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THE PIONEER FRINGE

BY

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TO THE MEMORY OF
MY FATHER AND MOTHER

PREFACE

Pioneering today does not conform to the American frontier traditions of the nineteenth century. Most of the land of the United States was occupied before modern machine agriculture was developed. There has been but one big thrust of machine-equipped farmer-settlers in the country since 1900—the determined advance in the dry-farming region of the present wheat growers of western Texas and Oklahoma, western Kansas and Nebraska, and central and eastern Montana. The tools of conquest no less than new fields of conquest are now in the mind of the enterprising settler. Mere land is no longer a boon. No one is looking for rough fare and homespun. Nowadays even the pioneer wants to have. To produce and to sell are the forerunning conditions of having. And “everybody wants everything because there is so much to want.”

The pioneer belts of the world are regions of experiment—“experimental zones” we might call them. Settlement habitually advances and retreats on the outer fringe of land occupation. One kind of crop and then another may be grown to see which will best withstand the hazards of uncertain climate: a short growing season that in any year may prove to be too short or a limited rainfall that may prove to be too small. Range land is broken into farm land and then reverts to range again. Whether to raise livestock or grow crops, or how to combine them, are questions that are never settled in the mind of the pioneer because the climate is never settled and the relative market prices of what he has to produce are never settled.

“Marginal” is a term frequently applied to the man who is on or beyond the fringe of normal settlement. Frontier or pioneer living is more than that: it may become economically marginal at last, but it is characteristically a search for the combination of untried or little-known land and climate and crops that will provide a fresh chance to gain an acceptable standard of living. It is also luck-hunting, the habit of “always moving along,” the willingness to believe that fortune will be kinder in the wilderness, the desire to give children a better chance. The whole of a country

and all of agriculture are experimental in a broad sense; but on the frontier the chances of success or failure in land use are greatest.

The pioneer lands of the world are of great extent. They are to be found in every continent. They include some of the best soil and some of the most promising young communities. One must also admit that some pioneer regions have become "slums of settlement." It is the purpose of this book to sketch the outlines of a "science of settlement" to set forth the ideas that have moved men to take such diverse paths, and to provide a description of the different environments in which so many men elect to meet destiny.

The national policies of a dozen countries involve questions of immigration and land use and the thrust of settlement into pioneer areas. No country desires to add idle men to its city populations. Yet if newcomers turn to the land will they not increase the volume of production that has now flooded the world? The drop in commodity prices and the idle acres of appalling extent in settled communities may lead us to take the narrow view. Not alone high prices for farm products incite men to occupy new land. When the prices of farm products are lowest men are also induced to look for new and more promising sites that mean less capital required to buy, less labor with which to produce, less taxes to pay. A severe drop in crop prices is as likely to lead to new land occupation by settlers from the older communities as a severe drought is likely to drive them back or end their prosperity in the semiarid fringe.

A science of settlement is not desirable merely to provide means by which to attract men to new land. The ultimate withdrawal of the borders of settlement in the least favorable situations is also one of its objects. It is unintelligent to grow everything that can be grown in a given place. Pioneering is an acute question of national magnitude not only because men have gone to the frontier but also because they are now going in large numbers. Science no less than government seeks to follow them in their advance and in their community building. In addition to the science of the pioneering process there are the phenomena themselves—a stream of mankind on some of the newer roads to fortune, having experiences on the way, seeing in new communities the realization of dreams, and willing to pay the price of realization.

ISAIAH BOWMAN

THE PLAN

Six years ago, encouraged by David White, at that time the Home Secretary of the National Academy of Sciences and an officer of the National Research Council, I presented a plan of research in pioneer settlement to the latter organization. After two years' consideration by a special committee, and by the Division of Geology and Geography, the National Research Council approved the plan and recommended it to the Social Science Research Council. The latter organization, after similar consideration for two years, gave its approval and provided generously for the support of the first project. This made it possible for the members of the Advisory Committee of the American Geographical Society to prepare a detailed plan of research in the Canadian field, a plan that has since been vigorously prosecuted by Canadian scholars through the Canadian Pioneer Problems Committee, with results that will be published in the near future.

At the same time the Council of the American Geographical Society generously set up a separate fund for the support of related work on a more limited scale in several other regions.

The Social Science Research Council and the American Geographical Society have also contributed to a joint fund for the publication of a series of papers entitled "Pioneer Settlement" by thirty authors who are specialists in the field and familiar with the regions with which they deal. "The Pioneer Fringe" is intended as an introduction to this companion volume and to the various publications that the plan will call into being and deals with the ideas that moved the three supporting organizations to give their approval.

