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HISTORICAL

# POINT FOUR PIONEERS

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REPORTS FROM A

WALK THROUGH THE

FRANK PINDEI

ALBION W. PATTERSON

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# POINT FOUR PIONEERS

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REPORTS FROM A NEW FRONTIER

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## FOREWORD

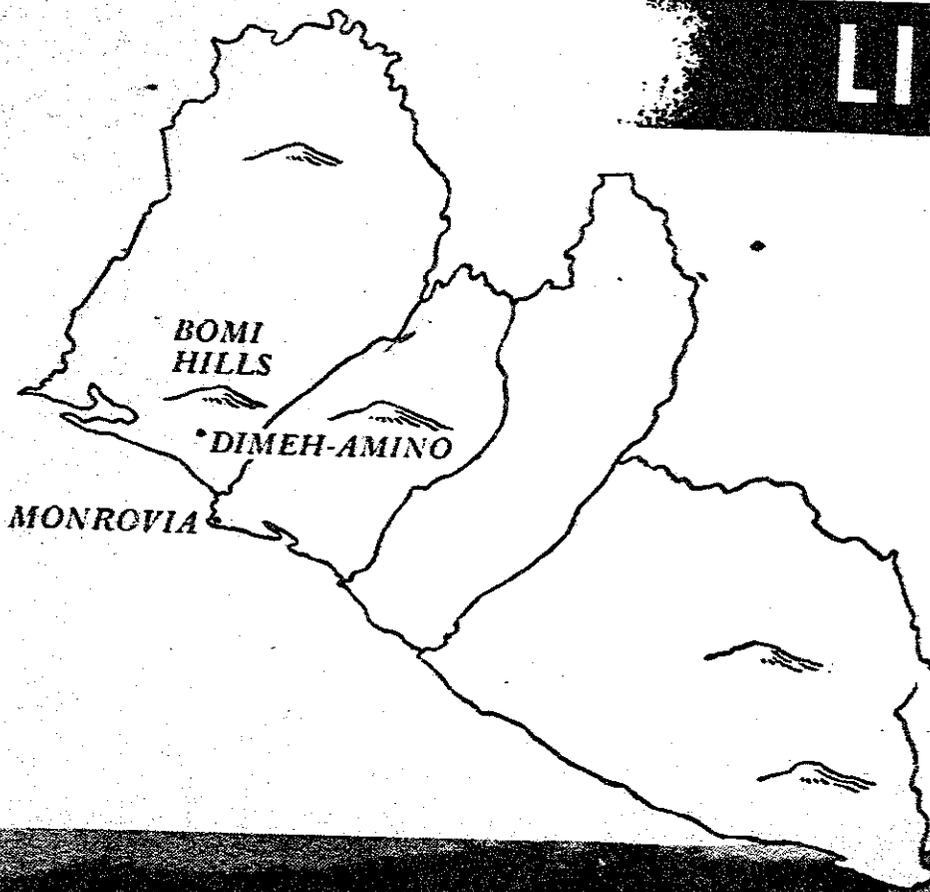
*"The only kind of war we seek is the good old fight against man's ancient enemies—poverty, disease, hunger, and illiteracy."*

On the continents of Asia, Africa, and Latin America, the Point Four Program is leading the fight "against man's ancient enemies," as President Truman called them in his message to the Congress on May 24, 1951.

The stories which follow constitute a "battle report" from these three continents, selecting examples of Point Four work in India, Liberia, and Paraguay as representative of the battle in progress on a broad front.

The report is not primarily in terms of strategy or logistics. Instead it is an inquiry into the human factor which can determine the success or failure of Point Four projects, which can make the difference between human progress and stagnation. If any conclusions can be drawn from this inquiry, they are perhaps that each campaign against hunger and poverty must be fought not only with technical knowledge but also with patience, courage, creative imagination, and a humble spirit.

# LIBERIA



# Frank Pinder

The Point Four idea is based on solid experience and a practical demonstration of what can be accomplished by technical cooperation.

Almost 10 years ago, work began in the little Republic of Liberia on the west coast of Africa, which we now recognize as a pilot project for the Point Four Program. Until recently most Americans knew little about Liberia. They may have learned from their history books that it had been colonized by Negro freedmen from the United States. Since then the ties between the two countries have become strong.

When the African settlement declared itself an independent nation in 1847, it adopted a constitution and a governmental structure modeled closely after our own. The official language is English though most of the tribal people speak their own dialects. In 1943 the legislature sanctioned the use of the United States dollar as Liberia's currency.

During World War II thousands of Americans passed through Liberia on the way to North Africa or the Middle East. A few hundred took part in building or guarding the airfield and the free port of Monrovia. They and some of their fellow citizens back in the United States began to understand the importance of Liberia in the family of democratic nations. The African country that lies closest to the shores of Brazil, Liberia is a necessary link in air communications between the United States, Africa, and the Near East. Two of Liberia's crops, rubber and red palm oil, are "strategic" materials. During 1943, when our sources of rubber in the Far East had been almost entirely cut off, we received 31,000 tons of rubber—half of our supply—from Liberia. Other products that are important are iron, lumber, cocoa, and coffee.

After seeing some of the work of American technicians, the Government of Liberia asked cooperation in developing its country. A United States Health Mission and a United States Economic Mission arrived in the country in 1944. It was the Economic Mission that brought Frank Pinder to the country and set him on the first of his many expeditions to villages and tribes deep in the jungle.

When Pinder came to Liberia he observed that the country did not grow enough food for its population of around a million people. He knew that most of them did not have enough to eat to keep them healthy. He found out that there was a "hungry season" during which starvation came very close to many people. He went out with the full support and cooperation of the Government of Liberia which had long been concerned about the food problem. To deal with the hard facts, he had a sack of seed corn and a few simple farming tools.

This was not Pinder's first experience in helping people to help themselves. Born some 40 years before in Key West, Florida, at a time when most boys in that town grew up to wring a precarious living from the sea, Pinder turned to the soil. After graduating from the Florida Agricultural School for Negroes, he went to work with the poor share croppers in the Everglades.

For a time he taught agricultural subjects at Tuskegee Institute. Then he served as an economist in the Farm Security Administration. Early in World War II, when violence flared up between the Jamaicans brought to this country as emergency laborers and their American employers, he had been called to arbitrate the differences between them.

