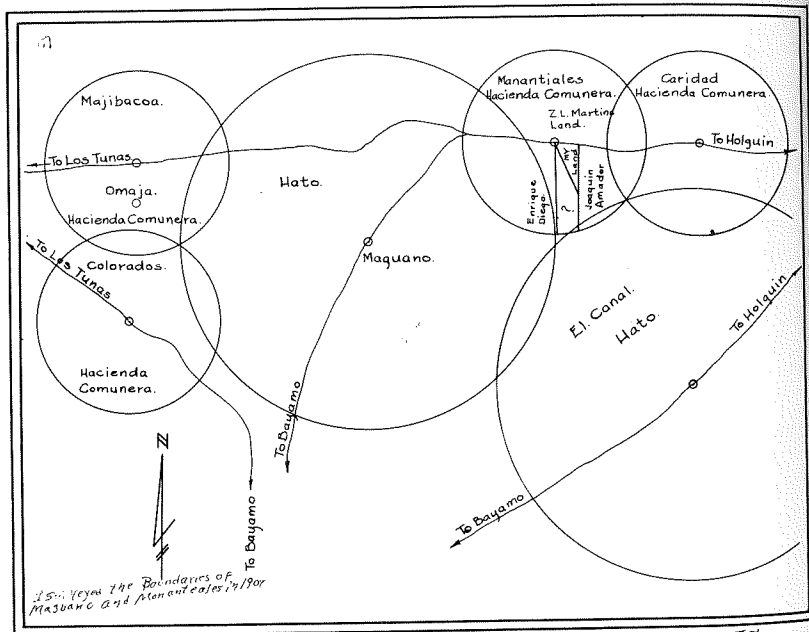


to subdivide or put into pesos of possession. The title had passed down intact from father to son with very little, if any, actual possession. When General Wood's law went into effect, the owner at that time saw that on account of the late date of his Primo Real, whatever hopes he may have had of someday getting more land, had vanished. When he learned that Sir William was buying so much land, he traveled all the way to Camaguey; put his price away down; played Sir William for a sucker; and won. When the survey was completed, Alcides had the pleasure of telling Sir William "I told you so", but that didn't heal the sore spot. Nobody likes to have it proven to him that he has been made a sucker.



RESIDENT ENGINEER

I reported to Palma Soriano as ordered, but my boss, McKie, didn't show up till twenty-four hours later. He was heavy-set, about forty years old and had just come from a harbor construction job at Guadalajara, Mexico. He may have been a good harbor engineer, but we soon discovered that he didn't know any more about railroad location than I did—which wasn't much at that time. He said that our first job would be to make out a list of what we would need in the way of camp equipment, and buy it. He said that some people thought that engineers should skimp themselves and get along with just as little as possible, but they have to spend many years of their lives in camps and are entitled to some of the comforts of life just the same as other folks. So he bought about twice as many tents as we actually needed, folding chairs, spring cots with mattresses, china cups, saucers, plates, soup plates, knives, forks, tablespoons, spoons, teaspoons, a factory-built table, linen tablecloths and napkins, and a big kitchen range to cook on. There was so much of it that we couldn't get it on an ox cart and had to hire a pack train to take the rest. The railroad had already been located to the Contramaestra River, some twenty miles to the west and we were going to set up our camp there.

In other camps where I had worked, we used enamel cups and soup plates without saucers or flat plates. We did have knives and forks for the first table, but let the Cubans eat very much as they were accustomed to eat at home. Every Cuban carried a knife at his belt, fingers were made before forks, and spoons took care of all other needs. Two planks with removable legs made a table, and the cover was oil cloth. The engineers

slept on either army cots or Cuban cots, both of which fold into very small packages. The Cubans slept in hammocks. The engineers sat on camp stools or their cots, the Cubans in their hammocks or on convenient logs. The stove was made entirely of three-quarter-inch gas pipe, coupled together in such a way that there were two parallel pipes seven or eight inches apart, with legs about six inches long. You set it on the ground, put your kettles on top and built an open fire underneath. After the cart and pack train were on their way, McKie said, "We have to see about hiring some men."

I said, "All the men I have seen here are Gallegoes. They are no good on a survey party. Let's wait till we get out there and hire some Cubans."

Pretty soon he went to town; and, on his return, he announced that he had hired a whole crew of men. I asked if they were Cubans or Gallegoes. He said he didn't know. They looked like a pretty husky bunch.

We got started for camp about three P. M.

Several miles out there was a fork in the road, and nobody around to ask questions of. Just naturally we took the wrong road and wound up at the Contramaestra River all right about nine o'clock, but we were miles upstream from where we should have been. Fortunately for us, a Scotsman named William Bell-Irvin had a cattle ranch right by the river crossing and put us up for the night. During the course of the conversation, he asked us if we had any idea what had brought him to Cuba. Of course we didn't.

"To get away from the mosquitoes."

"Do they have so many mosquitoes in Scotland?"

"I came here from Alberta, Canada."

"We certainly have mosquitoes here."

"Yes, but not like they have up there."

I was in the cattle business up there, too, and they were so bad I had to put my cattle in the corral every night and keep a smudge going to keep the mosquitoes from killing

them." (Evidently he hadn't been down along the Salado River.) He had a beautiful ranch there right in the foothills of the Sierra Maestra Mountains. We were there only one night, but I didn't see nor hear a mosquito, nor were there any mosquito bars over the beds.

Next morning we went downriver to where we intended to go in the first place. We found the camp outfit and crew waiting for us. We spent the rest of the day setting up camp, checking instruments, and getting ready to start the survey the following morning. McKie was chief of party, and didn't lay hands on an instrument. I had to alternate between the transit and level; but it didn't make much difference, as we were not getting anywhere anyhow. McKie's "husky bunch" were husky all right, but Gallegoes, just as I feared. Neither Spaniards nor Cubans are diversified like Americans. They learn to do one or two things well and that is it. The Cubans learn to handle an ax, a machete and a hoe. I have never seen better men anywhere on those three implements. The Gallegoes are tops on picks and shovels.

* * * * *

Once, when on a surveying expedition, I was looking for a place to pitch camp. A Cuban told me he had a place right near where the line was going, and that there was a well on it, but the well needed cleaning out. He said he would gladly let us camp there, and would not charge us one cent of rent, if we would just clean out the well. I told my men the score and asked for a volunteer to go down in the well. They told me I would have to get a Gallego. They were not afraid to die. It wound up by me having to go down in the well myself.

On another occasion, the men who cleared a railroad right-of-way, left a very big tree standing. I brought an ax and told the Gallegoes who were building the grade that they would have to cut the tree down before they built the grade there. They told me I

would have to get a Cuban to cut it down. Cubans were not afraid of dying. On this job I, at least, learned why a Spaniard is afraid of dying when he cuts a big tree down. He has no way of knowing which way it will fall. At this time there was something of a depression on, work was very scarce, and men were grasping at anything that would give them a day's pay; but they would not cut down a tree.

* * * * *

An efficient set-up for a survey in jungle country is for the transitman to stand behind his instrument and give line as often as it is called for. The head chainman keeps the chaining up as close to the cutters as possible; and, when he has to stop for a few minutes, he calls for line and sticks his rod up on it. Then the head macheteman lines himself with the range rod and transit, and works his way ahead, always on line and cutting just enough to mark the line well. Behind him come two more machetemen, one on each side of the line, widening it out so that the men can travel along it and the transitman can see through it. As they express it, the machetemen cut everything from the size of the wrist down, and leave the rest for the axman. He cuts the smaller trees and thrusts them aside. When he comes to a big one, he looks up to see which way it leans, then facing the way he was walking he cuts it (say right-handed) about half off on the leaning side. Then, scarcely moving out of his tracks, he takes his ax (say, left-handed) and cuts the other half. Unless the tree is wound up with vines, it falls at right angles to the line. There is no possible chance of its falling on the line or anyone in the line.