I cannot express thanks in terms that adequately convey my sense of gratitude to the Social Science Research Council, the National Research Council, and the Officers and Councilors of the American Geographical Society for their endorsement and financial support of the undertaking. In equal measure thanks are due the Advisory Committee of the Society, a group of specialists in geography, history, economics, and sociology, who helped prepare the detailed plans and launch the enterprise.

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CHAPTER ONE

THE ROAD TO THE BORDER

And luck—is it yonder?

—CARL SANDBURG, *Abraham Lincoln,*
the Prairie Years

PIONEERS are all sorts of people, a cross section of society at an advancing border; but they are principally young folks with children. Those that succeed are strong and hopeful and confident, willing to buy their dreams with hard labor. In this sense, pioneers are settlers upon the land whether for agriculture or grazing, not hunters or mineral prospectors or traders or missionaries, though all these may be the bold forerunners of land-hungry pioneers. The land-tilling pioneer is at once a home maker and a breaker of the mold of the society that he leaves behind. Timothy Dwight thought the frontier type crude beyond the endurance of a gentleman; while John White's "Planters Plea" (1630) held to the compensations: ". . . the spirits and hearts of men are kept in better temper by spreading wide, and by pouring, as it were, from vessell to vessell." Always in the foreground of pioneer ambition is a better future for the family: ". . . they were intent that their children should have a chance."

The whole of America is a land of pioneering tradition; the western communities are sprinkled with the family names that make up the honor rolls of the local historical societies. Almost every other man of us treasures the story of his pioneering forbears: endless miles over rough roads, mud and snow and storm, the log hut or the sod "house" at the end of the journey, wild land to tame, long years of struggle, the flame of hope unextinguished at the end of the days of strength. "They let life go, [threw] it away for the benefit of the generation to come after . . ." (Bushnell).

Multiply this story by a million and you have the tale of America in the pioneering epoch. Elsewhere the tale is not yet ended. The attack upon the conquerable lands continues on a wide front. Tens of thousands of men of varied breeds still seek the frontier zone of every continent. The land of their dreams includes, besides babies and the end of the rainbow, approximately three million square miles of productive soil. Its extent and variety would make it a

rival of the United States if all of it were gathered together. Millions now live in the pioneer lands, and millions more can be accommodated there. The question of their destiny is a most engaging one to the farmer near the border who has heard of opportunities over the next ridge; to geographers and economists and



FIG. 1.—Two-horse team and covered wagon on a mountain road in the colonization country between São Bento and the Hansa Colony (west of Joinville), Santa Catharina, Brazil. (Photograph by Fritz Hofmann.)

colonial administrators; to biologists and eugenists intent on improving the breed and aware of the higher birth rate among pioneers; to politicians who, like nature, abhor empty space; and to a certain type of city dweller, that modern thrall, who would exchange a desk for a bark canoe and whose bright vision of a home in the wilderness rarely outlasts the first rainy night.

The pioneers of today include millions of Chinese, hundreds of thousands a year, on the move, half of them—men, women, and children—walking 400 miles after a journey at sea to reach the edge of settlement in Manchuria; remote Scotch, Welsh, and English sheep herders, and equally isolated farmers, living in the belt of grassland along the eastern foot of the Patagonian Andes; tens of thousands of settlers of many sects and nationalities in the Canadian Northwest, among others, Icelanders, Scandinavians, and Ukrainians; Dukhobors, Hutterians, and Mennonites; Aus-

tralians (and others of English speech) on the endless grasslands of their sun-baked continent; Boers and Englishmen and Portuguese in southern Africa, on the dry veld and the cooler tropical highlands as well as in the rich hot valleys that border them, where there is a reservoir of cheap black labor; Russian cart trains trailing into



FIG. 2—Russian land settlers emigrating to Siberia. (Photograph copyright by Underwood & Underwood.)

the plains of western Siberia and the Steppe Region and shoving the untamed Kirghiz nomads before them or persuading them to accept the servitude of the plow as they turn virgin grasslands into grainfields.

The remaining pioneer lands are not merely crumbs for the poor man. To be sure, some of them are not the most desirable places in which to meet destiny. All of them mean *border living* for the home seeker, at least for a time. There are chances to take: with rain in Australia and western Siberia; with frost in the Peace River Valley and Northern Manchuria; with the rise of a black proletariat in southern Africa where the planter finds the native useful because he can better endure the hot sun in the fields and his cheapness lowers the cost of production; and with drought and sun and wind and frost at intervals in the long pioneer hinterland of South America that extends from the Brazilian border of the hot Amazon forest to tidewater glaciers in southern Patagonia.

