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## WE START TO MOVE

WE WERE IN the tree-trimming business. We were in landscaping. We were in right-of-way maintenance. We were in the electric business. We were cutting here, putting up poles there, stringing wires between. We were paving and rewiring, tearing down old electric and telephone systems and installing new. We were moving the face of the earth around a little, planting it, putting poles on it and pipes under it. Soon we were to be in sewage and gas work and in complicated jobs scattered over wider and wider territory.

How it all came about it would be hard to say. Some of it must have been gradual expansion, almost unnoticed at the time. One job led to another and usually a larger and more demanding one. The business grew as much by accretion as by leaps and bounds. We had only one answer when anyone asked if we wanted to bid on a job or try something we had not thought of trying before. The answer was always yes.

Lou McCloskey, Buck Faust, Roy Lehnen, and I were usually too busy to notice the growth and change that our efforts

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were bringing about.

Roy Lehnen came to us after graduating from the famous Dr. Barnes Art School in Merion and a scholarship in Paris. This was during the Depression and at first he drew landscape plans for us on a part time basis.

One day we were short of supervisors and asked Roy to serve. He was an instant success. Roy has the great gift of analysis, breaking a complex problem into its simple components. He could take an automobile or a diesel engine or an airplane and give a sensible price on assembling it. The price might be 50% off, but would be reasoned out and logical. No 400% error as many people would guess it. This enabled us to start such things as airfield lighting, equipment repair, sound and light work. It seemed to us as if just about now everything came with a bang. Before we knew it we had jobs all over the place, equipment parked wherever we could find a place to store it, and even the grandeur of branch offices.

One of the first of these was in Rising Sun, where it still is. Planned development! It happened this way.

When, early, we could not afford to buy all the trucks we needed, we hired them. One that we rented was driven by a husky boy, Joseph B. Dugan. He tells about the first time he saw me. I was laboring along with the gang and evidently didn't approve of the amount of work Joe was putting out and wondered aloud whether we were supposed to subsidize hired trucks. Joe said he went home that night and looked up "subsidize." Well, he had assumed the burden of supporting his stepmother and five half brothers and sisters. Soon he had his own truck. So competent was he that he was made a foreman, bossing from his truck. He added another truck. His territory was the Western Division of the Philadelphia Electric, headquarters at Coatesville, and extending almost to York. This was rugged traveling, so Joe moved his family to Rising Sun.

We have prospered mutually from his work there for Henkels & McCoy. He has a prosperous equipment business of his own without interfering with his Henkels & McCoy work. He is a director of the bank. He has been voted the Number One citizen of Rising Sun.

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Joe's two little girls take riding lessons at a nearby duPont estate. He keeps quite a respectable stable-a matched pair of black hackneys, one white Welsh pony and a Chestnut Morgan, and drives to horse shows in a surrey attired formally, finished off with a green top hat. He collects ancient cars-a 1915 Cadillac touring, a 1920 Packard touring, 1930 Packard roadster, a 1925 Ford one ton stake body truck-and has big shamrocks painted on their sides as he enters them in many shows.

From the beginning we were intermittently active in Wilmington. The Diamond State Telephone Company was and is operated as a district of the Eastern Division of the Bell. We started trimming trees along the duPont Highway. This highway was given by Coleman duPont, who said he was building the tallest monument in the world, ninety miles, and laying it down for people to walk and ride on.

Later we planted some trees on the strip between the north and south lanes in a rather spasmodic program by the Highway Department which has never gotten off dead center.

After our success in removing the Keystone Telephone equipment in Philadelphia we were chosen to remove the overhead wires and poles of the Wilmington trolley outfit, which was done successfully. We then painted all the poles for the Delaware Power & Light Company.

One of our accounts was with the Delaware Land Development Company, for whom we laid most of the streets in Westover Hills. Howell Eskridge was their engineer and he taught me road building. We used a trap rock base and rolled and rolled and rolled. Then we put in screenings. We dumped, spread and broomed in and rolled. We forced it in with hoses and rolled. We were able to force in more than 30% grit. The road was opened for two weeks traffic and if little traffic developed they ran their trucks on it all day long for the two weeks. Then we blacktopped it, a thickness of one-half inch finished on the six-inch base. That meant a ton covered twenty-six square yards. Again, much rolling.

Those roads are as perfect today as when finished. This taught me that the real function of "asphaltic concrete" is to waterproof the road, and the thicker the poorer, as it softens in hot weather and can crack in cold weather. This is contrary to the

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expert thought in the matter. In a similar manner, the thinner sod is, the better it catches as 100% of the roots will reach the prepared ground on which it is laid if it is cut a half-inch thick, and practically none if three inches thick.

The Delaware Land Development Company had great confidence in our ability and integrity so when they decided to build the Delaware Race Track we were given the first chance at the early work. This involved a temporary work road, and grading for spurs from the two railroads, the Pennsylvania and Baltimore & Ohio. The latter required much earth moving, fill for one railroad and cut for the other. Off hand, they approximately seemed to balance.

We had no equipment for this, so I called in contracting friends of mine in Philadelphia, never realizing that the brains and energy had died out of the business and they were living on past glory and inherited income. They pointed out all the objections, insufficient specifications being the chief one. So I lost this fine job with one of the best companies for whom I ever worked. Three generations from shirtsleeves to shirtsleeves is very often true.

