building material sent from Dearborn rusted and rotted on the riverbank. Bags of cement turned to stone in the rain. Migrants desperate for jobs, many of them from Brazil's drought- and famine-stricken northeast, poured into the work camp on rumors that Ford would be hiring tens of thousands of employees and paying five dollars a day. They trailed behind them wives, children, parents, cousins, aunts, and uncles, building makeshift houses from packing crates and canvas tarps. Rather than a midwestern city of virtue springing from the Amazon green, local merchants set up thatched bordellos, bars, and gambling houses, turning Fordlandia into a rain forest boomtown. Managers eventually established sovereignty over the settlement and achieved something approximating their boss's vision. But then nature rebelled.

Hubris seems the obvious moral attached to Fordlandia, especially considering not just the disaster of its early years but also, even once order was established and the city was more or less functional, rubber's refusal to submit to Ford-style regimentation. Yet surveying what remains of it left me with an almost elegiac feeling. Despite the promiscuous use of fire by its first managers, along with the running of what was billed as the most modern sawmill in all of Latin America, the town doesn't so much invoke the plague of deforestation. That would be easy to rebuke. It rather brings to mind a different kind of loss: deindustrialization. There is in fact an uncanny resemblance between Fordlandia's rusting water tower, broken-glassed sawmill, and empty power plant and the husks of the same structures in Iron Mountain, a depressed industrial city in Michigan's Upper Peninsula that also used to be a Ford town.

About a mile and a half from the dock, on a hill hooked by a river bend, sits the abandoned "American neighborhood." The wood-framed buildings are properly Protestant and not too ostentatious, complete with shingled roofs, plank floors, plaster walls, decorative moldings, tile bathrooms, electric refrigerators, and wall sconces. Decrepit and overrun by weeds, as could be expected, the houses are now home to colonies of bats, which have left a patina of guano on the walls and floors. The residences flank "Palm Avenue," which is actually shaded by mango trees, a hint that the company made some concession to the jungle ecology. Elms or maples would have wilted in the wet heat. Yet concrete sidewalks, electric streetlamps, and those red fire hydrants confirm that it made such compromises reluctantly.

Closer to the river, Brazilians, including some surviving Ford employees, continue to live in smaller mill town bungalows, along three long avenues that follow the contours of the land. Though they have since been renamed, the street closest to the Tapajós was called "Riverside Avenue," the farthest, hugging the beginning of an incline, "Hillside." In the middle was Main Street. The powerhouse and sawmill, both with walls of floor-to-ceiling windows, separate the two residential areas. The turbines and generators have been removed from the engine room, but industrial ephemera are still scattered around the mill. Nuts and bolts fill wooden boxes carrying the name Standard Oil of Brazil, which did some exploratory work on the estate. About a dozen Landis Machine Company presses, dies, and stamps bear the mark "Made in the USA." Outside, buried in the jungle grass, are twisted rails, what's left of a three-mile train line that carried logs to the mill, though it's bewildering to think what force of nature or how the passing of time could have produced their current mangled state.

Fordlandia's most striking building is set back from the river, on a knoll about half a mile in. It's a wreck of a hundred-bed hospital built from a sketch by Albert Kahn, the architect of Ford's Highland Park and River Rouge plants. Gracefully proportioned, well ventilated, with generous eaves and dormer windows jutting out of a pitched roof, the long and narrow jungle sanatorium seems lower to the ground than it really is, much like Kahn's celebrated enormous Highland Park factory. Inside, two dormitory wings are united by a series of rooms marked by signs indicating their former function. Most of the beds are gone, but some equipment, made of metal and glass that today looks menacing but in the 1930s was state of the art, remains. In the sterilization room there's a large apparatus that suggests a front-load washing machine, and the gynecology room still has its examination table. The surgery and X-ray rooms are bare, but the laboratory has some bottles and test tubes lying around and the records of the hospital's last patients strewn on the floor.