As Pinder went about his work in Liberia, there was none of the fanfare usually associated with a visiting diplomat. Liberia had no beasts of burden. Human headloading is the method of carrying supplies. Pinder did not then, and never has, ridden in a hammock slung between four bearers. Instead, a sturdy man of medium height, he walked along a narrow trail worn through the jungle by generations of native citizens.

As he walked along, clad in a ragged white shirt, khaki pants,

and heavy work shoes, he puffed away at his pipe, observing the soil, the plants, the trees. He was intensely interested in every aspect of this countryside which he would do a great deal to change in certain localities. As he went, his soft voice and friendly smile made him more welcome than any official trap-pings could have done.

Wartime shortages made it impossible to get any of the supplies that Pinder needed for a trek through a tropical country. He did not wait for supplies. He lived on the land as he went along, and he lived with the people, learning to fit himself into the customs of the country. He learned to know the peoples' problems and their needs at first hand.

When he came to a village, he went immediately to the palaver house—which was also the guest house—and presented himself to the village chief. Toward sundown, when the day's work was over, the chief would summon the village elders and long talks followed. These talks might be continued on the several nights of Pinder's visit. He found it necessary to listen sympathetically to accounts of a variety of troubles such as boundary disputes, domestic squabbles, and tales of hunting prowess. He managed, always, to turn the conversation back to crops, seeds, plants, seasons, and methods of cultivation. This was not too difficult because everywhere the people lived on a day-to-day basis and the threat of hunger was constantly with them.

What Pinder found in the country back of the coastal strip pointed to the need for some drastic changes in methods of farming. The Liberian custom of moving on to a new clearing each year, allowing the cultivated land of the previous year to go back to bush, was wasteful of manpower and land. There was very little protein food—meat, fish, eggs—in the diet of the people. Fresh vegetables were always scarce and practically nonexistent in the dry season.

Rice and cassava were the principal foods. Often, they were the only foods. A little corn was grown in a haphazard manner among the other crops. Rice was planted in the uplands in the rainy season between April and November, but not enough

was grown to carry through the dry months. Hence, the "hungry season."

Talking with the village chiefs and elders, Pinder pointed out to them that if they would clear the inland swamps a crop of rice could be grown which would carry them through the dry months. They protested that it was impossible to clear those swamps. The growth was too dense. Men were not strong enough to do it. Besides, it had never been done. Patiently Frank Pinder assured them over and over again that it could be done. He would show them how with the help of the steel tools he had brought along.

Finally one village decided to try it. Once the decision was made, even the grumblers came along since they had had their say in the palaver house, very much in the manner of a New England Town Meeting. The American, as he had promised, helped in the strenuous task of clearing the bush. Afterward he kept in close touch with the village, offering suggestions about the planting and rejoicing when signs of sprouting began.

At the time of the harvest, Pinder saw to it that a meeting of chiefs and elders from nearby villages was called so that they could see with their own eyes the miracle of a rice crop in the dry season. The demonstration was more persuasive than a dozen arguments to communities which already had begun to tighten their belts. In the next dry season, other "hungry farms," as they are called, began to appear in the swamps.

The Liberians took other steps toward helping themselves. They followed Pinder's instructions about planting hybrid corn, giving it the special attention it needed. In some places they experimented with open ditch irrigation to grow vegetables in the dry season, using seeds given them by the American. Frank Pinder never went out on an expedition without seeds. He was both an itinerant preacher of agriculture and a Johnny Appleseed of Liberia. Now, cabbage which used to sell for a cent a leaf costs only a few cents a pound; a small onion which used to be worth five cents, sells for about the same price as it would in the United States.

Tales of the improvements in crops, trees, poultry were carried to the tribal chiefs. When Pinder called at the palaver house of one of these important personages, he found the chief and his council were interested and would take suggestions. Since the word of such a chief was law all down the line, the area grew where people not only were raising more and better food for themselves but also had some left over to sell.

These first important steps were not without their cost. In 7 years of making what the Liberians call "patrols," Pinder suffered attacks of malaria, dysentery, and other tropical ills—often when he was in the interior far from medical help.

One of the first plans mapped out in the early days of the Economic Mission was the training of Liberians in modern methods of farming. Sixty trained Liberians have been sent out to the more important farming areas to teach the use of improved seed, new farming methods, and the use and care of farm equipment. Pinder has one United States assistant and a rotating staff of about ten Liberian technicians. He trains and then releases them to work in the Liberian Department of Agriculture and Commerce.

Pinder had a great deal to do with the modernizing of this department. When the Economic Mission came to Liberia, the Government's Bureau of Agriculture had a staff of one or two and a token appropriation of a few hundred dollars a year. Within a year, it had been enlarged and granted more funds. In 1948, the Liberian Government created a Department of Agriculture and Commerce of full cabinet level, with a budget of \$100,000 a year. In 1949, the Liberian Government paid for the whole training program, which has been continued and expanded with the aid and advice of a U.S. mission.

When Pinder first started making his expeditions into the countryside living with the people and making note of what was lacking in their diet, he was struck by the small, scrawny chickens which laid eggs not much larger than robins' eggs. At his recommendation, the Economic Mission and the Department of Agriculture imported from the United States several

hundred large roosters of the best strains. Two hundred of these were allotted to the Booker T. Washington Institute and the rest were kept at one of the Mission's experimental stations.

Reports of big, healthy chickens and the size of the eggs they laid spread through the countryside. People traveled long distances on foot or by canoe to see them. A few of the new chicks were given to native farmers. They agreed to feed them strictly according to the rules laid down by Mission personnel and later to distribute their offspring to neighbors. Those farmers lucky enough to be assigned the chicks have treated their good fortune as a solemn trust and are helping with their distribution. Large, fresh eggs are doing wonders in raising the Liberian standard of eating and living.

The national income of Liberia comes mainly from rubber growing, which belongs mostly to a private concession, and from the sale of palm oil, palm kernels, and cocoa. Red palm oil is important in the processing of tin plate. All of it used to be obtained from wild oil palms. The oil was extracted by the simplest of hand methods. Pinder brought in a better strain of palms from Nigeria. These have been successfully raised on the experimental farms of the Government and the Mission.

In terms of individual human beings and of families, the changes wrought by these improvements have been large. An example is the case of Festus S. Kandakai of the Ganyea clan in the Liberian hinterland. Mr. Kandakai, his wife, and their four children of school age, all working the whole day, were scarcely able to wring a bare subsistence from their 15-acre farm and the few wild palms on it. The family's income was about 50 dollars a year.