We opened our Wilmington office in the house of one of our men and continued with the arrangement for some few years. We disagreed on many things including such fundamentals as unions. We parted and he held on to the Diamond State Telephone business, which was always erratic and has now stopped.

George Mobley went down and saved the day, retaining our contractor customers and the Delaware Power & Light. We branched out into gas mains and laterals and retained our power work. George became more and more interested in safety so in a shift he returned to Philadelphia to be completely in charge of that department. This safety work is extremely important as insurance gives nothing for nothing. In fact, for the great benefit of having experts investigate and settle claims and the knowledge that one big claim will not break us, we pay approximately two dollars for every dollar paid out in claims by the insurance company.

Drew Lewis took more and more interest in Delaware so we opened an office with a large storage yard with Stan Woodman as local man in charge. Stan is one of the most pleasant discoveries we ever made. Pleasing in manner and a born contractor, he

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has increased the work enormously and tied the loose ends together.

Neal Jett had dropped dead in his car, rushing over to New Jersey to get his brother Hoke out of some jam. After a few months Mrs. Jett came to work in our office and their son Jim became a successful supervisor in our gas department. This solved their financial difficulty, though it could do nothing to assuage their sorrow.

As Buck was busy with electrical work, George Mobley had pretty well taken over the tree work in the middle and late Thirties, Lou was handling his own accounts. I was busy with other important matters, such as a job for a man in Chestnut Hill. He had a new house and wanted a drive. I was asked for a price to build the drive. Too high. I figured on a skimpier job. Too high. All he wanted was to get from the street to his garage, in the cheapest way.

I said we could dump cinders, roll them in roughly with the truck and dose them with used crankcase oil for stability. The appearance would not be entrancing.

When it was done and billed the owner objected to its looks. How would I like it if he told his friends that we had done the job?

My blood pressure went up immediately. "You didn't want a cheap job. You want a good job at my expense. You are welcome to tell your friends, if any. I wouldn't work for you or anyone you could call a friend." I collected.

Perhaps Buck Faust could have handled the incident more diplomatically. His diplomacy was something to see.

Vision, energy, and unexpectedness came into Henkels & McCoy with Arthur C. Faust. Recently I called on one of our old industrial accounts, Rohm & Haas. We had done a lot of small line jobs for them, then got no work for some years, then more and more profitable jobs. I found out why we had got the business back. The purchasing agent said a man from our office had called about a year before. He could not remember the name. I mentioned one or two. No. Then I knew.

"Did he jam a cigar in your mouth before shaking hands?"

"Yeah, yeah! That's the guy."

Buck Faust, of course.

After making an estimate or jotting down figures on the near-

est piece of paper, Buck would hand it over saying, "Lose this envelope and civilization will be put back 100 years." New notions and explosive comments sprang out of Buck at any time, but occasionally he lost his aplomb. Once as an Ursinus undergraduate he saw a coed back to her dorm after the spring dance on the last night of the term. Ahead of Buck lay a long, bleak summer back in his native Mahanoy City.

"May we correspond?" he asked hopefully.

"Not tonight. I have my best dress on."

In the early days, Buck, who had played end, lived at the YMCA with other ex-Ursinus athletes, Ronald Kichline and Moxie Derk, the former head coach at the college. The other two worked for us summers. Some of Buck's inspirations had to do with the work; others with sport.

I could go on forever about the originality of Buck's ideas. One of our tree trimming problems, before the invention of the machine that cuts the culled branches into small slivers, was disposal of the "brush." For years we gave to our friends beautiful boxes of greens at Christmas, holly, mistletoe, leucothoe, various conifers with cones, a splendid, cultivated silvery and fragrant variety of eucalyptus. I saw it growing only once in a botanical garden in Guatemala. Fan mail was flattering. But Buck called it "brush." Tickets to the Series, Army-Navy tickets or even bootleg liquor were what he advocated, probably to agitate me.

Among the projects of that fertile mind was the organizing of coaching and managing of a football team at the Gratersford Penitentiary. It was quite an idea. First the uniforms. Then house rules, schedules, officials. I was one of the latter. One time I made a decision objectionable to a rooter in the inmates' stand.

"Here I am," he complained, "doing four to six and this afternoon you will walk out free."

The climax of the season was the Gratersford-Cherry Hill (Penitentiary) clash. Gratersford always lost because Cherry Hill was hosting a former professional fullback who was doing life. He had come home unexpectedly, found her entertaining another man and after quite a session managed with an axe to cut her head off. When I met him, time had sobered his passions, and he was as pleasant a man as you could meet, and unfortunately

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a great football player and on the wrong side.

Our best player was a college man, yes, from Swarthmore, and strangely a bootlegger.

After this game they had a special dinner. I remember Ronnie Kichline doing sleight of hand tricks. One time he told his audience to pass around a dollar bill for inspection and brought down the house by asking them to be sure to keep their hands above their heads as they did it.

We had other problems. I said before that Johnny Mullen was the best tree man I ever saw. He did a splendid job from the beginning but one day something upset him and he quit. I went around to his house and persuaded him to return. A couple of months later, the same thing happened and again I was able to get him back. Once more he quit and I knew my oratory would be stale and repetitious so Anne did the persuading.