Unlike nineteenth-century British writers who lamented the coming of industrialization, Henry Ford saw the machine not as defiling the garden but rather as harmonizing with it. And Ford's Amazon town does seem to complement its setting, perhaps because the conceit that underwrote Fordlandia has been muted by its weed-entwined buildings, rotten floor planks, and guano-glazed walls. This impression is reinforced by the memories of residents, most too young to have experienced the company firsthand, who speak approvingly about the good wages Ford offered and the free health care provided by the town's hospital. Things were *bom demais*, almost too good, says a man who moved to the town from downriver as a boy, when his father took a job on the plantation. Undoubtedly paternalistic, Ford's social program compares well with what is available to much of the world today. One doctor who accompanied a team of São Paulo medical students on a visit to the town in 2006 said contemporary Fordlandia residents who are sick have two options: those with money travel by river to a doctor; those who don't have money learn to suffer their illness. América Lobato, eighty-one years old on my first trip to Fordlandia, in 2005, was in the lucky group, but barely. She began working at the age of sixteen as a babysitter for a Ford administrator and therefore enjoyed a small pension from the Brazilian government. América remembers that the hospital didn't just treat company employees but took in patients from all over Brazil. "They couldn't do complicated operations like heart surgery," she said, but things like "the appendix or liver they took care of." América has since passed away, but during the last years of her life she had to travel nearly a full day by riverboat to a specialist to attend to her failing eyes and bad legs.[18]

The fond memories with which América and others recalled the heyday of Fordlandia are understandable, considering the lack of opportunities, decent jobs, and basic services available to most residents of the region. But there's something particular to Henry Ford that summons a deeper poignancy than one would hear from residents in similarly derelict company towns elsewhere in Latin America, ruins from a time when US corporations rapidly expanded their operations throughout the hemisphere, built around mines, mills, and plantations. In 1917, Milton Hershey began work on a sugar mill town outside the city of Santa Cruz, Cuba, which he named Hershey and which, when finished, included American-style bungalows, luxurious houses for staff, schools, a hospital, a baseball diamond, and a number of movie theaters. At the height of the banana boom of the 1920s, one could tour Guatemala, Costa Rica, Panama, Honduras, Cuba, and Colombia and not for a moment leave United Fruit Company property, traveling on its trains and ships, passing through its ports, staying in its many towns, with their tree-lined streets and modern amenities, in a company hotel or guest house, playing golf on its links, taking in a Hollywood movie in one of its theaters, and being tended to in its hospital if sick.

All of these enterprises of course say something about the way the United States spread out in the world, capturing in clapboard simplicity the assuredness with which businessmen and politicians believed that the American way of life could be easily transplanted and eagerly welcomed elsewhere. In the United States, company towns were hailed not just for the earnings they generated for their companies but for the benefits they brought Latin Americans, and many observers explicitly thought them a New World alternative to European imperialism—that is, run by private interests rather than government ministries. Just as the "conquest by Europe of the tropics of Africa, Asia, and the islands of the Pacific will be recounted by future historians as the monumental achievement of this age" for bringing "high civilization" to benighted lands, thought the business writer Frederick Upham Adams, so, too, would the United Fruit Company be celebrated for carving an "empire" in the "wilderness" that included not just modern industrial technology and up-to-date sanitary practices but "picturesque settlements," complete with "places of amusement, well-kept streets, electric lights, and most of the accessories of civilization."[19]

But the story of Fordlandia cuts deeper into the marrow of the American experience. Not because its trappings more faithfully represent the life and culture of the United States than those found in Hershey, Cuba, or in United Fruit Company towns: many of the features of Ford's Amazon town most commented on for their incongruity in a jungle setting in fact reflected eccentricities particular to the carmaker. Rather, what makes Fordlandia more quintessentially American was the way frustrated idealism was built into its conception.

Over fifty years ago, the Harvard historian Perry Miller gave his famous "Errand into the Wilderness" lecture in which he tried to explain why English Puritans lit out for the New World to begin with, as opposed to, say, going to Holland. They went, Miller offered by way of an answer, not just to preserve their "posterity from the corruption of this evil world" as it was manifest in the Church of England but to complete the Protestant reformation of Christendom that had stalled in Europe. In a "bare land, devoid of already established (and corrupt) institutions, empty of bishops and courtiers," they would "start *de novo*." The Puritans did not flee to America, Miller said, but rather sought to give the faithful back in England a "working model" of a purer community. Thus, central from the start to American expansion was "deep disquietude," a feeling that "something had gone wrong"—not only with the inability of the Reformation to redeem Europe but subsequently with the failure to achieve perfection, to found and maintain a "pure biblical polity" in New England. With the Massachusetts Bay Colony just a few decades old, a dissatisfied Cotton Mather began to learn Spanish, thinking that a better "New Jerusalem" could be raised in Mexico.[20]