In 1946, Kandakai asked the Economic Mission for help in growing vegetables. Three years later, in 1949, the Kandakai family had an annual income of 300 dollars. In addition to selling the vegetables, they have added some to their own diet. The four older children go to elementary school at Saukoko now. Kandakai has added a block of about 50 acres to be planted to

improved palms and cocoa and some day in the not too distant future he expects to own all his land outright.

There is the village of Dimeh-Amino, not far from Monrovia, where the Liberian Government, with United States cooperation, has begun a pilot project. World War II had cut off the trade in palm oil, palm fiber, coffee, and rice which had been carried on with German and Lebanese traders. "There was so little we could sell," the tribal elder, Momo Taweh, told an American visitor, "that we found it impossible to pay our hut taxes." The hut tax is the principal real-estate tax in Liberia and amounts to about three dollars a year.

Representatives of the U. S. Mission discussed the possibility of raising fruits and vegetables for sale in Monrovia. Seeds, simple tools, and other equipment were supplied. The first season, the people produced enough vegetables for sale. With some of the money they earned this way the village bought three 80-gallon kettles for cooking palm oil. Use of the kettles resulted in a better product because there was less acid left in the oil. Now, money is being invested cooperatively in an oil press and a nut-cracking machine. More young palm trees of improved variety have been planted. Head Chief Anadu takes pride in the fact that the annual income of each family has increased from less than five dollars a year in 1944 to about twenty-five dollars, now.

When the technical workers of the Economic Mission first began to go to the project at Dimeh-Amino, which is about 15 miles from the capital city of Monrovia, it took them about 8 hours of combined walking and canoeing to reach the place. Now by crossing the fine new bridge over the St. Paul River and following the new road which has been built, the traveler covers the distance in a car or truck in about 30 minutes.

The United States Pure Food and Drug Administration used to prohibit the entry of Liberian cocoa into the United States because of its poor quality. During the war years, European markets were cut off and the cocoa trees became part of the jungle. One of the first things Pinder did on coming to

Liberia was to encourage the people to clear the groves and to teach them to prepare their product for market. They have recently set out 600,000 young cocoa trees. When these come to full production, they will supply nearly 150 tons of exportable cocoa beans each year, most of which goes to the United States.

The building of new roads has had much to do with the expansion in agriculture and industry. In 1938 there were about 200 miles of roads in Liberia. In 1950 there were over 1,000 miles. With the roads have come also a demand for all kinds of goods from the United States—trucks, tractors, road-building and maintenance equipment. Now hundreds of farm families can take their produce to market in a day, whereas it used to mean weeks of weary plodding on foot. The produce arrives in better condition and the farmer can get better prices for it.

While these projects were going on, the United States Mission and the Liberian Government were advancing a survey of the entire country covering its soil, forest and mineral resources, future transportation possibilities, and other phases of economic life. The Government of Liberia has expressed a desire for United States technical cooperation in a long-range development program based on this survey.

Over a 5- to 10-year period the program will concentrate on five major fields: engineering, with emphasis on road-building and hydroelectric works; agricultural development; further health services; basic education; and improved public administration. The Liberian Government expects to contribute 20 percent of its total annual revenue, or about one million dollars a year, to these plans. The annual rate of United States spending for the program reached \$850,000 during the year 1951.

In Liberia, U.S. capital has found an open-door policy and a stable government. Since 1926, the Firestone Rubber Company has leased land for the cultivation of rubber. At present the company has 70,000 acres under production and another 10,000 acres of rubber trees which will come into production within the next 5 years. Its plantations contain model villages to house

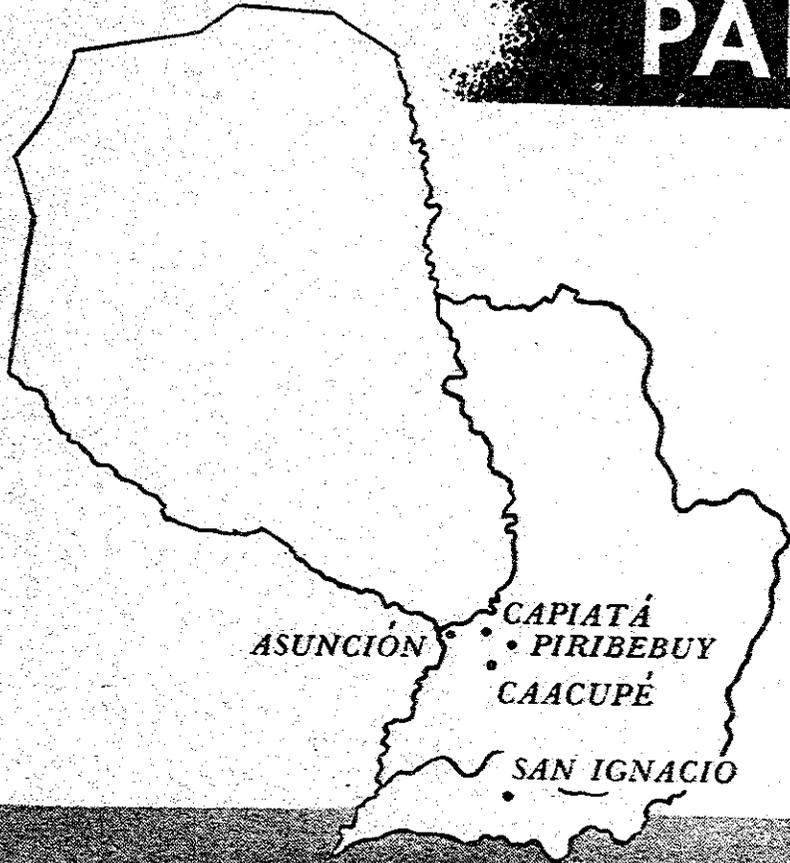
the rubber workers who are provided with modern medical care and hospitalization.

Other American firms have gone into Liberia. The Liberia Mining Company is developing iron-ore deposits in the Bomi Hills. This company has built a 50-mile railroad from the Bomi Hills to the free port of Monrovia. A third concern, the Liberia Company, deals in cocoa plantations and small trading and sawmill operations.