* * * * *

This bunch of Gallegoes that McKie hired came out with the idea that they were to cut something down, and couldn't get it through their heads that it made all the difference in the world as to what they cut down. They

attacked the jungle on a good broad front. It looked like a tornado had hit it. With all the coaching I could do, I couldn't get a line narrower than fifteen or twenty feet. Some of them used a machete in both hands, and there wasn't a man on the job that could hit twice in the same place with either ax or machete. Many of the trees they cut were several feet off line and should not have been cut at all. They hacked all the way around the trees, so that the stumps looked like a beaver had cut them down, and the trees fell any way they happened to be leaning. No one knew where they would fall. Trees that shouldn't have been cut at all were cut so they fell right on line, then the limbs had to be cut off and carried off line, and I was scared stiff all the time we were in the woods lest a tree would fall on someone. Fortunately, we had much more open country than jungle. After entirely too many days of that, I succeeded in getting McKie to fire his gang and hire Cubans.

About the time I got the Cubans broken in so they knew what it was all about, and were functioning smoothly, Espeland showed up and I turned the transit over to him and devoted all my time to the level, which was sorely needed here for this was tough country. Espeland was a Norwegian, about thirty years old, just off a job in Africa for an English company. He came as topographer and only took over the transit till the transitman showed up. He was a good topographer, a beautiful draftsman and a hard worker; but I think he was about the most explosive character I ever worked with. He was unmarried, but rather bragged about the fact that he lived with a native mulatto woman while he was in Africa, and was anxiously waiting to get settled on a residency here so he could look for a Cuban woman who would live with him without benefit of Clergy.

He was on the transit about two weeks when Clayton, the transitman showed up.

Clayton was from the mid-west—I think Indiana—was slight of build, quiet, in his mid-twenties, and a hard worker. He was married and had one child. He too was anxious to get settled on a residency, but it was so he could send for his family.

Soon after Clayton's arrival came a Mr. Winkler, a very good example of the old saying, "You can lead a horse to water but you cannot make him drink; You can drive a boy to school but you cannot make him think". He was rather a large man in both directions, about thirty, and prematurely gray. He wanted to study medicine but his father insisted on sending him to Ann Arbor Law School. I don't know if he graduated or not. He certainly never practiced. Why he was ever sent out here, I have no idea. He didn't know one thing about anything remotely related to engineering. Having nothing else for him to do, McKie gave him the job of Camp Steward, and to fill in his spare time he gave him the additional job of assistant topographer. Surprisingly enough, after a little instruction he did pretty well at it.

After we had been working about three weeks, Chief Engineer Shaw and Superintendent of Construction Cobb came by and spent the night with us. Shaw looked over our plans; and, when he saw how little progress we had made, and the kind of line we had located, he wasn't happy. He accompanied Cobb to the end of the line, then hurried back. He got in on a Saturday night and found McKie and Winkler on a hilarious drunk. That did it. Next morning he sent a cable to the States for an experienced locating engineer, and gave McKie notice that he was through just as soon as his successor arrived. Shaw stayed with us for a few days and practically took charge of the survey.

When Winters, the new boss, arrived he continued Shaw's survey as far as we could conveniently work from that camp, then announced that we were going to organize our camp into light marching order. He sent Winkler into Bairie to find a warehouse and stored nearly half of the equipment McKie had so recently bought. Then he moved, not forward, but backward and relocated a part of McKie's line.

After we had worked some six or seven weeks and no pay, the men got restive. The men were eating all right but their folks at home weren't. One morning

a spokesman came up and asked if they were working by the year. He said they were not going to work any more till they got their pay. It was a real case of gross inefficiency on the part of the railroad company that we didn't get our pay. The engineer's office and the paymaster's office were in the same building in Camaguey, and on the same floor. The paymaster knew he had a pay roll for a newly organized engineering outfit locating a railroad. Most any ten-year-old boy would have guessed that we were not locating it in the heart of a city. Both the Chief Engineer and the Chief Clerk knew we were some thirty-five or forty miles out in the jungle. The paymaster came to Palma Soriano in his pay car with an armed guard, paid all who showed up, and went merrily on his way. It would have been a very simple matter for him to hire a horse, ask the Rural Guard for an escort, and bring the pay roll out while his guard took care of the car; or, if he had advised Winters what day he would be in Palma, he would have sent a messenger and guard to bring it out. As it was, Winters had no choice but to give the men time checks on the agent in Palma, which he was authorized to pay out of daily receipts, and the men had to get to Palma any way they could. Fortunately for us, the head chainman and the back flagman didn't strike, and we were running in fairly level pasture-land where there was very little cutting to do. The head chainman was a better macheteman than I, so we changed him to head macheteman. I parked my level; took the head chain; put my rodman on rear chain; and ran a normal day's work. Winters told the cook not to tell anyone that we had had a strike; but, when he went for his supplies, to just casually mention to both the grocer and the butcher that we could use another man or two. We were sitting down eating lunch in a big pasture when I saw a man crawl through the fence and head in our direction. About the same time, two men crawled through the fence on the opposite side. They each saw the other and then began one of the hottest foot races I had seen in many a year. They all three arrived about the same time, and all out of breath. We fooled them. We put them all to work as well as others who came during the afternoon. By quitting time we had a full crew.

When we moved camp into the little village of

Bairie, I saw an American-style house and asked what it was. They told me it was a Baptist Church, and that they had preaching there once a month, and Sunday School every Sunday afternoon. So next Sunday I went. A native assistant pastor was in charge. I introduced myself and had quite a talk with him. A few days later we were close to camp and came in for lunch, which was very unusual. While I was getting cleaned up, someone came in and told me there was an American outside looking for me. That was indeed a surprise. There were no Americans around there. When I went out, there, sitting on his horse, was a very tall, well-built American dressed in khaki. He gave his name as Hagerman, and said he was Superintendent of all the Baptist Churches in that District, with headquarters in Bayamo. He said his assistant had told him about me and he wanted to meet me. I invited him in and he had dinner with us. When we reached Bayamo with the survey, he insisted that I fill his pulpit on Sunday night.

I had been teaching Sunday School classes in Spanish whenever opportunity offered, for years, but had never tried to preach in Spanish. He preached the morning sermon, and I at night. He was a preacher and preached a much better sermon than I did; but if I do say it, who shouldn't, I put mine into better Spanish than he did his. Next time I was in Bayamo I had dinner with him at his boarding house. His wife was in the States. In the course of the conversation I mentioned something about my trip to the States three years before.

"What? Do you mean to tell me that after being down in this God-forsaken Country you got back up into God's Country, and then came back here?"

"I certainly did. Didn't you do the same?"

"Yes, but I am in God's work. I certainly would never have come back on my own."

A few months later I was in Bayamo again and inquired for my friend Hagerman. His assistant told me that after his wife went to the States, he had to live on Cuban cooking. It gave him indigestion so he resigned and joined his wife. I may have been wrong but remarked, "One-fourth indigestion, three-fourths homesickness."

When I went to work for the railroad, work was very scarce at Omaja. As soon as I got settled, my

brother, John, wrote down for me to see if I could get him a job. He had neither engineering education nor experience. I talked it over with McKie and he said he could give him a job as hostler. I wrote him to that effect. By that time, we were far from any railroad, so he mounted one of my ponies and came across country. It just so happened that the very next day after his arrival, Shaw sent my rodman back on construction and left me without a rodman. McKie said, "Why don't you break your brother in as rodman?" So I did.