Well, this happened three times more, with the working periods gradually lengthening. Anne brought him back for the fourth time, Buck Faust the fifth and sixth. The seventh time he wrote a letter of resignation to all four partners. One of them, with the idea of protecting me from such temperament, wrote a letter of acceptance and the fat was in the fire.

I forgot to mention that always when Johnny had quit he would stay a square or so away from the garage to see that the men were getting away all right to the jobs. Joe Brennan and the other foremen came around to see me one evening to ask what Johnny had to do to come back. I paraphrased Andrew Jackson's "The way to resume specie payment is to resume it." Joe wanted to know to whom he had to apologize. I responded that we were all grown men and there was nothing to apologize for.

John carries out the ideals of the business perfectly. I knew then and I know now that the very temperament that evoked our troubles was necessary to handle his job with the force and imagination it required.

Harry Hendrickson had a truck of his own and a natural gift for organizing a gang and running it. He started from an ad I saw during the Depression and has run some very large and important jobs. He also moved to a house we have on our plant yard and was largely responsible for the minimal losses from theft.

Always plagued by bad intestinal troubles, he is now virtually retired, living in a beautiful place near Prospectville. But his work goes marching on in the persons of his four capable and ambitious sons, Bob, Buddy, Jr., Joe and Bill.

Magnus Stender came to us about this time. Unlike Andy Lewis, he did not ask his wife's opinion when he got a call in Connecticut to come down to Philadelphia for an interview. He flipped pennies. Two said "no," but three said "yes."

We needed a pusher in the Landscape Department, and Magnus was it. He found out that the job was really everything anybody needed a hand on. Diversification is hardly the word for it, but he thrived on it, and we thrived with his help.

One job that we had was located in back of Harrisburg, Pennsylvania and involved the planting of several thousand small plants on a hillside, along with two oak trees and some shrubs. No one knew the size of the trees or the local ground conditions. The men prepared themselves for an ordinary planting job which would take about a week away from home. Each of the nine men involved helped himself to a pick, thinking it advisable to have at least *one* pick on the truck so far from home.

Magnus and his crew arrived on the job with *nine* picks which proved to be important in this case, since the ground in which we had to plant was nothing but shale. They never used a single shovel on this job. The two oak trees had been laid on the ground in the nursery and were pulled ball first into a closed trailer, using a chain and tractor, pulling through a small opening in the headwell of the vehicle. Each tree, weighing in excess of a ton, had to come out of the trailer backwards and in a hurry as the trailer had to leave. This is quite a problem without machinery.

Since there is always a small 2-inch triple set of blocks and some 3/8-inch rope in Magnus's car, we were in business. In two hours' time the trees were in place if the sides of the trailer slightly out of place. At one time, the trailer almost turned over but decided against it at the last moment.

The entire staff of a large estate at one time left their positions in a huff. A call for help came into the office with the result that within 90 minutes the place was fully manned by Henkels & McCoy men. They were feeding pigs, milking and caring

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for purebred Guernsey cows, caring for a flock of chickens and their products, tending a greenhouse filled with orchids, lawns, and the million other little jobs involved in managing an estate of some size. Little by little Henkels & McCoy selected and provided a new permanent staff for the property and closed the account.

One difficulty arose when we hired a superintendent for the estate. The housing, generally provided for in such a position, had been occupied by a married farmer. Since the superintendent would also be obliged to live on the premises and the one that had been hired was married, we found the place short of one cottage. Everyone was busy. The builders of houses could not help. To rent or purchase anything to live in, during the population explosion at the time, was impossible. The result? We built them a cottage, and what a cottage it was. We poured a solid concrete basement with a nine-foot ceiling and installed underground utilities. To cover it, we built the cutest little cottage window boxes and geraniums.

During a hurricane, a large buttonwood tree fell across a dwelling, tearing through the roof and penetrating a ceiling within two feet of the beds in the room below. Within an hour and a half after the call for help, the roof was clear and covered with canvas to prevent extensive water damage inside. In this instance, the charge was lost in the shuffle. The people were in desperate need and in trouble.

During a heavy wet snowstorm, one place had its power lines torn down and everyone was busy for weeks to come, repairing main feed lines. The owner had a herd of purebred cows and a stable full of fancy horses, and no access to water for days. Our men got him a temporary, *safe*, power hook-up within two hours and he was back in business.

Landscape pusher? Those were the kinds of jobs Magnus found himself handling, and there were plenty more. Let him tell of one more of the hundreds he has handled since.

“The Schuylkill River had been cleaned and the accumulated culm had been deposited along the banks. A Henkels client owned approximately ten acres of riverfront which had been graded and was ready for stabilization. The call came in for consultation as to what could be done to prevent this area from moving back into

the river and becoming a useless swamp again. Our suggestion of seeding it into deep-rooting grasses and legumes, as well as the estimated price was satisfactory. The season was right but nearing an end. To succeed with this, it was imperative to go ahead with the job. Without consultation within our company or getting the consent of the owners I fertilized the area and seeded it.

Nine weeks later, with flood warnings on the way, the client was worried and finished with the red tape in a hurry. He called, his voice sounding urgent.