The founding of Fordlandia was driven by a similar restlessness, a chafing sense that "something had gone wrong" in America. Other company towns, despite their much publicized altruism, lived and died by the economic logic that led to their establishment. Hershey, Cuba, supplied sugar to Hershey, Pennsylvania's chocolate factories for decades, until 1945, when it made more sense to purchase the crop from independent mills. Fordlandia, however, moved to rhythms set not by supply and demand but rather by the ups and downs of American life, which Henry Ford pledged to reform. Ford's frustrations with domestic politics and culture were legion: war, unions, Wall Street, energy monopolies, Jews, modern dance, cow's milk, the Roosevelts, cigarettes, alcohol, and creeping government intervention. Yet churning beneath all these annoyances was the fact that the force of industrial capitalism he helped unleash was undermining the world he hoped to restore.

FORDLANDIA'S LESSON WOULD seem to be particularly resonant today. With a surety of purpose and incuriosity about the world that seems all too familiar, Ford deliberately rejected expert advice and set out to turn the Amazon into the Midwest of his imagination. "What the people of the interior of Brazil need," he declared at the outset of the project, "is to have their economic life stabilized by fair returns for their labor paid in cash and their mode of living brought up to modern standards in sanitation and in prevention and cure of disease." This formula worked in Michigan and

Ford saw no reason it couldn't be exported to Brazil. "There will not be," Ford said, "any great difficulty in accomplishing these things." *Fordism* was a term that would go on to have many meanings, but its first usage captured the essence of cocksureness, defined by the *Washington Post* as "Ford efforts conceived in disregard or ignorance of Ford limitations."[21]

If anything, failure only made Ford and his emissaries more certain. The more Ford's errand to grow rubber, as originally stated, proved impossible to fulfill, the more he and his company revised their warrant, justifying their Brazilian mission in ever more idealistic terms, especially after the onset of the Great Depression, when the settlement was held up as a Ford-built solution for surviving hard times.

Two years into the construction of Fordlandia, after visiting the plantation site and witnessing firsthand the chaos that reigned there, one US diplomat stationed in Brazil wrote his superiors in the State Department to try to explain Ford's ongoing commitment to a "venture which apparently will never be commercially profitable":

> In the last few months, the writer has arrived at an opinion, based on a number of different facts, which seems to be the only theory which will fit all of these facts. This belief is that Mr. Ford considers the project as a "work of civilization." This very phrase has been used in correspondence of one of the higher officials of the Detroit office. Nothing else will explain the lavish expenditure of money, at least three million dollars in the last sixteen months, in laying the foundation of what is evidently planned to become a city of two or three hundred thousand inhabitants.
>
> On the basis of this theory, discarding any interpretation ascribing to the work the character of a purely commercial venture, it is possible to understand many things which are otherwise inexplicable.[22]

The journalist Walter Lippmann identified in Henry Ford, for all his peculiarity, a common strain of "primitive Americanism." The industrialist's conviction that he could make the world conform to his will was founded on a faith that success in economic matters should, by extension, allow capitalists to try their hands "with equal success" at "every other occupation." "Mr. Ford is neither a crank nor a freak," Lippmann insisted, but "merely the logical exponent of American prejudices about wealth and success."[23]

For Lippmann, Ford represented the essence of Americanism not just because he embodied a confidence born of money but also because he reflected "our touching belief that the world is like ourselves." "Why shouldn't success in Detroit," Lippmann asked, "assure success in front of Baghdad?"

And if Baghdad, then certainly Brazil.

Part I

# MANY THINGS OTHERWISE INEXPLICABLE

CHAPTER 1

# UNDER AN AMERICAN FLAG

Over a long lunch at Henry Ford's Dearborn home, Ford listened to Harvey Firestone complain about the British.