When we reached Bayamo, Shaw paid us another visit. When I returned from downtown one night, Winters told me that Shaw had just given the order for me to go back to Palma Soriano on construction the next morning. He said that they needed an engineer on construction very badly, and the country ahead was quite flat, so neither levels nor topography were critical. He told me to take Winkler out and show him how to run the level before I left. John had word from home that work was picking up there, so he rode back with me; left the pony with me and returned home by train. I reported to the District Engineer, L. F. M. Tonneson, a Norwegian. He told me that I was to be Resident Engineer on the first section west of the Cauto River, which ran by the west side of Palma Soriano. That right now he had some men out setting up a camp for me at the little settlement of Candonga, about midway of my residency; and that I would have as my assistant a Guatamaltec College student named Nestor Keith. I learned later that Keith's father and Sir William Van Horne had been pals in their youthful days. Sir William had gone into railroad promotion, and Keith had studied engineering and gone down to Guatamala to work for the United Fruit Company. There, he had met and married a native girl, and this was their son. Keith had died; and, when his widow ran into financial difficulties, Sir William came to her assistance. When her son, Nestor, was ready for college, he sent him to an engineering school in Canada, and now, during his summer vacation, he had sent him down here to get some real experience building a real railroad. (I am not sure, but think the school he went to was McGill University, where my brother, Lloyd, was later Professor of Mathematics for many years.)

When I reached camp, about the first thing I ran into was McKie's "husky crew of Gallegoes". They were here waiting to go to work on the grade, and when they saw me they were about ready to murder me. They thought I was here to see that they didn't get work. They said McKie fired them and told them he did so because I said they were no good. I told them they had me all wrong. I had never said they were no good. What I did say was that they didn't know how to use axes and machetes, and they knew that was true, just as well as I did. That this was their kind of work and I was going to put them to work just as soon as I could get some cross-section stakes in the ground. I put them to work the very next day, and everybody was happy.

I got Tonneson's permission and sent for Birdie and Elizabeth to come down. They had been there just about a week when a letter and some plans came from Mr. Shaw. He said I should leave Keith in charge there; set up a new camp at Remanguanagua, about twenty kilometers farther west, and relocate a part of the line. He indicated on the plan where I should look for better ground. The following Sunday, I took Birdie to Cristo and left her with Robert and Luella; and on Monday, I set up the new camp, and began the relocation. It was my first attempt at railroad location, and the country was tough, or Shaw would not have ordered the relocation. I ran a couple of trial lines and took some topography. Tonneson came out and consulted with me, and we made a paper location, which I put on the ground. It was quite an improvement over the original. I had just finished the relocation and come into camp to draw up my plan and profile when a stranger rode up with more importance than if he had been president of the railroad.

"Has my trunk got out here yet?"

"I haven't seen it. Are you the engineer Tonneson asked for to help me get caught up with my work?"

"I have come out here to take charge of this camp. Which way is Mr. Williams?"

"I am Mr. Williams."

"Oh, I expected to find you out in the field at work."

"I have just come from the field where I finished some relocation, and have come in to make up

the plans."

"Here are some letters for you."

The one that interested me most right then was from Tonneson. It read: "This will introduce Mr. Mason. He will help you till you get caught up with your work and will then take charge of the residency next west of yours. In the meantime, he doesn't like to room with the other men and doesn't approve of women in camp. Neither do I for that matter. So you will please turn the tent I sent out for you and your wife over to him, and you will continue to room with the other boys. By the way, your wife is in town. You will have to make other arrangements for her."

When I finished reading the letter, I handed it over to Mason to read, and remarked, "That doesn't look to me like you are going to take charge of this camp." He read it and said, "That ain't what they told me." He spent the rest of the day sulking like a spoiled child.

Among the letters Mason had brought was one from Keith. He said he had a curve that wouldn't fit. Would I please come and fix it? And he told me which one it was. I spent the rest of the day working on my plans. Next morning, after breakfast, in a very surly tone Mason asked, "What do you want me to do today?" I handed him Keith's letter and a profile; pointed out the bad curve; told him I would get him a horse, and he and the crew could go back and put in that curve and cross-section it, while I took my plans in to the office. I also took my own pony along for Birdie to ride back to camp. When I saw Tonneson he asked if Mason got out there.

"Yes, he got out there all right, but how does it come that he, my assistant, ranks higher than I?"

"Why do you two have to quarrel? He has had a lot more experience than you have, and you should be glad to have him."

"His experience doesn't have one thing to do with whether I have my wife in camp or not. You told me I might have her there, and sent me a tent for her use. Now she goes with me back to camp or I don't go. Which is it?" Pretty brave talk for a man who had been out of work as long as I had, and I felt a cold chill run down my spine as I said it, for fear I would be fired. I probably would have been but engineers were very scarce at that particular time and

place. He didn't answer my question. Instead he said, "Let's see that profile." We worked over the plans till quite late in the afternoon, then I gave him a chance to fire me if he wanted to.

I said, "It's getting late and it's a long way to camp, so I should get started if I am going."

He said, "Go and get your wife and bring her here and have supper with us before you hit that long trail."

It was a long trail and we didn't reach camp till one-thirty in the morning. Fortunately, it was Sunday, so we didn't have to get up early. At breakfast, I asked Mason how he got along the day before.

"I didn't do a damn thing. In the first place that guide that you gave me got lost and we didn't get there till two o'clock. Then that curve didn't fit."

"I thought Keith's letter made it plain that the curve didn't fit, or Keith could have put it in."

Then he went into a great tirade about these farmers who call themselves engineers.

I said, "Wait a minute! When you start talking about farmers, you are talking about me. I learned to plow corn long before I learned to run a transit. But I can put that curve in." He got the point all right, and it hurt. I have seen women and young folks blush, but never have I seen a grown man's face turn as red as his did, and he had no more to say during breakfast. Monday morning after breakfast he asked what he was to do. I told him we would all go back to that curve and I would put in the curve while he did some cross-sectioning nearby. For the benefit of any engineer who may read this, it was a very long, maximum curve, and the P. I. was inaccessible. It takes a lot of cutting to put in that kind of a curve in heavy jungle, so the locating engineer had not run it in. Instead, he ran a series of short straight lines; read the angles and computed the curve. He put in the P. C. and P. T. and figured and set enough offset stakes for clearing the ~~right-of-way~~ which was standard practice under the circumstances. The trouble was that he had either misread an angle, or slipped up somewhere in some of his computations. So when both Keith and Mason started in at the P. C. and ran the curve around on the now cleared ~~right-of-way~~ to where the P. T. should be it was somewhere else.

I traversed the curve, keeping inside the cleared ~~right-of-way~~, re-computed it and put in my own P. C. and P. T. When I ran it around, it fit. Just as I finished putting it in, Leslie Ralston, Tonneson's clerk, came out with a letter from Tonneson for Mason, copy to Williams.

"My Dear Mr. Mason: I am going to be pretty well tied up here on the Cauto River bridge, so have decided to make you Assistant District Engineer and put you in charge of all the grading. I recommend that you establish your camp at Remanguanagua." Right where my camp was!

Ralston also brought a letter to Williams, copy to Mason. "My Dear Mr. Williams: Mr. Mason needs a horse and the Company has none available, so you will please turn over the Company horse and saddle you have to him and we will give you ten dollars a month to ride your own."

He didn't ask me. He told me. That evening after supper I called Mason out for a heart-to-heart talk. I said, "That letter this morning just reverses our positions. That part of it is all right with me. I realize you have had a lot more experience than I have, but I know you don't approve of women in camp. I am going to say to you just what I said to Tonneson. My wife stays here or we leave together."

"You have no right to make that statement. It is true that I don't approve of women in camp, but your wife is here; you had permission to bring her here; and I am definitely not going to say she can't stay."