“Magnus, we are going to issue a Purchase Order for the seeding of the acreage along the river. When can you do it?”

My answer was “When would you like us to do it?”

The voice became a little easier and said “Yesterday.”

My answer was ‘O.K.; and if you have cows to feed, you may cut your first crop of hay tomorrow. It was seeded just nine weeks ago, and it is a heavy stand.’

“After a slight pause, a relieved voice came back with just three words: ‘Thank you Magnus,’ and hung up.”

You need trucks in our kinds of work. You need heavy equipment and lots of it in good repair. Equipment has improved a hundredfold since we started, and we do things now with complicated devices that were never dreamed of in 1924. Once Anne did all the accounting, billing, payrolls, and a lot of other work in our back-kitchen office and paid the men-when we could-out the kitchen window. Now she and a lot of other people in the office use electronic equipment to do a thousand-fold large volume of paper work.

Yet, if I had observed anything since we started, it is this. A shovel won’t shovel unless there is a man shoveling it. It’s the people that count, and Henkels & McCoy has real people from the first. That is why this chapter has been about some of them.

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THE FIRST MOVE that Anne and I made was very simply effected. That was the move from the first Penn Street house to the half house on the wrong side of Germantown Avenue.

The half house had belonged to the Browns, cousins of George Emlen, the real estate man with whom we had signed an agreement of sale. We had the key.

Well, one of those rainy days came. Our back shed office on Penn Street was filled with and reeked of rainy day drunks. Why not use our own trucks and move? We did. Mr. Emlen, horrified, came to our new home in a great hurry with a lease of \$1.00 per month until settlement. We had no rights in the house, but as squatters would be difficult to evict. Of course we signed, the first of many deals with Emlen & Company, all of them mutually satisfactory.

Henkels & McCoy had outgrown the back kitchen, then the rooms over the drugstore. Now we were outgrowing the bowling alley. At 6100 North 20th Street we saw an empty gray stone building, a combined garage and office. I told the organization

about it and they went over to inspect it. Later Anne, Riebe, and I followed. We went through the entrance into the front room.

A half dozen men with revolvers and automatics in their hands confronted us. Before we could run or faint they told us they were FBI, and when Riebe asked for credentials, showed us their badges. Then they herded us into the garage where they had already incarcerated the rest of our people alongside two trucks loaded with Hiram Walker whiskey which had been hijacked and hidden there. The FBI had been lying in wait for days to catch the criminals. Our unfortunate timing had broken up their secrecy. One told us very kindly that had they not been FBI we would be dead. They took us to the police station where we easily identified ourselves.

The building had been leased by private owners to Bell for a district office and garage. At the end of ten years, the owners asked for an increase in rent. This is a brave gesture at any time as the tenants know to a fraction of a percent how much was being made. Ma Bell did not agree, moved out and after a period of tenants of short duration, we bought it. Today, nobody would recognize the building. The first floor is chiefly offices, whereas it had been all shop. The building I am told is better than fire-proof. It is fire resistant, which gives greater opportunity to remove records in a fire.

We had not only outgrown our offices but also our first truck and equipment garage on Walnut Lane. We first realized the need of a pro at this point. Our offices and yards are a tribute to a brilliant real estate man, Harry Parker, who has an infallible instinct on where to look and a sound judgment of values.

We were backing and filling at Walnut Lane, hoping not to pay the penalty for breaking the lease. At the same time the owner had found a more lucrative use for the property but was impeded by the same penalty clause. Harry found this out, and the owner and we parted company with no penalties and the most cordial feelings.

The first real yard was one we bought in the rear of Ivy Hill Cemetery. It had many advantages including a hollow to which a truck could back up and dump brush to be burnt. It turned out to be a strategic location for a Philadelphia Electric substation.

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They offered us a very fair price, which we accepted.

On Washington Lane, east of Chew, was a deep property, narrow frontage on Washington Lane and wedged in between Mueller's greenhouse and Bennis's building supply yard. We bought this. Our survey developed that we came to within ten feet of the garages on Brinton Street. If we built up to our line, these garages would be useless. The saying of Robert Frost is conditionally true: "Good fences make good neighbors." We notified the homeowners that we would offset the fence twenty feet, but every ten years or so we would notify them that we were closing it for twenty-four hours so as not to lose our legal right through "adverse possession" which I think is the correct phrase.

Little we dreamed of the effect this would have. In the rear of our property and the Bennis property with an entrance on the unopened part of Johnson Street was another two acres belonging to the estates of Messrs. Wilson and Gardner. The Philadelphia Housing Authority offered \$25,000 for it. We offered \$12,500. Our offer required a variance in the zoning. We had a meeting with the neighbors and told them we would open up on the same terms as the rear of Brinton Street an entrance on Johnson Street, thus clearing up the deadend handicap of the Brinton Street owners. We would also erect attractive fences and some really good planting. At least thirty of the residents, including two ministers, attended the Zoning Board meeting in City Hall, all of them strongly advocating the variance in our favor. The Wilson and Gardner heirs preferred our \$12,500 cash offer to delays and red tape of the Housing Authority people.