It was July 1925, and Firestone had thrown himself into a campaign to thwart Winston Churchill's proposed British rubber cartel. For decades, US industry had imported rubber from European, predominately British, colonies in Southeast Asia with little problem. But when prices started to tumble in 1919, Churchill, the British secretary of state for the colonies, endorsed a plan to regulate the production of crude rubber to ensure supply didn't outstrip demand. The future Tory prime minister would go on to gain a reputation as a steadfast friend of America. But at the time, politicians and industrialists denounced him as an archimperialist and protectionist. Speaker of the House Nicholas Longworth called Churchill's plan an "international swindle." Tennessee's Representative Cordell Hull, who would later serve as FDR's secretary of state, likened the proposed cartel to a "hold-up."[1]

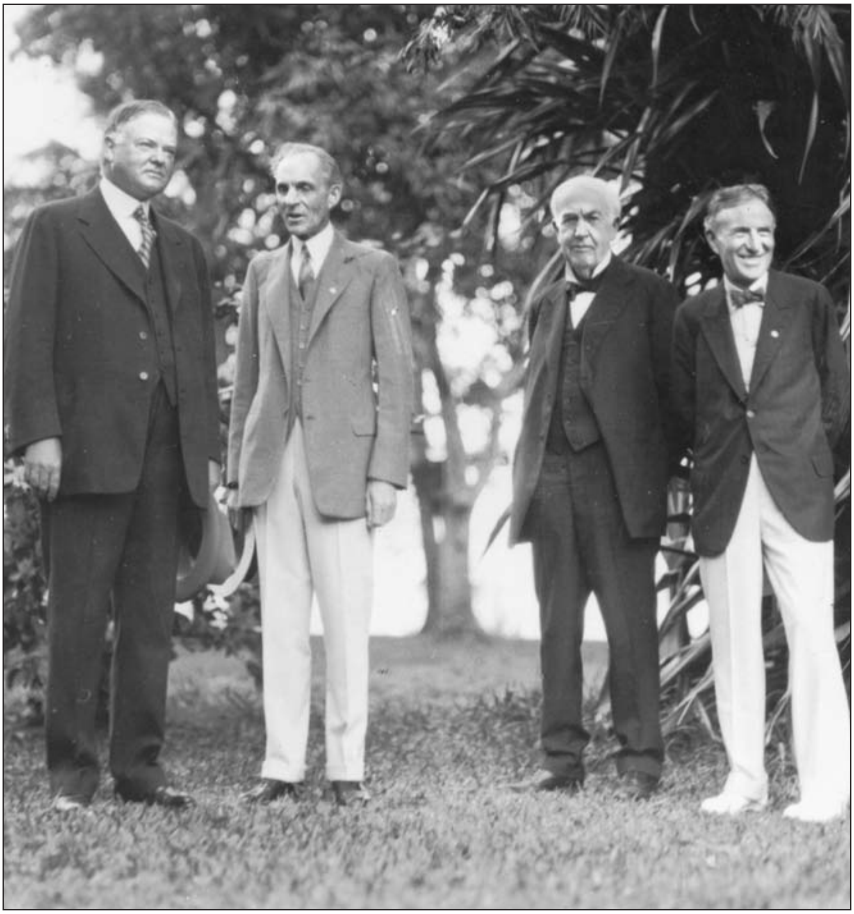
Secretary of Commerce Herbert Hoover stoked the anger. The man who would soon be president believed America's rubber supply to be industry's choke point, more critical in many ways than oil. Petroleum was found in domestic fields in Pennsylvania, Louisiana, Oklahoma, Texas, and California, as well as in neighboring Mexico and Venezuela, within easy reach of US gunboats. But rubber came from a world away, from British, Dutch, and French plantations in Southeast Asia. Just as an increase in the demand for cotton in the nineteenth century reinvigorated America's slave plantation system, the growing US auto industry's thirst for rubber breathed new life into European colonialism, which had been weakened by World War I. Revenue from rubber—tapped and processed by cheap coolie labor—helped Amsterdam, London, and Paris bind their colonies in Indonesia, Sri Lanka, Malaysia, and Indochina tighter into their imperial system, with the profits from the sale of latex helping England and France pay off their war debt. Hoover warned American manufacturers—not just of cars but of any machine that used latex—that their supply of rubber was too dependent on old, imperialist Europe and that they could be subject to a "supercharge" of more than a half billion dollars if Holland and France were to join the proposed British cartel. He pointed out that if the United States adopted the same production restrictions and price controls that London was imposing on its rubber, the price of wheat would go from $1.50 to $8.00 a bushel in foreign markets. The secretary of commerce urged US manufacturers to invest in rubber cultivation in Latin America and funded scientific expeditions into the Amazon to offset their research costs. Business leaders, though, largely responded with indifference to Hoover's alarm. Except for Harvey Firestone and Henry Ford.[2]