I didn't know it at the time, but he began figuring from that day on some way to get rid of me. He couldn't fire me. He needed me too badly, and I was doing my work. He wanted someone to take my place so Birdie and I could go together. The first time he went into the office, he enlisted the services of both Tonneson and Ralston and the three of them started in to make life miserable for me. Every time he went into the office, he brought me an annoying letter from one or the other of them.

First, I was paying my flunky too much. Fire him and get a young boy who would work for less money. Watch the cook. He was using too much, and too high priced food. After a few of that calibre, the real

insulting one. "If you are going to run the mess for profit, you should pay the cook yourself and buy your own groceries." Finally I got an order to turn the mess over to Mason to run, which was a real relief.

About that time another engineer showed up. I didn't know it at the time, but Mason had asked for him to relieve me. The first noon he was there, he and Birdie were the only ones in for lunch. That evening when I came in, she met me clear outside the tent, with a smile all over her face, and asked if I knew the new engineer's name. I didn't. "It is Philbrick, and believe me he is a brick. At lunch he said he was going to have to go out in the field and do some measuring and see if he could figure out the width of the roadbed. He said that Mason had given him some cross-sections to figure, and had neglected to tell him the width of the roadbed. He had searched all over the office, but had been unable to find it anywhere. I told him that was easy. It was four and eight-tenths meters on the fill, and six meters in the cut. He wanted to know how I knew, and I told him that my husband had told me and that I had been figuring cross-sections. Sometime during the afternoon he came down to the tent with a cross-section book and a Searles Handbook. He said Mason had given him those cross-sections to check. He had used Searles formula, and couldn't check a one of them. He wondered if I could check them. I took one look at the book and told him I should be able to check them, they were my figures. I showed him how to figure them. He said that was not Searles Formula, and asked where I got my formula. I told him my husband gave it to me. He went back to his tent and I haven't seen him since, but he sure is a character."

For several days I saw nothing of him except at meal time. Then one morning Mason said, "Take Philbrick to the field with you today."

"What can he do out there?"

"I don't care whether he does a damn thing or not. The field is bigger than the office. He is in the way here."

He wanted to run an instrument, so one day when I had some computing to do, I opened my fieldbook to a curve and told him to take the transit and men and run that curve in. I knew that curve would fit. I had run it in myself on my relocation, but most of

the stakes had been knocked out in clearing the right-of-way. He placed the transit very roughly over the P. C. and after fooling with it quite a while he said, "This transit is out of adjustment."

"That's funny. I used it yesterday and it was O.K."

I left my work and went over to see what it was all about. He had tried to level it and left one of the leveling screws loose so it rocked on the tripod head. I set the transit up for him; then told him everything was set. He could go ahead.

He stalled around for a while, then asked, "Where shall I keep these notes?"

"There are your notes. They were written when the curve was put in in the first place. You have no notes to keep. What I want you to do is put those notes back on the ground."

He fiddled around a while longer, then asked, "What is our azimuth here?"

"I don't know and I don't care. We don't run these curves in by azimuths. We use deflections."

He stood around till I finished my computations and took over. He was in the field with me for just about a month. He called himself an engineer, and was drawing exactly the same pay I was; and, in fact, was there to relieve me. Yet he couldn't even set up an instrument, nor read an angle nor a level rod when the instrument was set up for him. Nor could he do any figuring beyond simple arithmetic. The only place I was ever able to use him at all was when I was cross-sectioning in rough country. I could set up the level and leave him with it; then I could go out with the men and pick the places where cross-sections were needed. When I wanted a rod reading, I could run my pencil up or down along the rod till he signalled me it was in front of the cross hair, and I could read my own rod. As soon as Mason found out that he couldn't do the work he came to do, which didn't take many days, he and Tonneson started the machinery going to get him recalled. It took six weeks; and, while they were working on him they eased the pressure on me. In fact Mason opened up enough one day at noon to confide to Birdie that he didn't know how he could ever have got the work done there if it had not been for my help.

Lieutenant Philbrick had been two years in West

Point, then got a commission as a Lieutenant in the Philippine Constabulary. While in the Philippines, he passed the examination and got his certificate as a coast engineer, whatever that may mean. I never heard of that kind of engineer anywhere else, but his paper seemed to be authentic. He didn't ask anyone to take his word for his accomplishments. He had documents to prove every one of them, and wasn't at all backward about showing them. It was on their strength that he got his job with the railroad company. His going left a lot of unanswered questions in all of our minds. How could so dumb a man ever get into West Point? How could he stay there two years and not learn at least a little bit? How did he get a commission in the Philippine Constabulary? How could he pass an examination as any kind of an engineer, when he couldn't set up an engineering instrument nor make any engineering computation? I have a theory, but it is only a theory.

I don't think he ever saw West Point; for every question we asked him about life and work there was answered very evasively. He definitely had been in the Philippines, because he talked quite freely and intelligently about conditions and happenings there. At the time he was there the shooting was not all over yet. Isn't it just possible that the real Lieutenant Philbrick died or was killed in action out there; and this man was there, either as a buck private, or a civilian adventurer; knew Philbrick; saw his opportunity; grabbed it and reported himself dead? Then took over all of Philbrick's papers and insignia, and carried on from there as Lieutenant Philbrick?

Not many days after we finally got rid of Philbrick, I was sent back almost to Palma to stake out the San Francisco bridge, the biggest bridge between the Cauto and the Contramaestra Rivers. Soon after I arrived at the bridge, Tonneson came out and introduced me to a big Dane named Thorp, that he had brought with him. He told me that Thorp would help me stake out the bridge, and then I should hire him a horse and take him back to camp with me. He sure was a big help. I very soon saw that he knew a lot more about staking out bridges than I did. I will never forget one piece of advice he gave me. He said, "An engineer's life is a very interesting one. He travels a lot and sees new places, but can save just enough on

one job to get him to the next one, and never gets ahead. It is no life for a married man. You have a family. You should find yourself some other kind of occupation just as soon as possible." He had just come from a job in Africa. I didn't learn if it was the same job Espeland was on or not.

Just as soon as Mason saw that Thorp could handle the job, which didn't take long, he handed me a letter from Mr. Shaw that had been written more than two months ago, and he had kept it. In fact, it was written before Philbrick came, in anticipation of his coming. It said, "Just as soon as you get the work caught up there so Mason can handle it without you, report to Winters in Bayamo. Wire me from Bairie as you go through." Mason told me to take a day and hunt up a pack train, and get everything packed up so we could get an early start the following morning. It was a day-and-a-half journey. Elizabeth was just ten months old. I put a pillow in my saddle between me and the saddle horn. She sat on the pillow when awake, and laid over onto one of my arms when asleep. The sun was hot so I had to carry a parasol over her as well as carrying her. My pony was a trotter, and we traveled at a jog-trot most of the day. A trotting horse gives a lot of movement to the rider, and the poor kid was so sore that night she couldn't sleep, though she never complained so long as we kept going. We stopped for the night in the little village of Santa Rita. There wasn't a hotel nor boarding house in the whole town. We found one palm-leaf shack with a dirt floor, that had an extra Cuban cot. We set that up in their front room and the three of us slept on that—at least we tried to but didn't do too well at it. Despite her soreness from the day before, when the horses came up in the morning, Elizabeth was rearing to go.