The variance was granted and we now have over four acres of prime Germantown real estate, zoned industrial, in the midst of friendly neighbors. Our yard near Norristown is rented. We have a good office and yard in Wilmington which we rent on a long lease. At York we have a similar arrangement on a garage for 30 trucks. Red Hain has a lovely, picturesque farm near Harrisburg where we store equipment at times. Elkhart, where we have had a branch long since, has splendid facilities. We own a large yard and modern office on the growing side of the city, that is, between the city center and the Indiana Turnpike, a logical site for increased value and convenience.

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It was our increasing diversification that made all these expanded facilities necessary.

Our tree work was still a major part of the business and, for the most part, going satisfactorily. There were exceptions, of course.

Not all utilities are good to work for. I remember one up-state outfit owned by a large holding company and one of the causes for the anti-holding company legislation. We were the successful bidders on a tree-trimming job (in other words we didn't get it). I was curious to see how our competitors were making out so I rode to work one day. The contract had been let on a price per tree basis.

The contractor was struggling with some huge trees. About a mile ahead, a gang from the utility was snipping the easy ones. As the price had been made on averaging the easy and hard trees, the contractor was taking a shellacking. The same purchasing agent asked for bids on clearing a right-of-way. One of the important questions was what to do with the stumps. "Oh," said he airily, "just push them to the sides of the right-of-way." I asked whether it was an extra if the property owner refused to have this unsightly mess on his property. No, that was our lookout. Needless to say, we refused to bid. We have never been able to save enough money to afford to take them on. Such incidents are rare and usually occur with "absentee ownership."

One of the great points we made in trying to sell utilities on tree trimming was our ability to obtain permissions. We asked the property owner for exactly what we needed and rigidly abided by his directions.

I remember Mr. Van Antwerp sent us out to a palatial residence on the south side of Arch Street, Norristown. The electric line came up the south side to that property, crossed the street to the north side, and after passing, returned to the south side. This made unsafe and expensive construction including guying the four poles involved. It was evident that this was a hard one, so I spent some time walking up and down and deciding on every cut I would like to make and the reason for it.

I rang the bell, showed the owner what we wanted in order to straighten out the line.

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“That will be all right,” he said, and I hadn’t used one of my arguments. What a temptation to go on with my spiel, but I bowed and thanked him and departed. Either I had caught him in a mellow mood or it was a new owner. A year or so later I told Van the whole incident although it demolished my reputation as a boy wonder.

Fred Brown was a rotund jovial tree supervisor with a perfect genius for getting us in trouble and a real artist at making wine. With us Fred could estimate closely the cost of a tree job. We never made any money and seldom lost more than 15%.

His car casualty was terrible. One winter day we had a call from Baltimore. Fred volunteered to go. I warned him of the icy roads and to please be careful. Later I had a call from him. Car total wreck. It seems that at Rising Sun the road, without warning signs or anything that could deter or slow a driver, made a sharp right turn. A wreck was absolutely inevitable. The only remark I could make to show my disappointment and disapproval was to tell him that with conditions so extraordinary he surely must have been alerted by the numerous wrecks that preceded his and that had not yet been towed away. A feeble joke for a \$2,000 loss.

Fred finished with us that day at Rising Sun. I have been through Rising Sun many times on the old roads and the new but have never seen that abrupt turn that was impossible to negotiate.

Several attempts by others to obtain right-of-way from the owners of a farm house property were unsuccessful. Buck Faust and John Mullen went to get the necessary permission before anyone could touch the trees.

The owners were in a pathetic state. Both were quite old, the woman was stone blind, and the man was a semi-invalid. The house was cold, their supply of firewood was exhausted, and they needed groceries. Without hesitation, Buck and John went to work and secured firewood and groceries for them. Before long, the old couple were comfortable and willing to talk about the right of way. The man’s attitude was friendly and he gave permission to trim his trees. The next morning when they returned to the farmhouse, they were told not to trim the trees but to take

them down.

Completion of the job doesn't end the story. Buck and John didn't forget the plight of the old couple and frequently stopped to visit them and check if they were comfortable.

We had expanded our business with a theory diametrically different from our friendly competitors, the Asplundhs. They really made themselves a national power in tree trimming for utilities. On the other hand, we had numerous friends in the utilities, contractors and public agencies. We found varied services were more down our alley.

Even in the early days we graded properties, planted shrubbery, put in private driveways, cleaned the underground ducts for telephone companies, ran rural electric lines into farms and large industries, installed guard rail for turnpikes, and took on such jobs as installing underground conduit on Vine Street. We painted metal street light standards, replaced bulbs. In fact, we did everything except clean cesspools.

One major operation we never had tried was installing gas lines. In the Philadelphia vicinity, territories were complicated. The city itself is operated on a lease to the Philadelphia Gas Works subsidiary of the United Gas Improvement Company. Outside the city, the gas and electric operations of the Philadelphia Electric Company are co-extensive. South Jersey Gas Company covers approximately the same territory as the Atlantic City Electric Company. Public Service Gas & Electric are practically the same territory, as is the case with Delaware Power & Light.

One day in 1944 Andy and Buck called on Ed Mitchell of the Jenkintown office of the Philadelphia Electric. He put us on the bidding list. Andy and Buck were taken through the warehouse and then made a thorough study of Philadelphia Electric methods.