"I am going to fight this law with all the strength and vigor that is in me," Firestone pledged, and he asked Ford to join with him in organizing a rubber association. He had tried this before. In February 1923, he convened a "national conference of rubber, automotive, and accessory manufacturers." Over two hundred industrialists, including Ford, gathered in Washington at the Willard Hotel to hear Firestone make his declaration of "economic independence" from London. "Rubber under an American flag," he proclaimed, as his audience listened politely to a plan to create an American Cooperative Association. Capitalized at $50 million, the cooperative would establish plantations in Latin America and the Philippines to bust the "small coterie of British shareholders in plantation interests." "We must," Firestone urged his fellow industrialists, "act immediately."[3]

But they didn't. Neither Hoover nor Firestone could raise much worry among America's corporate leaders. Firestone's colleagues at B. F. Goodrich, Goodyear, and U.S. Rubber worked closely with the British and didn't want to contribute to American Anglophobia, which seemed to be fueling much of the rubber feud. Besides, despite all their talk in support of free enterprise and open markets, they were generally in favor of the right to monopoly. Stuart Hotchkiss, president of U.S. Rubber, actually admitted to favoring Churchill's cartel. He thought it represented a mature rejection of a juvenile faith in the laws of free supply and demand and laughed at Firestone's warnings of war with Great Britain. It was so "unthinkable that if it should occur, there would not be much use in anything."[4]

Henry Ford, dependent as he was on rubber, shared Firestone's concern. The auto industry relied as much on vulcanized rubber as on oil, using processed latex not just for tires but for the hoses, valves, gaskets, and electrical wires needed to run the increasingly complex internal combustion engines, steering assemblages, and shock absorption systems, as well as for the machines that made the cars. The mileage of paved roads in the United States increased rapidly after World War I, reducing tire wear and tear. And during the first two decades of the twentieth century, design improvements extended the average life of a tire more than sixfold. Yet by 1925, the total number of tires sold in the United States hit an all-time high, and by the end of the decade the value of all rubber sold in the country surpassed a billion dollars, with more than 70 percent of it used to manufacture tires, about fifty million of them a year.[5]

Already by 1924, Ford had considered growing his own rubber in the "muck lands" of the Florida Everglades. Rumors of his interest in Florida prompted Detroit speculators to organize the Florida and Cape Cod Realty Company to scoop up and subdivide large tracts of land in the town of Labelle, offering lots for sale at seventy-five dollars a piece. "No doubt," wrote an investigator from the Michigan Securities Commission, "a good many Ford employees will be buncoed, as they will undoubtedly buy lots on the strength of Mr. Ford's supposed rubber experiment." But the project



*Rubber-trust busters: Herbert Hoover, Henry Ford, Thomas Edison, Harvey Firestone.*

didn't advance much beyond a few plantings of rubber figs and rubber vines to see if industrial amounts of sap could be tapped from their trunks.[6]

So through the course of lunch Ford listened to Firestone's harangue. He had heard it before, including Firestone's prophecy that the British would increase the price of rubber to an astonishing $1.20 a pound, even though at that moment it had floated down to about twenty cents. "Well, you know what to do about that," he finally shouted. "Grow your own rubber!"[7]

Ford liked Firestone and considered him not just an industry colleague but a friend. They had met in Detroit in 1895, when Ford walked into the Columbus Buggy Works, where Firestone worked as a sales agent, and ordered a set of sturdy carriage tires that wouldn't burst under his just built 500-pound gas-propelled automobile. Five years later, Harvey founded the Firestone Tire and Rubber Company in Akron, Ohio, and over the next two decades he worked in close partnership with Ford to develop tire technology—a detachable rim, diagonal nonskid thread patterns that allowed increased speeds, and a low-pressure balloon tire that dramatically increased mileage per gallon, thus lowering the cost of owning a car—that complemented Ford's goal of delivering a cheap, well-built car to the masses.[8]