I reported to Winters that afternoon and we talked things over. He said it was just forty kilometers from Bayamo to the lower crossing of the Cauto at Guamo. He was going to divide it into two residencies, and would give me the one on the Guamo end. He had located the line and said it was all low land and solid jungle—not a decent place for a camp on the whole line. At Cayamas, a little settlement about two kilometers off the line, he had found a very good site right on the bank of the Cauto River. He

didn't have all of my camp outfit assembled. Would need a day to get it ready, and would send me out the day following. Then he said, "I don't know where you can board out there. There is a canteen, but I don't know much about their facilities for boarding anybody. How would you like twenty-five dollars a month board allowance and let your wife cook?" That suited me just fine. Then he said he didn't have a horse for me there, and didn't know if he could find one to buy on such short notice or not. I told him what Tonneson had done to me, that I still had the same horse, and would be glad to continue riding it at the same price. He approved. That was the only time in my life that I was literally kicked upstairs. There is no going around the fact that Mason and Tonneson kicked me out. They would have kicked me out much sooner if they could have found someone to take my place. Winters was as agreeable a man to work with as I ever worked for. We rode over the line together just once, then he put me on my own. After he got moved to Guamo, I reported to him personally once a week. Before I had my residency all cross-sectioned, the engineer on the other residency quit. Instead of sending to the States for another engineer, he gave me half of it and added the other half to the first residency on the Manzanillo Line. That gave me thirty kilometers, or nineteen miles, a very long residency.

Our camp site was beautiful, right on the high bank of the Cauto River, though it was a little lonesome for Birdie. In the eight months we lived there, she never saw an American woman except on the two trips we took to Omaja. The twenty-five dollars a month more than fed the three of us, and there was a river steamboat that came up from Manzanillo once a week. The owner of the canteen was very obliging and would order anything from Manzanillo we asked for, so we had a lot of American foods you couldn't buy in Cuban stores. Winters ordered lumber for us and we put a board floor in our tent. Later he sent the camp outfit we had on location to me to store. I set up one tent and put everything in it but McKie's kitchen range. That I set up just outside the back door of the tent, then built a palm-leaf shack over it so Birdie had all the comforts of home. She and Elizabeth also had a nice place to keep warm in cold weather, something none of our neighbors had.

It took work but I handled my whole thirty kilometers without an assistant. When I was finishing up, Winters said, "I have a compliment for you from Mr. Shaw. He says that the engineering on your section has cost less, and there has been less friction between the engineering and construction departments, than on any other residency on the whole road."

I have anticipated a little. On the third day we moved on to Cayamas. The road was very muddy. Two of the pack horses and my saddle horse got down in one mud hole and had to be unloaded. Fortunately, Winters had sent two packers with the train, and they unloaded the pack horses and carried the loads to dry ground and extracted the horses. In addition to myself, I had to care for a ten month old baby, a pillow and a parasol. Babies sense danger very young in life. When the horse fell and began to flounder, she began to cry. It was with considerable difficulty that I got my charges to dry land, the baby soothed and willing to sit on the pillow and play while I went back and worked the horse loose. We reached Cayamas about three o'clock, and the packers set up the tent for us.

Our first big problem after we arrived was dogs. It was the "Dogondest" settlement I ever lived in. I went to the canteen, and got a big box and made a cupboard out of it. The very first time we went away from home the dogs dug under the tent; turned over the cupboard; broke a lot of our dishes; ate and destroyed all of our groceries; and made a regular shambles of the place. Twice afterward they dug under the tent at night, while we were right there in bed, and started their depredations. I broke up their fun before it got very far out of hand. One day I was talking with Daniel, the school teacher, and mentioned what the dogs were doing to us. He said I ought to give them some strychnine. I told him I couldn't get any. He said he could. He got a little and divided with me. I had no grievance against my neighbors, and no desire to do them harm; but self preservation is one of the first laws of survival. I put no poison out where the dogs could get it unless they were too aggressive. Every night I put a little poison on two pieces of bread and placed them just inside the tent doors. I think Daniel put out more than I did, for there were certainly more than two dogs a day that died for a while. That poison didn't last long.

When I went on a trip to Omaja, my friend, Dr. Butler, whom I had signed up as Omaja's doctor, was still there, so I got a bigger supply from him and repaid Daniel.

Just before Christmas I was down at the canteen one evening, and a man asked to speak to me privately. We stepped outside and I asked him what he had on his mind.

"Have you got any strychnine?"

"Whatever gave you any idea like that?"

"The neighbors' dogs have been dying and they say you poisoned them, so I thought you might still have some poison."

"Has someone poisoned your dog?"

"No. I feed my dog. Come here I want to show you something." The rains had ceased; so the ground had dried up so men could work on the grade; and a lot of men were gathering in to work. This man was a cattleman in a small way, and thought he saw a chance to make a little money. He had built a palm-leaf shack, put in a counter and scales, bought meat hooks and other butcher's equipment for a meat market. He had killed his first beef the evening before, preparing to open up that morning. The dogs had dug under the sides of his shack (It had a dirt floor.); turned his counter over; broken his scales; jumped up and grabbed the meat that was hanging on hooks; wrecked the place, generally, and destroyed his whole beef. He said, "That is what the dogs have done to me. I need some poison." I really felt sorry for the man. He was a poor man and the dogs had done him more than a hundred dollars damage in one night. There was no chance of his being able to carry on unless something was done about the dogs, so I took him to the tent and gave him about three-fourths of what I had left. It just so happened that we were leaving the very next morning for a three-day vacation at Omaja. As we rode away in the morning twilight next day, we passed two dead dogs beside the road. Next day after our return, my men and I were sitting down to eat our lunches out on the job, when one of the men said, "Mr. Williams, the people here have been accusing you of killing their dogs, and more dogs have died in the three days you have been away, than in all the months you have lived here"—a perfect alibi.

It had already been raining some before we

reached Cayamas; but, just after we arrived, the heavens really opened up. My section was all low land and very soon the whole thing was belly-deep in mud and water. You can't build railroad grade under water with picks and shovels. We did manage to clear the right-of-way. For three months all I did, or could do, was to ride over the line one day a week, make up a report on the clearing, and send it into the office. I was so far out in front, and the road was so bad that for three months the paymaster didn't find me. He reached Bayamo and turned back. I began to worry for fear I never would get pay for that time. I definitely wasn't earning anything. We were only a short day's ride from Omaja; I had some business up there; besides winter was coming on and we would need more bedding; and, too, I wanted to bring another horse down so Birdie would have one to ride. Since I couldn't work, I thought this would be a good time to go, and got Winters' permission, on condition I get back in time to send in my weekly report. When I got home, I told Birdie I was going to Omaja next morning, and would get Anita, a Cuban girl, to stay with her.

She said, "If you are going to Omaja, I am going along."

"The roads are too bad and the weather too rainy for you and the baby."

"We can take it, if you can. We go or you stay."

"We haven't but one horse."

"Well, you are going to get another."

I went down to the canteen and found a man that lived on the other side of the river, and had two horses and a boat. I rented his horses on condition he take us over the river in his boat next morning. It really rained after I saw the man, but he came after us according to agreement. His horses were bigger and stronger than the average Cuban pony, and I was glad they were, for much of the road was belly-deep in mud and water. About mid-morning, we reached the Salado River. Yes, the same one that had so many mosquitoes two years before when I was surveying the Hacienda Comunera of Maguano. But this was farther downstream. The river was entirely too badly swollen to ford, but there were two men there with a boat just waiting for any hapless travelers that might come along. They quickly stripped the saddles off the horses; took the saddles and us across in the boat;

then led the horses across, one at a time as they swam behind the boat. In spite of rain, mud and a swollen river, we reached Omaja just before dark.