Liberia has proved a staunch independent ally to the United States. Both countries are profiting from the cooperation between the Health and Economic Missions of the United States and the Government of Liberia. This is true whether you consider Frank Pinder exploring the countryside to show the people how to help themselves or whether you consider that annual trade between the two countries has grown in 9 years from \$2,000,000 to \$21,500,000.

Both have laid a firm foundation for the Point Four cooperation which the United States and Liberia, as free nations, have pledged themselves to continue in the years ahead.

# PARAGUAY



# *Albion W. Patterson*

As our forefathers went westward from the Appalachians to the Pacific Ocean, they took with them, in addition to their passion for freedom, a decent respect for education. School teachers followed along in the wagon tracks and many times the first one in a community was from New England.

The teacher usually combined knowledge from books with a Yankee ability to do things well by hand. This breed of helpful men and women has not died out. One of them, Albion W. Patterson, has been the moving spirit behind great changes which are taking place today in the country of Paraguay.

In the early days of his work there, Patterson found it hard to convince Paraguayan technicians that "know how" was just this old-time combination of theoretical knowledge and skilled hand work.

"It is not the custom of our country for an educated man to do things like a common laborer," one technician protested.

"But it works better," Patterson persisted, and he kept right on showing farmers and students how to use a steel plow, or a cultivator, how best to turn velvet beans under to fertilize the soil by doing these things himself. Eventually, custom gave way to the obvious fact that people learned how to do things faster after a demonstration. Now, Paraguayan teachers use their hands, also, when they feel it will do the most good.

While the Point Four Program was introduced as a bold new idea in President Truman's inaugural address, programs of technical cooperation have been carried on for more than 9 years, particularly in Latin America. Patterson went to Paraguay in 1942 as one of three technicians from the United States. At that time, the Paraguayan Government had been among the first of our southern neighbors to request help from the Food

Supply Division of the Institute of Inter-American Affairs. In the 9 years which have passed since then, the lanky, energetic figure of Patterson has become familiar to farmers all over the land.

Though they gave him the respect due an important foreigner, they were somewhat amazed by him. Tall and fair with friendly blue eyes and a scholarly air, he seemed really to be interested in their troubles. He also seemed to be always in motion—striding across the fields, picking up samples of soil to examine them, riding out on horseback to inspect local cattle, or later, bouncing by in one of the trucks belonging to the Institute of Agronomy.

Moreover he did not often dress like a foreign dignitary, or even like an important business man out from the capital city, Asunción. Instead, he went about in a soft shirt open at the neck, work pants, and many times he had on his head, a broad-brimmed, home-made palm-fiber hat like that of anyone else working in the country. He looked as if he were going to get right down to a job himself, which, of course, is exactly what he did. In spite of this—or perhaps because of it—he is now liked and respected by officials in Paraguay. It was not, however, always that way.

As the three North Americans who formed the Food Mission soon discovered upon their arrival in Asunción in 1942, the request for North American help had not been unanimous on the part of all government officials. Quite a number of them were doubtful of the intentions of the northerners. Despite some deliberate discouragement, the Mission went about its business of looking over the country.

When questioned, Patterson will modestly say that he went to Paraguay merely as an interpreter. He had been a student of Romance languages and had lived many months in Spain. Later, he had been head of the Romance Language Department at South Kent School in Connecticut—a school whose students worked on the land maintaining the school farm as part of their curriculum. In Paraguay, Patterson's translating went beyond

mere words. He wanted to understand the people. He wanted to know the reason why, in a subtropical climate somewhat like that of California, they had such a desperate struggle for existence.

What Patterson and his two companions saw was a country about the size of California with rivers, forests, fertile plains, potential hydroelectric power. From an agricultural point of view, Paraguay "had everything" except the opportunity to take advantage of it by modern methods. To a man born in Springfield, Massachusetts, who had inherited the New England urge to make a great deal out of little, this was a challenge.

Outside of Asunción and one or two other cities, most of the people of the country were small farmers who were living in a state of continuous depression. Between them and the twentieth century world, as it was represented in the cities, there was little communication. The roads were adequate, at the most, for ox carts. Despite the democratic processes which existed in Paraguay, the average small farmer lacked methods and means of communication to help himself.

Long ago, the Spaniards and the Guaraní Indians had intermarried so completely that there is no racial problem in the country. But Paraguay is bilingual. Even with a thorough knowledge of Spanish it is sometimes difficult to make conversation in rural areas because Guaraní is the language of the home, of friends, of all pleasant personal discourse. But with his ability to invite confidence, to understand feelings without too many words, Patterson learned a good deal about the way of life and the problems of these country people.

The family and farm of Juan and María Gonzales—not their real names—might be considered typical. Juan's farm, Patterson discovered, consisted of about 20 acres of land, a good deal of it worn out. A wooden plough, an ancient hoe, an axe, a machete, and a shovel were his farm equipment. Sometimes, with luck, he could arrange to borrow his neighbor's oxen. His house was a well-ventilated affair of poles and mud where he and María, their five children, and a scattering of relatives shivered

through the rainy months. In the warm season, they used a lean-to with a palm thatched roof. They had no furniture and very little clothing. Despite their poverty, Patterson felt these people had tremendous possibilities. With proper help, these small, independent, democratic farmers could become the greatest asset of their country.

In December of 1942, the Government of the United States and the Government of Paraguay entered into an agreement to help the Paraguayan farmer lift his standard of living. This agreement created the "Servicio Técnico Interamericano de Cooperación Agrícola," referred to as the "Servicio." A Servicio is a cooperative service unit set up within the appropriate ministry of the country. It is staffed by technicians from the United States and workers and trainees from the country within which the work is to be done. In the case of this agreement, it meant that technical knowledge from the United States would be applied to cattle raising, lumbering, land use, colonization, and economic planning. In plain words it meant that Juan and María were going to get a break at last.

At the time the Servicio was established and Patterson was asked to join the staff, he hesitated. Back in the United States, he had once been in the educational section of the Agricultural Marketing Administration for the Western States. But this, of course, did not make him an agricultural expert. However he had become intrigued by the problems of Paraguay and felt a tremendous sympathy for the people. He decided to stay. Sometime later, he became Director of the Servicio and Chief of Field Party.

When the Servicio staff had been assembled, they decided, with the approval of the Paraguayan Government, that what they needed to do first was to take stock. Seven years before the census for all of Latin America began, the Servicio trained 1,300 enumerators who went to 100,000 farms and made a complete survey. When they had finished, their figures furnished a basis for action.