But Ford was not an association man. Unlike northeastern corporate elites on the model of Hotchkiss, Ford, who grew up on a Dearborn farm, disliked collective action. In June 1926, despite a personal plea from General Motors' chairman, John Raskob, he refused to attend a meeting of Detroit's major car company executives called to figure out how to bypass antitrust legislation prohibiting the auto industry from importing rubber collectively. Raskob was an ally of Pierre du Pont, another GM director, and Ford had long felt persecuted by the patrician du Ponts. He did show up at Firestone's Washington conclave and funded a few joint projects with the tire maker to explore the possibility of growing rubber in Nicaragua. And the two men underwrote Thomas Edison's slow-going efforts to develop what Edison had taken to calling "war rubber"—that is, synthetic or organic alternatives to rubber, made from milkweed maybe or goldenrod. But he did nothing to help his friend realize his rubber association. "Mr. Ford," remarked his longtime personal secretary, Ernest Liebold, "wouldn't consider a thing like joining an organization of rubber producers. . . . He never wanted to ally himself with anybody else in connection with any specific activities."[9]

When the lunch was over, Ford held Liebold back out of earshot. "Find out," he whispered to his bespectacled aide, "where is the best place to grow rubber."[10]

Liebold threw himself into the task. He read everything he could on rubber, including reports supplied by the Department of Agriculture and Hoover's commercial attachés stationed in Brazil. He also took a crash course in African history and fairly quickly concluded that Liberia, where

Firestone, unable to rouse interest in his rubber collective, would soon establish a plantation, was too unstable to suit Ford's interest. Latex, thought Liebold, the American-born son of German Lutheran parents, should be cultivated "where the people themselves have reached a higher state of civilization." Ford's secretary decided that this ruled out Liberia, a country "composed entirely of Negroes whose mentality and intellectual possibilities are quite low."

"Rubber should be grown where it originated," Liebold concluded. And that meant the Amazon.

The southern half of the Amazon basin, running from the Atlantic mouth of the river through Brazil and into Ecuador, Bolivia, and Peru, is home to *Hevea brasiliensis*, the species of rubber tree that provides the most elastic and purest latex. From the early eighteenth century to the end of the nineteenth, the Brazilian Amazon supplied nearly all of the world's rubber, demand for which steadily increased as the Industrial Revolution in the United States and Europe took off. At the height of the rubber boom, in the second half of the nineteenth century, Amazonian latex made up 40 percent of Brazil's total exports and supplied most of the rubber used for gaskets, valves, belts, wire insulation, carriage, bicycle, and automobile tires, boots, shoes, raincoats, condoms, and elastic garters. Latex lords grew magnificently wealthy, building opulent palatial homes and gilded jungle cities. With their Beaux Arts palaces, neoclassical municipal buildings, electric trams, wide Parisian boulevards, and French restaurants, the cities of Manaus, located about nine hundred miles up the Amazon River, and Belém, the region's principal Atlantic port, competed for the title of "tropical Paris."[11]

Manaus is famous for its hulking Amazonas Theater, an opera house built of Italian marble and surrounded by roads made of rubber so the carriage clatter of late arrivals wouldn't interrupt the voices of Europe's best tenors and sopranos. Finished in 1896, it reportedly cost more than two million dollars to construct. Money flowed freely during the boom, and Manaus's better classes imported whatever they could at whatever price. American explorers found that they could sell their used khakis for five times what they paid for them at home, once they grew tired of parading


*A contemporary view of the opera house in Manaus, the tropical Paris.*

around the city in their jungle gear.* With more movie theaters than Rio and more playhouses than Lisbon, Manaus was the second city in all of Brazil to be lighted by electricity, and visitors who came upon it from the river at night during the last years of the nineteenth century marveled at its brilliance in the midst of darkness, "pulsating with the feverish throb of the world." But not just light made Manaus and Belém, also electrified early, modern. Their many dark spaces provided venues for quintessentially urban pleasures. Roger Casement, Britain's consul in Rio, who later would become famous for his anti-imperialist and antislavery activities, wrote in his diary in 1911 about cruising Manaus's docks, picking up young men

*Unlike Brazilians, who upon returning from the jungle usually immediately bathed, shaved, and brought a new suit of clothes, Americans, one observer noted, had the "irritating habit of stalking through the streets, and calling on the highest officials" in their "ten-gallon hats, campaign boots, and cartridge-belts" (Earl Parker Hanson, *Journey to Manaos*, New York: Reynal and Hitchcock, 1938, p. 292).