Our first job was for about 200 lineal feet alongside the Jenkintown Bank. When the trench was finally dug, Buck took his post at one end, Andy his at the other. Their combined knowledge, as Andy says, was nil. Between them in the middle of the trench was "Old Jake," who really did know what he was doing. Among them they got the pipe in. An old pro, Louie Longo, was our boss on that first job and we practically broke even and had

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only a few small leaks. We were fortunate in working for Ed Mitchell, who had and has no superior as a gas construction man. He demands and gets perfection. As our equipment was meagre we were elated at the result.

It always has been my contention that the only satisfactory people for whom to work are the ones that know exactly what they want, write strict, accurate specifications and enforce them rigidly. Heaven help us from, "Jack, you know your business and what I want. Just go ahead and use your own judgment and ideas!" That spells trouble. Ed knew what he wanted, enforced his ideas and by so doing, our gas work from the beginning was big league.

Shortly after our first few gas jobs we bought our first trencher. This was a major event, akin to the first man in orbit.

Heading our gas department, now one of our most important, is Irv Maker, a Civil Engineering graduate of the University of Maine. Buck saw him in the garage one day and asked him what he wanted. It was a job. Buck told him he was hired and jumped into his car and drove off. An hour or so later he came back. Maker was still there. "Why aren't you working?"

"I wasn't told what to do."

"This floor is dirty. Grab that broom and clean it up."

Irv was husky, a real lover of the out-of-doors. We put him digging in a ditch for a gas main. He had never mentioned that he was a college man. He dug so well and intelligently that he was soon a straw boss, then foreman, now manager of the gas department.

We started other bright young men, all green, in the same way. Marty Helmus, Al Pearson, Norris Anders, the two Tucker boys, Clyde Ramsey (a reformed school teacher), Bob Reilly, Ernest Strasser, Joe Toth, Delmar Murray, Leon Whittock, Barry Young and many others, including several who are the second generation with Henkels & McCoy, such as Bucky Faust, Jr., Jim Jett, and Magnus Stender, Jr.

They had none of the preconceived ideas and "can't be done" attitude of the old timers, they read the trade and machinery journals, and are anxious to try new methods. From the Philadelphia Electric Gas work we have expanded into Public Service, South

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Jersey Gas, Pennsylvania Fuel & Gas Company, Delaware Power & Light, Philadelphia Gas Works and, in the Midwest, Indiana Gas & Water Company, Michigan Gas Utilities Company, Consumers Power Company, the Ohio Fuel Gas Company and Linde Air Division of Union Carbide Company.

One of our larger gas jobs was for Colonial Pipe Line Company, a combination of nine refineries to transport all sorts of petroleum products. It is the gas equivalent of a belt-line railroad, a connecting link of several gas companies with a large transmission line. Our run is about nineteen miles of 8-inch steel pipe somastic coated. It runs from North Baltimore Junction to the North Baltimore delivery facilities. At this time cathodic protection is under study. We are installing multi-volt drop stations at all road and stream crossings where we are running the pipe through sleeves.

The importance of our gas work is the result of unremitting study, chiefly by Maker and Helmus. One of the tedious and for a long time unprofitable parts of the job was installing laterals from the gas mains to houses in new developments. This type of work is now in the black. It is of necessity a tight margin job and requires highly skilled and energetic men with the closest supervision and coordination of materials which are not furnished by us.

In spite of untrained supervision, absence of adequate tools, and rented substandard equipment, Henkels & McCoy put a lot of gas pipe in the ground under the at first skeptical scrutiny of the Philadelphia Electric Company's inspection. Within a few years the basic problems of operation had been solved and a growing confidence by the customer was in evidence.

The work volume grew and with it the demand for finding and training more men, obtaining more specialized tools and improving the source of equipment as well as rendering immediate service, dispatching crews, finding leaks, improving standards, and convincing the men they were on a winning team. It was in this total complex of a new line of work that Marty Helmus saw the opportunity, recognized the scope and had the courage to face a responsibility.

Having finished his daily job of supervising his own crew

## AN AMERICAN ADVENTURE

installing gas lines in the Penndel subdivision, Marty showed up at the dispatch office to sit and observe and to become familiar with the routine of directing and serving the operation. For several months Marty sat on the sidelines to overhear the late afternoon phone calls from the foremen telling of their problems, their next day's needs, their production and their complaints. Marty became familiar with the constant need for more crews, relocating crews, more welders, more diggers, more cranes, shoring lumber, pipe hauls and all the rest of it.

One day Marty picked up one of the receivers and said, "This is Marty! May I help you?" Marty is now General Superintendent of Pipe Line Construction.

We are proud of our gas work and like most people not averse to a compliment when we feel we have earned it. We all appreciated an editorial in the Kennett News and Advertiser, April 30, 1964:

### "A PAT-on-the-BACK FOR OUR INTRUDERS"

"We'd like to pay a little tribute to the Philadelphia Electric Company and their Henkels & McCoy subcontractors, as well as the men who in various capacities have been tearing up Kennett Square's business district the past few weeks as they install underground conduits for rewiring and relighting the business center of the town.

"We know the noise, mud, dust and vibration have been annoying to individual merchants as well as pedestrians and motorists- but we think the workmen have done an outstanding task of performing the work speedily and with a minimum amount of inconvenience.