The first step was to set up a system of supervised credit which is now known as CAH (Crédito Agrícola de Habilitación). It was modeled on forms of credit which had been successful in the United States, particularly in the South. Supervised credit in Paraguay meant that a farmer who applied and received a loan was given a plan by a farm credit supervisor for improving his farm, thereby making the money with which to pay back the loan. At the same time, his wife worked out a plan to improve their home with a woman credit supervisor. The organization of the system and the training of supervisors, both men and women, were the job of technicians from the North. The money was provided by the Paraguayan Government through the Bank of Paraguay.

At first the farmers regarded the whole idea doubtfully. There had been other plans for farm credit. Nothing much had come of them. Juan Gonzales and his neighbors felt that this scheme had something phoney about it. They were being offered a great deal for nothing and the pay-off, they were sure, would come later and be heavy. Misfortune, wars, frequent changes of government had made skeptics out of them.

But slowly a few venturesome souls applied to the Credit Organization. Sometimes they would do so after a visit from the tall, blonde North American. Patterson was making a point of knowing the people well. He learned their songs, their legends, tried to understand the particular sense of humor revealed in their stories. He would ride into a farmyard at about the time of a noon meal and, since peoples of Spanish descent are invariably hospitable, he would be invited to share the family dinner of lean beef, yellow corn, mandioca. Or, if it were late in the afternoon, he would be offered cold yerba maté.

"Have you seen the North American machine which does the work of many hoes at the farm of Manuel Diego?" the guest would ask.

"Si! Si!" The eyes of Juan and perhaps his eldest son would light up at the recollection of how fast Manuel had been able to do work that formerly took 7 or 8 days. Patterson would then

make an estimate of how long it would take a cultivator to go over Juan's land and the difference between that time and the time it was taking him now.

Sometimes Patterson or some other member of the staff would go into a small farming community and give a visual demonstration of the difference between old-time tools and modern implements. But even when a man applied for credit, he could not believe that life really would change for him. According to Patterson, he would be liable to explain himself to the neighbors in some such way: "Of course I take the loan. Who, being poor, will dare refuse so nice a help? Pablo, my brother, says the same. But we are not so foolish. If tomorrow we don't pay, maybe we will be slaves to the Nortes. Maybe all my country must be sold one day to Nortes to pay for this nice help."

In any rural community, the family is the unit of production. What about María, then? Was she to go on cooking over an outdoor fire? Raising her children under unsanitary conditions? It did not make much sense to lift the income of the family if the members had not the ability to change their ways of living.

In the history of Paraguay, women have played a part unusual in Latin America. It is reflected in Guaraní song and story which portrays them as being tender as well as heroic. Many of them went to war with their men in the great conflict of 1864-1870 in which the small nation came very close to defeating its three big neighbors, Brazil, Uruguay, and Argentina. After the war there were left, roughly, eight women for every man. The women saved the country from utter collapse though until this day it has not been able to make much economic headway.

During the war of the Chaco, 1932-1936, the women stayed behind and ran the farms. The Government feared what the consequences would be to the crop output. To the amazement of all, there was a slight increase in production during the war years. Definitely, María is a hard-working full-time partner to her husband.

The first Domestic Work Center was established at Capiatá. Promising farm women from the vicinity were invited to join. Here they were taught improvements which could be made to the typical Paraguayan home to make it healthful and more pleasant. Domestic arts, hygiene, and nutrition were on the schedule, taught by supervisoras of the Farm Credit Organization.

Since the women brought their younger children with them, there was a double opportunity—to train the women on child care and to give the children some training. A nutrition survey of the country had been made and had confirmed the fact that the Paraguayan diet was woefully deficient in green vegetables. Since Juan refused to be bothered with a truck garden, María was taught to raise vegetables from seeds provided by the Servicio. Then she learned to cook beans, peas, onions, carrots, cabbage, and spinach. When she raised these on her own farm, she took on the most difficult job of all—teaching her family to eat them and like them.

Other Work Centers were established as CAH grew. They were fine as far as they went, but Patterson felt they did not go far enough. The rural families most in need of such education were too remote to benefit by it. So he proposed to the officials of the Paraguayan Ministry of Agriculture that a group of specially chosen young women be trained at the Institute to ride out to the more remote communities to teach the farm women in their own homes.

In a country traditionally conservative about women, this plan was viewed with alarm. It sounded very radical. Patterson urged the practical aspects of the idea. "The men supervisors help the men to plant more and thus they earn more. These women supervisors will see to it that the money is not spent on liquor or horse races but is used to improve the living conditions of the whole family."

The Paraguayan officials could see the point of this. "But," they retorted, "these women who are unmarried and must travel long distances alone on horseback will not be respected. If any-

thing happens to them, it will bring much ill repute to the whole program."

Despite the head shaking, the experiment was tried. About 35 young girls were chosen for the first class, after careful screening. These supervisoras have been enormously successful. They have suffered neither from dangers on the road nor from malicious gossip. Instead, ambitious young farmers have led them to the altar in such numbers that the Servicio must continually train new candidates.

When a farmer applies to CAH for a loan, the procedure goes something like this. He is visited by a trained supervisor. The two men spend the day walking over the farm discussing how it could be improved through a loan. If the possibilities are good, the district supervisor and the farmer's wife are called in too. The four together set up a farm-and-home loan plan. Nothing is left to chance. The amount of increased income which is to go toward the yearly repayment of the loan is put into a contract.

Then, the credit supervisor helps the farmer choose a pair of oxen, or buy a steel plough, a cultivator, or a knapsack sprayer. He explains the necessity of two practices which he has been taught by the Servicio and which are new to Paraguayan farmers—crop rotation and the use of certain legumes, such as the velvet bean, to increase soil fertility. Past credit systems have not been successful for the average Paraguayan farmer because they have not been supervised. Now, Juan and María not only begin to live twice, three times as well within the first year after applying for credit but they have a goal. They can see a future for their children.

If it seemed to the Paraguayans that Señor Patterson was always in motion, they were not far from wrong. Where poverty and discouragement have been long entrenched, they must be attacked from many directions. And that, in Patterson's opinion, called for action. Sitting at a desk issuing directives would accomplish nothing.

Now that Juan had a way to purchase his own land, other considerations came to the fore. Since Paraguay is not an indus-

trial country, equipment must be imported, and practically all of it has come from the United States. But what about the land itself, worn out from decades of poor management? How about the indifferent stock? The orchards which, in many places, had gone back to jungle?