for anonymous sex. Belém, for its part, wrote a *Los Angeles Times* correspondent in 1899, had an "amount of vice" that would shock the "reformers of New York," most of which could be found in its many cafes and cabarets, as well as its best brothel, the High Life Hotel, which is "devoted to the life of the lowest order" and which Brazilians pronounced, according to the journalist, as "Higgy Liffey."[12]

From start to finish, the production of rubber that made such affluence possible represented an extreme contrast to the industrial method pioneered by Henry Ford in Michigan. *Hevea brasiliensis* can grow as high as a hundred feet, standing straight with an average girth, at breast height, of about one meter in diameter. It's an old species, and during its millennia-long history there likewise evolved an army of insects and fungi that feed off its leaves, as well as mammals that eat its seeds. In its native habitats of Brazil, Bolivia, Peru, and Ecuador, it best grows wild, just a few trees per acre, far enough apart to keep bugs and blight at bay; would-be planters soon learned that the cultivation of large numbers of rubber trees in close proximity greatly increased the population of rubber's predators. The extraction and processing of latex, therefore, was based not on developing large plantations or investing in infrastructure but rather on a cumbersome and often violent system of peonage, in which tappers were compelled to spread out through the jungle and collect sap.

Tappers, known as *seringueiros*, lived scattered along the river, sometimes with their families but often alone, with their huts located at the head of one or two looped rubber trails that ran a few miles, connecting between a hundred and two hundred trees. In the morning, starting before sunrise, when the latex flowed freest through the thin vessels that run up the tree's bark, the tapper would make his first round, slashing each *Hevea* with diagonal cuts and then placing tin cans or cups to catch the falling sap. After lunch, and a nap to escape the worst of the heat, the *seringueiro* made a second round to collect the latex. Back at his hut, he smoked it on a spit over an earthenware oven fired by dampened palm nuts, which produced a toxic smoke that took its toll on tapper lungs, until it formed a black ball of rubber, weighing between seventy and ninety pounds. He then brought the ball to a trading post, handing it over to a


*Two tappers smoking latex under a thatched lean-to.*

merchant either as rent for the trails or to pay off goods purchased on credit. The rubber then made its way downriver to Belém's receivers and export houses. The excruciatingly unhurried drip, drip, drip of the sap into a battered cup, latched onto the tree with a piece of rope or leather, was about as far removed from the synchronized speed of Henry Ford's assembly line as one could imagine. Back in Michigan, Ford was obsessed with rooting out "slack" from not just the workday but the work year—trying to find ways to combine agricultural and industrial seasonal labor that maximized the efficiency of both. But along the Amazon, *seringueiros* often spent the "grey and sad" months of the rainy season, when latex ran too slow to tap, "in his hammock without any profitable occupation," accumulating more debt that they would never work off. Their thatched huts were often perched on poles, and as the water rose around them they passed the rainy days in isolation, as one traveler described, alone with "dogs, fowls, and a host of insects, all unable to move far owing to the water that surrounds them."[13]

It was a system that produced enormous riches when Brazil had a monopoly on the world's rubber trade and therefore largely set the global market price. But the wealth it created was fleeting and unsustainable. The tapping system itself could quickly deplete man and tree. As the seasons passed, cuts on the bark would scab over to be bled again, successively yielding less and less latex. With care, *Hevea* can produce for up to three decades, starting in its fifth or sixth year of growth, but under pressure to deliver more latex, *seringueiros* cut too often, too deep, causing stunted growth and early exhaustion. And profit was generated by what was essentially an elaborate pyramid scheme: at the apex were foreign commercial and financial houses; in the middle stood Brazilian merchants, traders, and a few exporters; and the whole thing rested on the backs of indebted tappers, who, as one critic put it, received goods on credit charged at fifty but in reality worth ten, in exchange for latex that the local merchant assessed at ten but that was actually worth fifty. As another writer noted, the "potentates of the forest have no credit beyond that on their books—against peons who never pay (unless with their lives)." Euclides da Cunha, one of the Amazon's great chroniclers, described the trade as the "most criminal employment organization ever spawned by unbridled selfishness."[14]