By that time, I had acquired several head of horses, but only one was saddle-gaited—a three-year-old, blaze-face sorrel filly, named Roxy. She wasn't very well broken yet so I thought this might be a good time to finish the breaking. I had no pack saddle, and anyway Birdie would need her saddle when we got back to camp. We stayed two days and it rained hard both days. On the morning of the third day, we got up early; rolled what we wanted to take with us, mostly bedding, into two rolls and lashed it onto the saddle—one roll on each side. Very few Cuban ponies will lead unless someone pushes behind. Roxy was no exception. I took the baby, the pillow for her to sit on, the parasol for her protection, and the lead rope. Birdie pushed behind.

About ten o'clock we were approaching the Rio Naranja (Orange River) which had been less than knee deep when we went up. A woman who had seen us go up, saw us coming and came out to tell us that the river was not fordable. It had rained hard every day since we went up. I asked if she could put us up till the river went down. She said she was not very well prepared, but would do her best. I told her we were going down to look at the river; and, if we couldn't cross, we would be back. The river didn't look too bad, so I handed the baby and the lead rope to Birdie while I rode in to try it. The bank was steep and my horse was swimming before I knew it. He swam across, then I swam him back. He didn't have to swim very far, and I wanted very much to go on. Both my horse and Birdie's were good strong horses, but riding a swimming horse in a strong current is always a hazardous undertaking, and carrying a baby makes it more so. Furthermore, I didn't know one thing about Roxy's swimming ability. Those packs on her back would expose more surface to the current and make swimming more difficult. Most of the pack was bedding, and there would be no chance to dry it out till we got home, and there were books rolled in the bedding that would be completely ruined. So we returned to the Cuban shack to wait for the river to go down.

We had brought our lunch, but had to eat supper with the Cubans. That afternoon we had the biggest

downpour of the series. Next morning the river was over its banks in many places and still rising. My horses were all on lariats, but I wanted to be sure they were not in the water, and were where they could get plenty of grass to eat. The Cuban's horse was loose, and we looked quite a while before we found it.

Then he told me there wasn't a bite to eat in the house, and that he would have to go to Omaja and get some food. It looked like we might have to stay several days, so I made up a list of some American foods we would like to eat, and sent it with him to the American grocer, and sent money to pay for it. Fortunately, there was a little bread left over from our lunch, and the landlady had a little sugar, so Elizabeth lived on bread and sweetened water, and the rest of us lived on hopes till five o'clock when he got back. He had had his troubles. In many places what was usually, apparently level ground, was under water, and in some places so deep his horse had to swim, and he had to make long detours.

I watched the river rise all day. The house was on a knoll. The water got high enough to completely surround it, but did not enter. By next morning it was completely within its banks and falling. I watched it fall a few hours and saw that it was falling very slowly, and thunder clouds were forming over the headwaters. So I told the Cuban I thought we should build a raft, ferry our stuff over and get on our way.

"Oh, no, that would be very dangerous."

"Can you swim?"

"Yes."

"Have you got an ax?"

"Yes."

"Would you work for me a few hours for pay?"

"Yes."

"Then take your ax; hunt a dead cedar tree; cut it down; then cut it into six-foot lengths and carry it down near the ford." In the meantime, I assembled my horses, saddles and pack on the bank. There were no bathing suits in that neck of the woods, and any other kind of clothes would very much hamper our swimming in the swift current. We had to build our raft in the water, so we stripped and went at it. First, one of us swam the river with one end of a

long rope, and tied it low down to a tree on the opposite bank. He had a ring and we put that on the rope for a traveler, then tied the other end of the rope to a tree on the near bank. Next we tied all our logs together in the form of a raft and tied it to our traveler. The raft wasn't very big so wouldn't carry much of a load. Wouldn't carry a load and a man too, so we put the load on the raft and we swam and pushed it. When we had all the goods across, we swam the horses across and called for Birdie. We were afraid to put Birdie and the baby on the raft at the same time, for fear something might happen and we would have two helpless people in the water at once. So we ferried Birdie across alone, then the Cuban dressed and held the baby while I pushed them across. We saddled up; loaded our pack; dismantled our raft to get our ropes, and got on our way about one-thirty.

We reached the Salado River just before dark. It was bank full and some seven or eight hundred feet wide. There was a house right on the bank, and we asked if we could stay all night. They put our horses in the pasture and got supper for us. By that time it was night. Then they told us there was a much better place to spend the night on the opposite bank. The boat was small; the night was black; and the river was wide and swift and carrying some drift. It was indeed a scary undertaking, but we made it safely and were well repaid for the trip. The house had a board floor, and they had a spare bed with a canopy and mosquito bar over it—all very rare in the country in those days. When we looked out at daylight, the men were already ferrying our outfit across the river. Then they led the hired horses one at a time behind the boat, leaving Roxy till last. She was lonesome. They didn't lead her behind the boat. They only started. She promptly swam around the boat and pulled it. I noticed that she swam very high, a trait that I turned to good account many times through the years. I took her for my saddle pony; and, when I got caught by a swollen stream, unless it was very wide and very swift with the current against me, I took everything out of my pants pockets, put them into my shirt pocket, and rode right in. She never let me down. Incidentally, she was the best investment in horse flesh I ever made. I paid twenty-five dollars for

her when she was one year old. This was her first job. I soon learned that she was not only much easier riding than the other pony, but was also tougher, and stood up better under the work, so I gave her much more than half of the work. I was in Cuba nine years after this, and whenever I was working for myself, she was my saddle horse, and on several jobs when I was working for companies they paid me ten dollars a month to ride my own horse, and she was always that horse. She was the only animal I owned that gave me sentimental pain at parting when I left Cuba.

* * * * *

Speaking of swimming streams, I had a rather close call a few years later because I was not riding her. It was after I moved to La Gloria, the American Colony on the North Coast. I had business at the Senado Sugar Mill that kept me over night. I don't remember why I rode Bob—probably because I had ridden Roxy so much I thought she needed a rest. Be that as it may, when I reached the Maximo River next morning, it was badly swollen from a big rain in the night. I had previously swum it on Roxy when it was just as high as it was now. Two Americans, to my knowledge, had been drowned here, and somehow I just didn't trust Bob. I spent a whole half day riding around to a ford that was several miles upstream, but where the current was going my way. I still didn't trust Bob.

I had previously worked with a Canadian who had been in the Boer War in South Africa. He told me that the Boers didn't ride their horses when swimming streams. They headed them in the right direction; hit them a spat; then grabbed their tails as they went by; and the horses pulled them instead of carrying them. I decided that would be safer than trying to ride Bob. At least it was worth a try. So I stripped off my clothes, stuffed them into my boots and tied them securely to the saddle horn. I coiled my lariat in one hand, headed him across the river and grabbed him by the tail. He started off all right, but when he got about mid-stream, he turned downstream instead of heading for the landing. I let go of his tail and started swimming for shore. I had just reached a thorn bush on the bank, when the rope came tight. I grabbed it and held on in spite of the thorns in my hand, and swung him around to the bank. There he laid

like a log floating on the water. It took all the strength I could muster to drag him up to the landing, and there he lay and wouldn't get on his feet nor make one effort to get out of the water. It made me so angry I went after him with the end of the rope. That brought him up with a jump; but, instead of jumping out of the river, he jumped right back in the middle and started swimming downstream again. I had all my work to do over again. By that time I was mad enough to have let him go on downstream and drown his fool-self, if he had been alone. But he had my saddle and all my clothes, and it was mosquito time. When I got him up to the landing next time, I was able to tie the end of the rope to a fence post; then I got me a good-sized gad and really worked him over. I just barely had time to get dressed and to a shack, when we got a very hard rain that lasted so long I had to spend the night there. It was lucky I got across that day, for the river was much higher the next morning.