One of the first undertakings of the Servicio was to establish an Institute of Agronomy, a 500-acre farm at Caacupé about 30 miles from the capital. Here soil and agricultural methods are tested. Nurseries have been set out. Fertilizer and rotation tests are carried on, and a small model farm is maintained exactly as if it were the property of an average farm family.

During the same time, the Servicio began to train young Paraguayans to be credit supervisors and supervisoras. One of Patterson's firmest credos has been that the Paraguayans should take over the development program of their own country as soon

*Patterson and a Paraguayan instructor at the Institute of Agronomy.*



as possible. In his opinion, this educational program is as important as helping Juan to help himself.

One of the difficulties with the Paraguayan economy has been that certain areas, mostly around Asunción, have been crowded so that 60 percent of the population has lived in  $\frac{1}{20}$  of the area of the whole country. In the past, efforts have been made to move Paraguayans into the open areas or to bring in immigrants from other parts of the world. These colonization efforts failed largely because the areas for resettlement had not been prepared for the newcomers. Plans had not been made for development, and there was no supervised credit. A model colony was established at Piribebuy in 1946. In 1948, a new, larger colony called the Misiones Development was started near San Ignacio. Both these recent efforts promise well for future colonization in Paraguay.

For generations, Paraguay had been a cattle country and practically no attention had ever been paid to dairy farming. Milk, such as there was of it, came from range stock. On his first arrival in the country, Patterson was struck by the fact that in the cities it was sold, raw and diluted, from door to door by individual hawkers with little or no attention to sanitary measures. In 1943 the Servicio started a model farm and dairy at San Lorenzo. It supplies the only bottled, pasteurized milk in the country. It is serving not only as an education center for small cattle owners and dairy farmers but is teaching Paraguayans to drink and appreciate good milk.

To improve the quality of the range cattle, a model stock farm owned and equipped by the Paraguayan Government but staffed by technicians from the United States was established at Estancia Barrerito. Modern range and pasture management is demonstrated here. The importation of Zebu bulls for crossing with English breeds and Criollo cattle to develop a better local beef breed has followed closely similar experiments in the southern part of the United States.

According to Fletcher Warren, Director of the Office of South American Affairs, who was our Ambassador to Paraguay from

1947 to 1950 and had opportunity to watch Albion Patterson at work, "He spearheaded all our efforts in Paraguay. He studied his work as few men study their jobs and I consider him one of our most effective Chiefs of Field Party." All of which praise would undoubtedly confound and abash the Yankee schoolmaster who is helping to change the life of a country and a people. He would indignantly claim that the credit was due the entire staff of the Servicio, both Paraguayans and North Americans.

Undoubtedly, the technicians who have accomplished so much in a short time and with no great expenditure of money deserve much credit. Patterson was no agriculturist, but he taught himself to cover all their individual jobs as he went along. Just translating what they were saying to students did not satisfy him. He wanted to understand what he was saying, what they were doing. One visiting official from the Institute of Inter-American Affairs recalls finding him at 5:30 a. m. poring over a volume of Morrison's *Feeds and Feeding* in preparation for a demonstration scheduled for the day. Among the titles which Mr. Patterson, a modest man, holds are Chief of the Institute of Inter-American Affairs' Mission, Chief of Field Party, Food Supply Division, IAA, Director of STICA (the "Servicio") and member of the Paraguayan-American Commission for Technical Cooperation.

Although he has learned to love the people of Paraguay, he has not become an expatriate by any means. According to ex-Ambassador Warren, he has stayed as American as cornbread and turnip greens. On his rare trips back to the United States, Patterson has been able to answer questions of American business men in terms that satisfy them.

Regarding the program as a whole, it has worked out that for every Point Four dollar put in by the United States, three Point Four dollars have been contributed by other countries. In the case of Paraguay, there has been a great increase of imports from this country. Fifty thousand Paraguayans who did not use steel ploughs before are using them now. And they are being intro-

duced to other modern conveniences—cultivators, sprayers, household items and insecticides—practically all of which come from the United States. In 1948, six years after the program started, the Government of Paraguay gave the International Harvester Company an order for \$2,500,000 worth of equipment, a considerable item in the Paraguayan economy.

To a man who has been completely devoted to his job, it seems unbelievable that anybody could question the larger issues: the fact, for instance, that we are helping to build and strengthen a friendly neighbor; the fact that communism or any other strange ideology will have a hard time making headway in a country made up of small, prosperous, democratic land owners.

There is still, of course, a great deal to be done. Progress must be measured in years when the living conditions of a whole people are being changed. But there have been heartening signs that the people understand and approve. They have lost their wary attitude. They now come readily to the Servicio for help. The Government of Paraguay, through the Ministry of Agriculture, constantly consults with Patterson and his aides.

At the Agricultural Conference of the Organization of American States in Montevideo, December 1950, the Chairman of the Commission from Paraguay, Señor Roberto L. Petit, gave full credit to the United States for helping his people to improve their lot. After the conference, three other Latin American countries asked Paraguay to help them set up similar credit systems. There can be few happier rewards for a schoolmaster like Albion Patterson than to see his own students teaching.

# INDIA



# *Horace Holmes*

India is a land of extremes—heat and cold, poverty and riches, ancient customs and modern progress. It is also a land of paradoxes. For example, in a year when the Government of India was forced to ask for emergency supplies of wheat to feed millions near starvation, a group of Indian farmers in one small area not far from New Delhi had success in doubling their wheat crop.

Their potato crops were yielding over twice as many bushels as before in the same acreage. Vegetable crops were larger, finer, than they ever had been in the memory of the oldest farmer. What had caused the rich yield? Who created the miracle of fat acres in the midst of miles of lean, barren earth? Actually it was no miracle. The change had been brought about by the careful planning, the patient demonstration, and the devotion of a small group of men, one of them an American who had come to India in the spring of 1948.

Horace Holmes, now the Chief of the Agricultural Group of our Point Four Program in India, believes deeply in the common bond between men of the soil all over the world. A lean man in his mid-forties, with keen, deep-set brown eyes and the soft-spoken accent of his native Tennessee, he is by no means inarticulate. He can express eloquently the feeling which has animated his relations with other farmers, particularly those of India.