The first generation of early-nineteenth-century-boom rubber tappers came from the Amazon's native population. Things were bad for many indigenous communities prior to the rubber trade; slave raiding had already devastated many groups. "Every manner of persuasion," one anthropologist observed, "from torture to degeneration by cachaça"—a cheap rum distilled from sugar cane juice—was used to make natives collect wild jungle products. Prior to the expansion of the latex economy, these included nuts, feathers, snake skins, dyes, fibers, pelts, timber, spices, fruit, and medicinal herbs and barks, most notably from the cinchona tree, found in the higher reaches of the upper Amazon, which produced the antimalarial alkaloid quinine, indispensable in hastening the spread of European colonialism in Asia and Africa.[15]

But the rubber trade was by far more extensive, and thus more disruptive, than anything that had come before it, organizing under its regime the whole of the Amazon wherever *Hevea* was found. The Apiaca, for instance, were just one of many groups practically wiped out as a distinct tribal society, their men pressed into service either as tappers or to paddle or pole trading boats, and their women as servants or concubines. After native sources of labor were exhausted, migrants, mostly from Brazil's drought-prone northeast, made up subsequent generations of tappers. They arrived at Manaus and Belém by the boatful, withered, sunken-faced, and already bonded to pay for their transport. Between 1800 and 1900, the lower Amazon's population increased tenfold, with desperately poor, eternally indebted families living in small, isolated clusters of huts along the river's many waterways or in the sprawling shantytowns that spread out behind Manaus and Belém's Belle Époque façade.[16]

But by 1925, when Ford and Firestone were thinking of getting into the rubber business, this boom had long turned to bust, largely because of the actions of another Henry, who arrived in the Amazon over half a century earlier to commit what observers today call "bio-piracy," which would eventually unravel Brazil's latex monopoly.

Henry Wickham was a prime example of the kind of imperial rogue chronicled by Rudyard Kipling. Only Wickham didn't travel east to make a name for himself in Britain's formal colonies; instead he went west to Latin America, where London in the late nineteenth century was extending its commercial and financial reach. He landed first in Nicaragua, where he tried to turn a profit exporting colorful bird plumage back to his mother's London millinery shop, located on a small street just off what is now Piccadilly Circus. He was a bad shot, though, and soon decided to better his luck in Brazil.[17]

In 1871, Wickham and his wife settled in Santarém, where the Tapajós River flows into the Amazon. Attempting to establish himself as a rubber expert, he quickly fell into destitution, surviving only thanks to the kindness of a community of U.S. Confederate exiles who, moved by, as one of the Southern expatriates put it, Wickham's "aristocratic appearance" and "lonesome, melancholy aspect," took the couple in. A failure at most everything in life, Wickham enjoyed one reported success, the illegal spiriting of seventy thousand Amazonian seeds, gathered from a site not far from where Fordlandia would be founded, out of Brazil in 1876. These he turned over to London's Royal Botanic Gardens, where they were nurtured into the seedlings used to develop Asia's latex competition. Actually, Wickham's real success was in gaining fame for stealing the seeds, for historians of rubber have subsequently questioned key aspects of his derring-do story. Whatever the case, Queen Victoria knighted Wickham, securing his place in history as a British imperial hero and a Brazilian imperialist villain, and the Amazon began its long descent into economic stupor.[18]

The seeds Wickham collected and shipped to London provided the genetic stock of all subsequent rubber plantations in the British, French, and Dutch colonies. *Hevea* was able to grow closer together in Asia, and later Africa, because the insects and fungi that feed off rubber didn't exist in that part of the world. And when the trees began to run sufficient amounts of cheap latex to meet the world's demand, Brazil's rubber pyramid came toppling down. No matter how exploited the Amazonian tapper, the price of producing rubber in large estates was considerably lower than what it cost to extract it from wild groves. Asian plantations were close to major ports, which cut down on transportation expense. They used low-wage labor, often imported from China, and by the early twentieth century had selected and crossbred trees, leading to much greater sap yields. In 1912, estates in Malaya and Sumatra were producing 8,500 tons of latex, compared with the Amazon's 38,000 tons. Two years later, Asia was exporting over 71,000 tons. Less than nine years later, that number rose to 370,000 tons. Manaus fell into fast decline, its opera house ridiculed as an emblem of folly, of the excess wealth and European strivings of rubber barons who spent their money on gold leaf, red velvet, and murals of Greek and Roman gods cavorting in the jungle, rather than on developing a sustainable economy. Belém gave way to Singapore as the world's premier rubber exporting port, and the Amazon languished, subject of any number of plans to restore the region to glory—until Ford tried to make one happen.[19]