Getting back to my railroad. As I said before, it had rained for about three months. It was just getting dry enough in spots so I had a few men at work, when Shaw came along one day. He asked how many men I had working. When I told him he said, "We have got to get the trains over this road, and we can grade it faster with a lead pencil than we can with picks and shovels. You come to Guamo tomorrow and bring your profile with you." Practically all my section was overflow land. There was only one very short cut in the whole thirty kilometers. The grade line had been laid high to get the track above high water. The fill was mostly one to two meters. Shaw left the permanent grade just as it was on the profile, and had me build all the bridges to that grade; but he laid temporary grades between bridges which were dropped more than a meter in places. He told me to stake all my berms on the basis of the permanent grade, and see that all borrow pits were connected so that they would drain. He said that when they got trains over the track, they would hunt a gravel hill somewhere, put a steam shovel to work in it and haul fill material in by the train load. When he got the profile all worked over, he handed it to me and smilingly said, "Now you have something

to do. Maybe you can make up a little for all the time you have been loafing."

About three months after it got dry enough to begin grading, Maximo Gonzalez, the big tall Negro who had worked with us on the Holguin Railroad, and had been Carrier's head chainman and labor foreman on the La Maya line came along looking for work. He had been a rodman on a residency on the Bayamo-Manzanillo railroad, that was just finished. He had learned I was here so came looking for a job. I had a full crew, and no reason to fire anyone, so I couldn't hire him.

I said, "There is a stretch of savana in my section that has not yet been contracted. Why don't you take it, then get out and hire some oxen and build some grade? I will get you a plow and some scrapers."

"Do you think I could make anything at it?"

"I know you can if you will stay with it and look after it."

He took the contract; but, as no one knew him, he couldn't hire any oxen. I went out and hired some for him. He had never held a plow nor dumped a scraper, but was intelligent and anxious to learn. I spent a little time showing him how. He learned fast; stayed on the job; and earned more than I did while the job lasted; and built a much better grade than the Gallegoes, because it was packed. When he finished, I gave him his estimate and never saw him again. Some years later I learned through a mutual friend that he got tangled up in the Negro Rebellion of 1912 and got himself killed. I never learned the details but it was a shame. He was far more intelligent, and a better worker than the average Cuban, either white or black.

Juan Carbonell, a Cuban storekeeper in Guamo, who couldn't swing either a pick nor a shovel, and who had never seen a grade built, took six kilometers on the Guamo end, which was the heaviest grading on my whole section. I expected to see a complete flop. Soon, I found several gangs of Gallegoes working on that, just as where the company was contracting direct to the laborers. I asked the Superintendent of Construction, himself a Gallego, how much Carbonell was paying the laborers.

He said, "Just the same as the company is paying

him."

"Then where does he get pay for looking after the work?"

"Don't worry about that. He won't do much looking after them. That's yours and my jobs. He will get his profit by selling them beans. This way he can be positively sure they won't run away owing him money."

Some of the gangs on what the company was handling direct, were getting their groceries at the local canteen. Knowing some of their tricks, when one gang was finishing, I went down to the canteen and asked if that gang owed the storekeeper any money, and told him to watch them. They were finishing that day and I would give them their estimate just as soon as I checked their work. They had a very awkward way of doing things there. The resident engineers received the work and made up the estimates. The contractors all had to take their estimates to the general office in Manzanillo, which was fifty or sixty miles from Cayamas, and they gave him a check on a store in Manzanillo. There was no bank there. That was a long way to go and these laborers had no horses. Our canteen man mounted his horse and was waiting in the company office in Manzanillo when the foreman of the above-mentioned gang arrived. The foreman got his check and they went to the store together.

In Cuba all stores have a two-hour siesta during the heat of the day. When they got to the store, it was closed. They agreed to meet there at two P. M. The canteen man was there, and hung around for three days and came home, without his money. I don't know just what happened. That check was too big to cash in just any store. So I suspect that foreman figured out that he could save the amount of that store bill by just hiding out till the canteen man went home, with much less sweat than he could earn it with a pick and shovel. As for a conscience, he didn't have any, or maybe he was like old Dad Bacom that I knew years later out on Lake Okeechobee. He said his conscience was just as good as brand new, at least it ought to be, he had never used it any. I think some of his neighbors agreed. Anyway nothing ever happened to Juan Carbonell, like what happened to our Cayamas canteen man, and Carbonell sold a lot of

beans.

I was going over Carbonell's work one day and found a gang of Cubans at work grading. They were all working hard, but were making progress just about as fast as McKie's husky gang of Gallegoes made on my survey line. I inquired for the foreman; introduced myself; and asked if the gang were working as partners, or if he was paying the others by the day. He told me he was paying them by the day, and how much per day. I looked at the amount of fill they had in, and told him they were not earning nearly that much. Then he asked me to please measure up what they had done so he could see how they stood. When I gave him the amount, he figured a while, then got quite panicky. He saw that I had been right; he already owed the men more than he could pay and was afraid that when he had to break the sad news to them, they would try to take it out of his hide. Such things were common in Cuba in those days. He just didn't know what to do.

I said, "Look here; your men are all Cubans. They can't handle picks and shovels, but they can all handle oxen and this is an old clearing and there are very few roots and stumps in it. You go out and get some oxen, and I will get you a plow and some scrapers and show you how to make some money yet."

He didn't have a man on the job who had ever held an American plow nor dumped a scraper, but they had all worked oxen. I spent quite a little time showing them how to do the work, and he made a nice little stake, and built the best piece of grade in Carbonell's contract.

After the grade was all built and the track over most all of it, Winters paid me off and we returned to Omaja. I promptly began looking for another job, but didn't have long to wait till Winters sent a messenger up with a telegram from Shaw, to report to the Camaguey office at once, and take my transit along. In Camaguey I never did learn just what the deal was. Shaw introduced me to Richard (Dick) Birbeck, a little runt of an engineer who had been head of the company's engineering office for years, and told me I was no longer working for the Cuba Company, but for Birbeck, personally. That we were going to run a survey from Placetatas in Santa Clara Province about thirty kilometers to Fomento which

was in the heart of the tobacco country. We were not working for the Cuba Company, yet I noticed that all the party were Cuba Co. men except the levelman and topographer; the horses had Cuba Co. brands on them, and the tents were all marked Cuba Co., and we were being issued Cuba Co. passes to go to the job. When Shaw went to write my pass, he asked about Birdie. He had seen her many times in Cayamas, and seemed to like to reach our tent about meal time. I think he very much preferred her cooking to the Cuban variety. I saw an opportunity and grabbed it. I told him she was just fine and was leaving for the States in just a few days, and asked him if he couldn't give her a pass to Havana. He said he couldn't give her a pass that far, but he could give her a pass as far as Santa Clara, and promptly wrote it out.

While getting our outfit together in Camaguey, I ran into Mason, sitting on a bench in the park. He was looking pretty glum. I went over and sat down beside him and started a conversation. It had been nine months since we parted; and, besides loafing three months on account of rain, I had built thirty kilometers of railroad with its bridges, and was now being transferred to another job. I asked him if he was through down where I left him. He said, "Yes, I'm through, but general manager, Galdos, has given me a date for two o'clock this afternoon, and I will at least have the satisfaction of telling him a few things." He didn't seem in a very talkative mood, so I moved on. I didn't know if his conscience was troubling him on account of the way he had treated me or not. I had no hard feelings against him; for after all, in spite of the way he did it, he had done me a favor. Naturally, seeing how glum he was, I took the trouble to inquire into it a little. Thorp, the big Dane, he got to take my place, very soon took over his place, too. He was given a place in the construction department, working on the Contramaestra bridge, and had just now been summarily fired off of that. I never did learn why.

On our road to Placetas we stopped for supper in Zaza. I don't know just what was said, nor what brought it up, but Birbeck said something against the liquor traffic. Then added, "I say that despite the fact that I am a drinking man, or at least have been, but I wouldn't take a drink now for a thousand dollars.