"We have too many recollections in our mind of holes being dug open and allowed to remain gaping eyesores and traffic hazards while someone seemed to be making up his mind what should be done next or waiting until the weather got just right.

"Despite the steady, miserable rain we had most of last week, the workmen went ahead with their job, and by the end of the week not only had the mud back in the trenches, or hauled out of the way so motorists could park for week-end shopping, but also had temporary blacktop on the surface of the excavations so that pedestrians would not need to wade in mud while the dirt

*But Not Always Forward*

settled enough to install permanent cement paving.

“We have been impressed too with the precautions taken by the workmen to prevent accidents (even warning pedestrians not to look at the welding operations) and their patience in answering the same questions again and again which merchants and “sidewalk superintendents” kept asking them.

“Reconstruction and air-hammer excavations are not pleasant things to endure. Our Kennett Square crews can be commended for so well minimizing the agonies of their operations on us.”

In 1957 we started renewing for the Delaware Power & Light service gas lines, deteriorated by age or electrolysis. The Company was faced with a program of renewing all the old services in the City of Wilmington. A technique was devised for driving out old services and at the same time installing new ones. In many instances, services were renewed by pulling new copper tubing through the old iron services. New tools and costly equipment were required and purchased. This involved working in the basements of houses whereas before all our work was outside. It opened up a new risk of blackmail charges of theft or assault. Which reminds me of Walter Roberts’ stock remark when one of his men was accused of assault on some woman. “That is beyond our company’s jurisdiction. We pay that man only to read meters.”

# 10

## REALLY MOVING

ELECTRICAL AND TELEPHONE work was burgeoning along with our newer gas business.

Our telephone work included the removal of the outside plant of the Keystone Telephone System, a small and incomplete duplication of the Bell System in Philadelphia. This was a consummation of the consolidation of duplicating telephones in Pennsylvania. It had started with the Bell selling out their facilities in the Allentown, Bethlehem, Easton and Hazelton vicinities to the larger system, the independent Lehigh Telephone Company. They were consolidated and later reacquired by the Bell. This was before the days of the aggressive expansion of such powerful independents as the General Telephone Company and the United Utilities. It is pertinent to state here that while 82% of the telephones in the United States are Bell owned, 65% of the area of the United States is independent.

The Bell bought the Keystone plant and gave us the job of removing the overhead lines and the underground cable. The city tax on these lines was considerable so we had a crash program

to remove them by the end of the year 1945. The wire and cable were delivered to freight cars for shipment to a smelter on Staten Island. These cars we kept under guard at all times to prevent theft. The Keystone used standard gauge wire overhead and underground, so theft was difficult to prove. Ma Bell on the other hand used sizes that no one else used. Discovery of these gauges in a junk yard or plant was prima-facie evidence of theft.

I never knew how dishonest people were. We literally followed every truck to the freight yard. Sometimes the truck would drive to a "fence;" at other times someone on the rear of the truck would throw lengths of cable off to be picked up by confederates in a following car. Due to our precautions we lost very little.

We set up a shop for electronic inspection and instrument repair. This included telephone switchboards, teletype equipment which included terminal switching and printing equipment, facsimile transceivers (combination transmitters and receivers); also, radio transmitters and receivers, mobile and fixed base stations, short wave, long wave and microwave.

In a separate building because of the danger of the work we repaired power supply units. There was so much danger from the high power radiation that the workmen were shielded.

We missed out on the installation of electronic equipment in Labrador because The Bell Telephone Company of Canada wished the work. However, we erected the pilot dish antennas, parabolas about eighty feet high, over two hundred feet long, two in each location.

WTPA project was a mast over five hundred feet high. We did what seemed to me to be an impossible feat. We took down an antenna and put up a more modern one weighing four tons. This was not a tower but a mast.

A unique job was equipping the entire western division of the Southern Railroad for hot box detection. Until now, between yard stops the only procedure was for tower men to look at the passing train for smoking journals, and wire ahead. This was clumsy and inefficient. An undetected hot box can wreck an entire train. This new idea is a development of the Lenkurt Electric Company of General Telephone. We rehabilitated 1100 miles of Western Union pole line that had been purchased by the rail-

## *Really Moving*

road, replacing poor poles and cable. We put in new insulators, changed the wiring to allow no more than two splices to a span and strung the wire to the J 5 transposition pattern of the Bell. We built 20 repeater stations, with their complicated cable and open wire connections. This was over an area of seven Southern States. Lenkurt installed their equipment which by some infrared application detects hot boxes on either side of a train and sends the information ahead. This prevents the most frequent cause of train wrecks, because some of the less financially able railroads send out some pretty ratty equipment.