If there are chances to take there are also great ends to gain by those who expect to get independence by toiling for it. Pioneering means hard labor. For the pioneer, life has validity because there is a living to be earned.

John Ball, in the fourteenth century, wrote of the painful contrast between rich and poor in the cities. But he was carried away in the rush of his argument, and, not foreseeing the outward thrust of English-speaking pioneers in the colonial era and its vast economic effects, including, ultimately, a higher standard of living, he really maligned country life when he said: "We have pain and labour, the rain and the wind in the fields." "Rain and wind" came naturally to him as an island and city dweller in the midst of that "stormy Northern sea" of *Ave Imperatrix* and all the geographies. The pioneers of Australia would have less pain if they had more rain; those of windy Patagonia and Manchuria escape the worst effects of disagreeable weather by adapting their culture to the soil and the rainfall habit; and those of southern Africa have less labor because the blacks do most of it. For those that have either black or peon labor, life is made tolerable if not sweet on the principle so long applied to land cultivation by Spaniard and Portuguese: "God bless those who labor and us who guide them!"

Pioneers are explorers of more than material realms. Someone in each community of them is a leader capable of magnificent moments of decision. Someone in distant pioneer groups is forever illustrating the Emersonian principle: "Let one man in a company be wise and all are wise, so great is the contagion." Sometimes it is the pastor of a church community who sees the pillar of cloud. Sometimes it is a merchant who, seeing a better future in "plantations," organizes a company and stakes everything he owns on its success. Here a philosopher seeks Utopia on the border. Rarely does a band of men and women have the courage to go without its strong man who is able to impart the mystic quality inseparable from all great decisions. The Portuguese navigator Quiros, in the service of Spain, immortalized the mood when he sailed his fleet westward out of Callao to be the first to explore the South Pacific, unknown leagues of water ahead of him, no man among his crew knowing the way: "Let her roll; God will take us somewhere."

Writing of Alaska, Davis sounds the immemorial note: "The *Mayflower* sails today for many a northward-facing port." The kind of men aboard her: "If your racial memory includes fiord, moor, fen, proud highland or gravid valley, endless spruce forest,

roaring canyon, or nameless rivers, then you will be at home here." The epigram that sets off the pioneer on the ground: "An Alaskan is not a piece of something manufactured."

Some leave the best behind them, for conscience' sake and other and worldly reasons, when they go pioneering, and not a few leave the worst. "Ireland is me country—an' by the help of God, may I niver see it agin!" Some sentimentalize the thing they leave, and their opposites store up sentiment for the land of the future. Memory of the thing behind sometimes plays tricks on hope for the thing ahead. The oversea migrant nowadays may go to his new home in a luxurious steamship; and this last bit of his past, dear in retrospect, may persuade him back to the old accustomed place whose drabness was temporarily forgotten. When so many kinds of men respond so differently to so many kinds of land it must be more than the land that calls.

On the border, men see a chance to live life over again or to begin it without the handicaps of other men's devising. For them the solution of life becomes nascent once more. Opportunity defies its own law and knocks twice. If the border appeals to a man it is because there is a border in his own mind. I speak not of the whole but of the leaders, not of blind mass movements but of purposeful settlement by men who have their eyes on the economic and social order that they hope to create or improve, as in Canada, Australia, and South Africa.

There is no handy rule to pioneering. No one has found a master key. The reasons that impel men to seek the border are as varied as humanity itself. There, as everywhere today, a man must accept his "dissimilars." A colony of Dukhobors finds isolation and independence in the Canadian pioneer zone only to learn that a group of Icelanders or Swedes is moving into the next township. The Mennonites of the Gran Chaco of eastern Bolivia migrated from Canada, fleeing "the world"; but the wilderness isolation they sought is an affair of hours almost, because the settlement of the boundary dispute between Bolivia and Paraguay will surely bring worldly development to their front door and deflect the spirit of their young men.

Economic gain is the most general motive of the pioneer—cheap land with high native fertility, low taxes, and an environment that makes the best economic use of the family unit. On the land, boys and girls are useful at eight and ten years and at sixteen can take the place of men and women. Hunger forces the pioneering



FIG. 3—Telephone line on temporary tripods and new track in undeveloped country, Hudson Bay Railway. (Canadian National Railways.)

Chinese out of crowded Shantung—and the graves of his ancestors may call him back if he prospers by the way. But it is not hunger that drives a man that has five or ten thousand dollars to leave civilization behind and search for the good life on the far margins of settlement. If capital goes, as well as the strong hands of hopeful youth, it is because there is business inducement. There is at least a sprinkling of all kinds of men on the border who are there for all kinds of reasons.