“There is a fellowship and an understanding among people close to nature. It may be that, schooled by the same teacher, we have more common understanding. It may be a spiritual bond stronger than those made by men. It is the understanding of some of these fundamental concepts of right and wrong, of decency of man to man.”

Because he is also an eminently practical American, Holmes is able to carry forward these ideals effectively. He has been engaged most of his adult life in the workable application of science to agriculture. The power of science working for humanity can be a great weapon of the free world he feels. To anyone who demands, "What do we get out of all this?" he has an answer on the personal level which every other American should be able to understand. "I have four sons. There are 350,000,000 people in India. I would rather have them with us than against us."

Having worked in China immediately after the war with the United Nations Relief and Rehabilitation Administration, Holmes came to India with some understanding of the Orient. He has great respect for the civilization of the East and he has been careful always to work within the tenets of the peoples' religion and customs. While this proved to be a sound approach, it was not always easy to follow. How well Holmes has succeeded is proven by the fact that on June 11, 1951, Prime Minister Nehru paid tribute to him by citing the remarkable progress he had made in bringing about a new orientation in the outlook of farmers.

When the growing chaos in China made further agricultural planning impossible, Holmes looked forward to going back to the States. He has a farm in Tennessee which he had not seen for a long time. Situated about nine miles from Whiteville, not far from Memphis, it has a simple white clapboard house set in the midst of cotton and corn fields. Holmes was born and brought up there. He rode a pony to school in the little town. It is the sort of farm and the sort of boyhood from which many thousands of Americans have gone out into the world. While in China, he occasionally, when he had a moment to take from the immediate tasks in hand, thought about it. But he was not destined to get back to Whiteville for that visit.

Toward the end of the war, with the prospect of freedom stirring throughout all of India, Prime Minister Pandit Jawaharlal Nehru had become interested in city planning as it had

been presented to him by an American Army officer stationed in India. After independence, it became evident to him that city planning would be of little use by itself since almost 90 percent of the population lived in rural communities. Prime Minister Nehru began to make inquiries for a top-notch agricultural technician from the United States.

Through the Indian Council of Agricultural Research, a good deal of interest had been aroused in farm extension work as it was carried on in our country. For that reason, an American seemed the logical choice. The name of Horace Holmes, who had once been an agent in farm extension work, was mentioned.

While an undergraduate at the University of Tennessee, Holmes had become interested in the work of Dr. George W. Warren who was teaching at Cornell University. Warren, who is well known for the agricultural evaluation work he did for President Franklin D. Roosevelt, was an authority on farm management and marketing. After finishing at Tennessee, Holmes went on to Cornell for graduate study. Arriving there, he told Dr. Warren enthusiastically, "I would have gone to India if you had been there!" As it turned out, he himself was to take many of Warren's revolutionary ideas to India.

When freedom came at last to that ancient land, the officials of the newest democracy recognized the need for great changes. In a speech over the radio, shortly after her arrival as Ambassador to the United States, Mme. Vijaya Pandit, sister of Premier Nehru, told some of the objectives of her government.

"First, on the debit side of the national ledger is India's greatest weakness, as it is that of all countries of Asia, the crushing poverty of the masses of its people. President Roosevelt spoke of the one-third of this nation which was ill-fed, ill-housed, and ill-clothed. In India one speaks of the nine-tenths of the nation which is ill-fed, ill-housed, and ill-clothed. In America, each of you has an average life expectancy, a reasonable hope of living to sixty-three. In India, our people can only hope to live to an average age of twenty-seven years. Our first effort, therefore, is the terribly urgent one of giving Indians more food, shelter,

clothing, and improving their health. Toward this end we are putting millions of additional acres under cultivation, beginning to build great irrigation projects, combat soil erosion, set up health clinics, better the methods of food distribution, electrify rural areas . . . .”<sup>1</sup>

Mme. Pandit went on to say, “Priority number two, and only just below that of giving more food to our people, is to give them more democracy. There is going on in India one of the greatest democratic upheavals the world has ever known.”

When Horace Holmes arrived in India in the spring of 1948 he realized how much must be done to achieve these goals. All the problems in India are on a large scale. They are also complex. He went to work—at that time as a private citizen having no connection with the United States Government—under Premier Balabhai Pant of the United Provinces. Premier Pant gave him every possible aid and encouragement.

After Holmes, with several Indian officials, had made a survey of the situation, they decided that the American would make his headquarters at New Delhi, but the work would be started in an area roughly one hundred square miles around Etawah, United Provinces. The chosen territory had to be small enough to give it close attention for study and yet large enough that whatever happened there would be significant. In contemplating an attack upon conditions so long existent and so complicated, it is natural to wonder, “How do you start? Where do you begin?”

According to Holmes, the answer is simple. “Find a few people with the right spirit.”

When these people were discovered, the next step was to talk things over with them, to win their friendship and their trust. Holmes says, and it has been a major thesis of all his farm extension work in the United States as well as abroad, “There is a tremendous difference in helping people do something they want to do and in trying to high pressure them to do something someone else feels will do them good.”

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<sup>1</sup> NBC radio discussion, The University of Chicago Round Table, June 26, 1949.

In the little village of Mahewa, a few interested farmers agreed to try to improve their yield of wheat—a staple grain of India. In small strips, they put in Punjab 591 seed, which had given promise at the Punjab Experimental Station. When the harvest was in, the farmers who had experimented weighed, measured, and discussed the results. The trials had resulted in an increase of 43 percent over the native wheat. On the following year, whole fields were planted to the improved wheat.

Along with the use of improved seed, the practice of turning under native legumes—dhanchi, moong, sunnai—to enrich the soil was demonstrated. Villagers were also taught to make and utilize compost piles. None of these steps were taken hastily. When people live close to the edge of starvation, they learn to be cautious about innovations. They cannot afford to be otherwise. In the case of Mahewa, the experiments paid off well. Now, in that area where other villages have adopted these

*An Indian farmer proudly bundles his bumper wheat crop.*



modern practices, the yield has gone from an average of 13 bushels per acre to an average of 26 bushels, and one particularly diligent farmer reaped as many as 63 bushels from one acre.

In all these enterprises around Mahewa, Holmes was ably assisted by Harish Chandra Seth, a young farmer who had turned extension worker. According to Seth's own words, he had never worked so hard in all his life but he has gloried in every small, slow step forward his people have made. Another indispensable coworker is a young farm-lecturer at the Benares University by the name of Bijnath Singh. With a burning desire to do something for his people, he has assisted by giving religious reasons for attempting new methods which otherwise the people would not have tried.