If I did, it would cost me more than that before I got over it." I learned later that he had been a heavy drinker, so much so that The Cuba Company had fired him for drunkenness, in spite of his great ability when sober. He had taken a liquor cure, had been hired back, and had not touched liquor for many months.

We spent the night in a hotel in Placetas. Next morning Birbeck said that he and I should ride to Fomento to make a reconnaissance of the country and get some idea of where we should run our survey. He told the levelman to assemble the camp outfit; buy some groceries; hire a cart and be prepared to move to camp just as soon as we got a site picked out. Birbeck had been in the office for years, and the hot sun, coupled with the continuous jar of the hard trotting horse, gave him an awful headache. He asked me if I knew the best remedy for a headache. I didn't. He said, "Vino Tónico." (Wine Tonic).

When we got into Fomento, he got his Vino Tónico, but didn't stop there. The wine had brought back the old craving. By bedtime, he was pretty well tanked up. Next morning when I brought the horses up to go he couldn't be found. By inquiring, I found him in the billiard hall drinking. I insisted we get started, and he insisted he should have another drink. He ordered the drink and I threw it out. He was my boss but I was bigger than he was, and he had had too much already. We had quite an argument and he insisted he wasn't going till he got another drink. Finally, I compromised with him. I told him if he would get on his horse, ready to ride, I would let the bar keeper hand him up a drink. We got started and he said, "Williams, you are fired. You're out of a job. But I sorta like you, and you are from my home state, Kansas, and you have a family to support. So if you ever need any money, come to me and I will lend you some. But you threw my liquor out, and no one throws my liquor out and gets away with it."

When we came to the first canteen, he was off of his horse before I realized it, and again I had to compromise with him and let him have a drink after he got on his horse. In Baez I got his horse by the bridle and pulled him through. In Guaracabulla he was getting thirsty, and was more determined. We were both struggling with his horse—he to pull him

up to the canteen, I to keep him going on up the road—when I happened to look across the street, and there sitting in a restaurant taking in the whole show was Mr. Shaw. We dismounted and went in and Birbeck started to tell him in his drunken way that we had been over the road and had a pretty good idea where the railroad should go. Then he asked Shaw if he had been over the road, and if he agreed with him. Shaw fixed his boring eyes on him and said, "I have a very definite idea and it isn't about the location of the railroad. You had better sober up and do it right now." We had dinner and Shaw dispatched me to take a message to the crew in Placetas where to move the camp to, and told me to return that night. He and Birbeck stayed there. I had the room with Birbeck that night. He was awfully sick, vomited all over the place and the stench was something awful. Next morning he was sober, but still with a hang-over. With Shaw there, he didn't even ask for any more liquor. The three of us turned back to Fomento to make the reconnaissance together. Shaw pointed out more or less where he thought it ought to go, then returned to Camaguey.

The first night in camp everybody was excited about Halley's Comet. They set the alarm clock so they could get up to see it. We were supposed to pass through its tail in the early morning. Two or three nights before while looking for work around Omaja, I had ridden most of the night. The Comet was quite visible but not at all spectacular. It looked like a bright star with a broad tail about two feet long. I told them I had seen it and not to bother me. They made so much fuss I couldn't sleep, and when I looked out I was glad I was awake. I can't describe it, but it was the most striking sight I ever saw. The head was below the horizon, but the tail lit up the whole eastern heavens with a reddish glow that made the night almost as light as day.

I was transitman on this job. It was mostly open pasture land; we had very little cutting to do. It was also quite rolling land, so we had to do a lot of looking for our line. In some cases we ran two or three preliminary lines, so we could figure out which would be cheaper to build. As we neared Fomento, I was very much impressed with the prosperity of the country. Many of the houses were frame houses with

tile roofs, and even those that had palm-leaf roofs, for the most part, had board sides and floors, or board sides and concrete floors. Many of them had pianos in them that had been hauled the entire thirty kilometers from Placetas.

But the most impressive thing of all was the lightning rods on the tobacco houses. The tobacco houses were very large buildings—high, long and wide, and both roof and sides were covered with palm leaves. They all had lightning rods, which made them look very incongruous. Lightning rods on palm-leaf shacks! Very few of the dwelling houses had them. I have traveled over a lot of Cuba, and wherever there is tobacco, there are lightning rods on the tobacco houses. They were there forty odd years ago when I worked there, and they were still there when I visited therein 1957, which raises some very pertinent questions in my mind. Is there something about tobacco that draws lightning? Does a tobacco grower think more of his tobacco than he does of his family? Or is it just a case of a series of good lightning-rod salesmen?

Birbeck was a good engineer when sober, and he stayed sober and everything went well till we moved camp down near Fomento. The first night we were there, he didn't come in till around midnight; and, when he did come in, he was as drunk as a lord. Next morning he decided he had to go into the Camaguey office. He went with me and showed me approximately where to run the line to the place Shaw had pointed out to us as the end of the road. He told me when all was finished, to hire a cart; haul everything to Placetas and ship them to Camaguey, including the horses, and to go in ourselves. He said if there was any change of orders he would wire me. It took four or five days to finish the survey, then I did as instructed. When we got into the Camaguey office, Shaw was real sore. He said that Birbeck came into Camaguey all right, but never went near the office. He found out, quite by accident, about noon the day before, that Birbeck was in town. He went down and dragged him out of a booze joint and up to the office to see if he could find out what was going on. Then he had tried to contact me, but it was too late. He didn't want the outfit shipped to Camaguey at all, but somewhere else. He didn't say if the personnel

was to have been included with the outfit or not. He summarily fired Birbeck, and paid the rest of us off as "Mission Accomplished". Birbeck took another liquor cure, and they hired him back and kept him till he retired after twenty-five years service. Four years later he looked me up and said it looked like ancient history was about to renew itself. He had the order to go to Fomento; pick up where we left our line and continue it down the Agabama River, through the Trinidad Mountains to the city of Trinidad, near the South Coast, and asked if I could join the party. I did, but that is another story which I will take up in due time. The other members of the party scattered and I never saw any of them again.

Chapter 15

GALBIS

After I finished with the Cuba Company, I was back looking for work; but this time I was looking for a specific kind of work, Engineering. I spent quite some time looking and investigating every possibility. There just weren't any engineering jobs in Cuba. I turned again to Panama, and found that the work had progressed to the point where they were laying off engineers, not hiring more.

I had saved a little money and decided that my best opportunity might be to start a little business. I investigated several possibilities and what looked like the most promising was at Galbis. C. E. Bowman, who had been a partner of D. E. Kerr at Omaja, had dissolved partnership with Kerr and was starting another American Colony at Galbis. He needed some surveying done; a store where settlers could get their groceries; and, a lodging place where prospective settlers could stop while looking things over; and, new settlers could stay while getting settled. He wouldn't have enough surveying to keep me busy all the time; but, if I would put in a store and lodging house, he would give me three lots and let me pick them anywhere I liked; and, give me all the surveying he had. The man who had put in an American store in Omaja had built up a very good business and was still going strong. With the store, lodging house and surveying, it looked like a good deal. Definitely it was the best thing in sight, so I took it.

Bowman gave me two very good and sufficient reasons why Galbis should grow faster than Omaja. Those two reasons were genuine. He didn't mention any reasons why it should not, and there were several. Omaja had very little good water. It had none at all when the Colony began. They had dug many wells and drilled a few, but very few wells had drinkable water. I, personally, had dug one well over thirty feet deep with pick and shovel, and the water was positively bitter. My neighbor, George Snell, and I drilled a well over two hundred feet deep. It cost us over four hundred dollars; and, while we got plenty of