For a long time the pioneer beat science at its own game. He did not wait for the government surveyor or the verdict of the agricultural specialist as to the best lands available for settlement. A large part of the advantage of pioneering lies in getting there first, because the essence of the

thing is to get good land cheap. If the settler waited till a printed report became available, he could be quite sure that others would be ahead of him. It is not enough to be on the heels of the surveyor; let him be on your heels. Pioneers speak of a certain man as having "a good eye for land," and picked committees or individuals—naturally endowed Joshuas and Calebs—have often gone ahead of a group that has decided to migrate, in order to choose the best land. Of course the method was not scientific. Often it consisted merely in finding soils and slopes that resembled those back home that were known to be good.

When the land looked right it was taken. The historian E. G. Bourne tells of an early member of his family who settled in eastern

Tennessee because the camp site near by "looked like the country back home in Pennsylvania." The geographer H. H. Barrows notes the tendency of the early settlers of Illinois to avoid the prairies, thought to be poor because they were timberless, and to stick to the timbered river bottoms where there was wood and spring water. They had come from timbered country where the presence of hardwoods was regarded as an index of soil fertility. Gradually the prairies between the rivers became settled as valley-bottom land became scarce. Then it was discovered that it was easier to haul logs and lumber for house building to a prairie site ready for the plow than to clear valley-bottom land of heavy timber. Thus the pioneer makes his case by the method of trial and error. The scientist has often come along afterward.

To most men, opportunity is not a thing one philosophizes about or seeks beyond some far horizon. Most of the pioneer land of today represents a growth at the *fringe* of settlement. A farmer who made a wrong start by paying too much for his land or who chose a bad site, with poor soil or difficult drainage, casts about for a better place. He hears of former neighbors who have succeeded in a new "country" not far away, and he sets out to better himself. New land just opening up has for the farmer a lure akin to the attraction of a new gold field for the adventurer. I remember with what interest young Gonzales inquired about the *playa* lands (flood-plain strips with deep soils) after my return to his hacienda from a journey down the Urubamba Valley in eastern



FIG. 4—Road near Clairmont, Alberta. (Canadian National Railways.)

Peru. He wanted to know in minute detail just where each *playa* was located, how large it was, what kind of wood or brush grew on it, how many Indians were there on whom one could draw for labor. His father's hacienda at Sahuayaco, on the floor of the Urubamba Valley, was a princely estate, ten miles by forty, and had been bought for only twelve thousand dollars. In a few years the best of it had been cleared, houses and furniture built, and crops of coca, cacao, coffee, rice, pepper, and cotton raised for the Cuzco market accessible at that time by pack train only. Instead of keeping a large family in the city he had become, in a few years, a wealthy landowner. Yet even in these fortunate surroundings his son was absorbed with the possibilities of new land miles away. A pioneer at the fringe, he wanted to get still farther into the undeveloped country.

Modern science has outdistanced the pioneer only in the past few decades and in a limited sense, for it affects chiefly what we may call the second wave of pioneering. When the first wave subsides the scientist can tell *why* certain sections have succeeded and others have failed. From the experimental results of the first pioneers he can derive a basis for soil mapping and land utilization, for example. Or he can help in finding local sources of road-making materials or recommend the best types of livestock for a given combination of climate and grass. The scientist can improve the seed, recommend improvements in the educational and social life, and perhaps reorganize the agricultural practices of a community. It is very like the evolution of an oil field. Before there can be a field someone must strike oil. That someone is the "wildcatter," a close relative of the "squatter," the man who is out ahead of the rest and risking everything, even the title to his farm, on his own guess or judgment.

But "the science of settlement" now enters on a new phase, and that is why it is so tremendously important for government today. This new phase is dependent on a new condition in pioneering—that the best land has been taken in all but a few regions and the rest of it has to be occupied by departures from the commonly accepted standards of agricultural practice. Perhaps dry farming in the United States is the best example, outside of the discovery or development of frost-and-drought-resisting strains of wheat, of the service of science to the fringe of settlement. But science can go very much farther than that today because we now have for the first time data from all the pioneer lands to assess and compare.