As an example, in one village they refused to turn under the legumes while they were green—which is the proper procedure to get the maximum benefit from green fertilizer. "It will kill the plants before they have matured and that would be taking life which we are forbidden to do," explained the farmers. Holmes talked it over with Bijnath Singh who consulted his Bhagavad-Gita.

According to Bijnath, the farmers were by no means wrong in their objections. However, the book of Vedic Laws also stated that the *first* obligation of a farmer was to feed himself, his bullocks, and his family. Therefore, he had a choice between two evils and ploughing under the green legumes in order to provide more food for his family was the lesser of the two.

Following the experiments with wheat, increases were promoted in the potato crops which went from an average of 119 bushels per acre to 235 bushels in the chosen area. From improved seed and soil enrichment, the next step was the use of better tools. An *olpad* thresher, a simple device for threshing grain, was introduced.

An old saying of the people is that "The share of the plough is the sword of India." But for 2,000 years or longer, there has been little change in the plough in India. Holmes and his

assistants demonstrated small turning ploughs (Gurya) on the farmers' own farms and they have become increasingly popular.

Within modern times, Indian scientists have made some valuable contributions to agricultural research. Dr. Mehta at Kam-pur evolved a hitherto unknown method of treating seed for the control of smut. Other scientists have developed new, superior strains of rice. But there was a tremendous gap between the scientists and the millions of poor struggling farmers, most of whom could neither read nor write. Somehow the benefit of modern methods must be brought from the laboratory to the land. To get out on the land and work with the people, as Holmes and his assistants have done in Mahewa and in other villages, is the only method which results in progress.

Out of the experiments in the chosen area around Etawah, certain principles which Holmes felt should govern all the agricultural work in India began to emerge. First, it was obvious that any new methods introduced must be immediately adaptable. The average Indian farmer, raising barely enough to feed himself and his family in the good years and close to starvation in bad years, could not afford long-range experiments.

Second, what was to be done must be accomplished with what materials were at hand or could be easily obtained. An example of economically acceptable change has been the effort to induce farmers to use cow dung as fertilizer instead of burning it for fuel which is done now. The Indian Government has provided fast-growing young trees which will eventually become fuel and put an end to the age-long waste of valuable fertilizer. The third principle is acceptance of the fact that all changes made must fit into the deeply religious lives of the people.

To speak of Indian agriculture is to raise the question in American minds, "What about the famines we read about?" Death from starvation itself is not a mass phenomenon. But in bad years, the people live on so very little that their health is impaired, their vitality subnormal. They fall ready victims to the ever-present diseases—malaria, cholera, plague, typhoid, typhus.

For the past 5 years, the monsoons have failed the farmers of central and south India. Their crops have been poor or have been stroyed by the drought. The technical aid offered by Holmes and his assistants offers hope of alleviating future famines. First, farmers are being taught to work the soil so as to conserve every bit of moisture in it. Second, they are being induced to clean out the ancient tanks—or ponds—which must long ago have been built for just such a purpose. In the state of Mysore, alone, which has an area of about 29,000 square miles, there are 26,000 of these ponds! By encouraging the people to restore them to their old function of storing water, an important contribution will be made toward controlling future famine threats.

As the work expanded and more men were trained as teachers and demonstrators, the general improvement went into other fields. The care of animals, particularly the precious bullocks of each farmer, has been improved. The invaluable Bijnath Singh promoted housing improvements with particular emphasis on sanitation. The village of Etawah, through the village "panchayat," set up a unit for adult education. A panchayat is a village council, an ancient democratic unit of government which is being revived under the second of the priorities named by Mme. Pandit.

At about the same time the Ministry of Agriculture started first steps toward farm improvement, another tremendous innovation was brought to the villages. Under Savagram Pathik, a mass education movement began. In each village, those with the ability to read and write were chosen, or volunteered, to teach others. In some places, eager adults learned the rudiments of reading and writing in as short a time as 30 days. The cost for this tremendous boon in the lives of the people was about 21 cents per person.

From the very start of his work in India, Holmes had recognized the necessity of training young men to teach, if the areas of farm improvement were to grow. While India had a long, long tradition of academic scholarship, her technical training

schools were not always too successful. They were not truly vocational. What Holmes wanted were courses that would be immediately practical—work shops where a boy could learn to put a steel tip on a plough, make a compost pile, see with his own eyes methods for conserving water.

Because school of any sort was a luxury for most farm families, he set up courses which could give a boy basic training in 60 days. In these classes about two-thirds of the students would drop out. The remainder who finished became a valuable nucleus of well-trained people to carry on the work in the future. The enthusiasm of the boys who have graduated and gone to work in the farm areas is tremendous. When Holmes or the other members of the Agricultural Mission come to the area near one of their villages, they will walk miles to show a product of their newly found skill or point out progress in the village.

Since 1950, Holmes and his assistants have been working under the Point Four Program in close cooperation with the Government of India. A tremendous factor in the progress so far achieved has been the drive and courage of the two top officials concerned. The Minister of Agriculture, K. M. Munshi, has faith in the doctrine that people can be helped to help themselves. Mr. Vishnu Sahay, Secretary, Ministry of Food, has kept a steady vision before him of the day when India's millions can achieve economic independence. Up to date, the sole expenditure of the United States Government on Point Four work in India has been for the salaries of the technical group.

In the years since he first arrived in the new democracy, Holmes has come to respect and to love the Indian people. For him, the greatest reward has been to have them come to him, not only for aid, but with plans and suggestions.

However, there was a time after he had been in India for 2 years, when he felt that he should go back to the States. He and Mrs. Holmes had been away a long time. He wanted his boys to have the same roots in Tennessee that he had had. For the two older boys, there were problems of education. Premier

Pant could see his point of view, but he urged, "Come back and help us."

It was during the months immediately following partition. Holmes went down to Etawah to say good-by to his friends there. When he arrived, he was met by two or three village elders. "Come with us," they said, "you have helped us a great deal. You have not violated our beliefs. Now, we have something to show you."

They took him to the village temple. There, inside, waiting to say farewell were assembled, besides the Hindus, some Moslems, some Christians, and some Untouchables.

"It has never happened before in all the years of our village," said the elders.

Holmes went back to New Delhi and told the Indian Government that he would stay. The farm in Tennessee would have to wait a while longer.