Many kinds of experiments have been made in the past: group settlement in Australia, seed improvement in the United States, soil studies in Russia, immigrant colonization in Argentina, soldier settlement in Canada, and the use of native labor in Rhodesia. It is true that in each of these cases the conditions are special and that a uniform type of agricultural or pastoral practice cannot be evolved. It is also true that modern pioneers differ from country to country



FIG. 5—Immigrants traveling on foot to their future homes in Manchuria. (*Canadian Geogr. Journ.*, July, 1931, and the South Manchuria Railway Co.)

and that each type has its own standards of comfort and success. But it is equally true that there are many things in common, provided we take the pioneering lands of the temperate and near-temperate zones and leave out those in the tropics. It is this common body of experience that science is trying to discover. When all the pioneering experiences of the world are pooled, some very useful generalizations and even "principles" can be reached. At any rate we shall know of many things it will *not* pay to try.

Scattered along the edge of settlement through thousands of miles of the world's pioneer communities, experimentation is being carried forward at different rates and has had different degrees of success. We ought to capture each experiment, each technique of living, in process of development—to see how forest land is occupied here, grazing land there, and the relation of short-lived mining towns to the settlement of border communities whose occupation would otherwise be indefinitely delayed. Here too one can find those two most interesting facts of pioneer life, the "social density" and the "economic density" required by the modern pioneer. More than ever, the pioneer dislikes to be out of touch with neighbors. People must see their own kind. What is the

present limit of tolerance in this respect? What are the critical densities from the social standpoint?

By "economic density" we mean a distribution not widely scattered but, on the contrary, economically assembled. There are efficient and inefficient densities of population. How far can land be settled from a railway line? In Western Australia ten miles seems to be the economic limit; in Rhodesia it is twenty-five miles; in Argentina, fifteen miles. The individual can accept as low a standard of living as is tolerable to him, but the labor he employs may not go so far. Wheat farming of the extensive type requires the employment of seasonal labor. Here questions of social and economic density overlap. Some races are tolerable to social isolation; others are not. Hints and suggestions about this element of the life of the pioneer are to be had; but laboratory cases remain to be studied. We need both diagnosis and cure.

From the political standpoint the question of subsidy to the pioneer settler is now gravely troubling the makers of government policies. When the state steps in to help settlement how far should it go? What is the measure of state aid? At what point does it become a mere tax upon the people of better-favored lands to the advantage of the people in ill-favored lands? Those in charge of government policies are working haphazardly if they work on the basis of theory alone; they work in a narrow way if they work on a basis of purely local studies; they work in a political not a scientific way if they seek large appropriations merely to throw them into new, untried, and uncritical projects on the theory that any development is better than none.

The economics of marketing and of labor-saving machinery, how far it pays to breed the best strains of livestock under the rough conditions of a new land, what is the geographical extent of repellent or succulent grasses, what is the extent of soils found by local experiment to be good for specified crops—these are among the problems that can be worked out in a new "science of settlement." They are problems that not only can but must be worked out if the marginal lands that are left to our generation are to be permanently occupied, because otherwise the waste of capital and the hardships of settlement would be too great and government would be called upon to provide relief. The better way is clearly to survey the country, analyze conditions, and guide settlement in order that stable communities may develop from the start.

CHAPTER TWO

PIONEERING, MODERN STYLE

I drove my wife to wander with the wind.

—S. V. BENÉT, *John Brown's Body*

WHEN he had told the man's side of the pioneering story of the Middle West, Hamlin Garland turned to the epic of the pioneering woman in "A Daughter of the Middle Border." What pioneering does to family life and education is largely written in terms of what it does to women. Probably the change that has come over the humans who seek life at the frontier, especially in their attitude toward help from the government for roads and schools, is largely due to the unwillingness of the women to stand the hardships and primitive life of the untamed land beyond the settled communities.

We borrow the lines of Stephen Vincent Benét to describe the earlier land-seeker and chronic wanderer in relation to his mate:

I took my wife out of a pretty house,
I took my wife out of a pleasant place,
I stripped my wife of comfortable things,
I drove my wife to wander with the wind.

If "everybody she'd ever known was moving along," it was "because the land was always better elsewhere." The social result was obvious. You can't make a home in a dusty wagon. Murchie warns of the handicap of few educational facilities in the poorer regions of Manitoba which may lead to "a marginal people on the marginal land." The English in Rhodesia make school facilities one of their first concerns, and the women deserve the credit for it. Nowadays, and to an increasing extent, women are responsible for the flow of culture into the pioneering lands of the world; that is the case at least with white women and lands held by English-speaking sovereignties.

At the unveiling of the statue of The Pioneer Woman at Ponca City, Oklahoma, on April 22, 1930, President Hoover and Secretary Hurley made radio addresses in which there is reflected an appreciation of the woman's part in pioneering.

There are few men of the West of my generation who did not know the pioneer woman in his own mother. . . .