In 1943, we constructed a river crossing from an artificial Island in the Susquehanna River just below Conowingo to the east bank of the River. The 3-pole structures, one on the mainland, the others on the island, were of yellow pine impregnated to refusal with creosote. The poles and cross arms were so heavy after the treatment that they could not float. The wood before treatment weighs approximately 48 lb. to a cubic foot; water is about 62 lb. to a foot so it absorbed creosote to increase its weight about 33%. Nasty stuff to work with, as creosote bums. We could not get any machinery over the river, so the steel tower had to be erected by hand. The other steel tower was on the mainland. Incidentally the men had to be ferried four times a day, morning, back and forth for lunch and at quitting time. Neal Jett was in charge of the job, thus insuring competence both in time and honest construction. We erected an electric cable car to ferry the steel and concrete over, and then lugged both to the place of erection, We had a good gang, Dutch Schraff, Whitey Lentz, Jim Cozenza, Bill Kreiter and Vin Conaway. The crew was filled out by Baltimore people. The operator of the motor boat from Port Deposit doubled as a groundman during working hours.

The operation was a complete success. No accidents. This was partly insured by the operation of the boat. We never proceeded when more than five of the seven turbines were in operation. Now they have doubled the capacity of the dam by erecting four larger units. It shows the development of the machines when the new units are almost double the capacity of the old. Seventeen years later we were crossing this same Susquehanna River again. This was a much bigger, more challenging, and more

important river carry. It was, in fact, the most thrilling part of a twenty-one mile transmission line, a job for which there was no adequate equipment in existence.

The line involved zigzagging across twenty miles of hilly country, first clearing the right-of-way of all trees, and then placing special towers on the turns to take the tremendous sidetrain.

This line was a tie-in between the companies supplying electricity to Baltimore and Philadelphia, 90 miles apart, Wilmington being connected with both by another line to a central switching location. The location of the river crossing was chosen because on the west bank of the river was the site of an atomic energy plant then being built – a pioneer effort in generating, participated in by a number of utilities and manufacturers.

The first mention of an atomic plant brought a storm of protest. Bird lovers feared for the bald eagle nest on the island and it would have been an overwhelming argument against the location as part of the island is a bird sanctuary.

The specifications contained a remarkable paragraph:

“The Contractor’s attention is called to the fact that by agreement between the National Audubon Society and the Power Company, the installation of Anchor Tower No. 13/1 located on Mount Johnson Island must be done as far as practicable outside of the eagle mating season which starts in late February and ends in mid-May or mid-June depending on the successful egg hatching.”

Our men noticed a single eagle several times, whether the same one we could not determine. However, close observers have said that in the past ten years no eaglets have been hatched, nor did binoculars show any eggs, so the one we saw may be “the last leaf upon the tree in the spring.”

The 220,000-volt steel tower line runs twenty miles between Nottingham, Pennsylvania and Graceton, Maryland.

At the time of its construction, the Nottingham-Graceton Line was our largest single undertaking of this type, and our first attempt at a river crossing of this size. The river crossing is made up of two anchor towers and one suspension tower. This crossing is located on the Susquehanna River about ten miles up-river from the Conowingo Dam in Conowingo, Maryland.

The line at this point is running in an east-to-west direction,

## *Really Moving*

I will refer to the three towers of the crossing as the east anchor tower, the west anchor tower and the river suspension tower.

The first job on the crossing was building the foundation for the three towers. Dick Gable was our superintendent for this part of the work. A unique part of the job was that one foundation for the east anchor tower was located on Mt. Johnson Island, which rises 200 feet above the river with no less than 45 degrees sloping sides. Dick hired a local man, Meryl Murphy, who worked the river all his life. "Murph" really proved his worth on knowing the ways of the river, the wind, and the ice in the winter time.

Dick bought a boat and 75 horse power outboard motor and with this as our only means of transportation on the river, we pushed and towed barges with all of our equipment and material to the island.

Dick had to gouge out a switchback road up the slopes of Mt. Johnson Island. He very appropriately named this road "Cardiac Trail"; if you didn't have a heart condition when you started, you sure would after a couple of trips up the mountain!

While Dick was struggling up the mountain, we had our subcontractor, Carrol Smith, come in and start on the river suspension tower foundation in the middle of the river.

This foundation was made up of four forty-foot diameter cells or coffer dams, each cell connected to the other to form an island in the river, roughly 100 feet square. The cells were made up of sheet piling and then filled with sand. We were working with about fourteen feet of water and eleven feet of muck on the river bottom.

After Carrol Smith completed the cells, Dick poured the concrete foundations into the cells. All equipment and concrete had to be barged to this man-made island. Carrol Smith used his floating crane and pile driver for all his work.

Back on Mount Johnson Island, Dick had to make a straight trail down the side of the mountain to get material to the top. Hoody, our bulldozer operator, started at the top of the mountain and pushed a straight path down the side, on slopes in excess of 45 degrees, while we watched with our fingers crossed lest he tumble into the river. We used a four-wheeled farm wagon

to haul material up this path, pulling it with a winch line from the mountain top. We may have made bigger and better pours of concrete, but we never made any tougher than the ones on this river. Thanks to Dick Gable, the job was well done.

When the foundations were complete, we started erecting the three steel towers. Bobby Chrisswell and his crew built the towers. The anchor towers were each about eighty feet high and the river suspension tower two hundred and sixty feet high.

While all of this construction was going on, Bob Ratayski, Bob Farmer and Charley Fetters spent endless days engineering ways and means of getting the wire job done.

Before a job of this type could be started, a complete plan of each and every operation had to be set up, with every detail figured out, down to when a small pin would be put in a dead end assembly. Finally, we had a workable plan. After discussion with outside engineering forces to double-check our own engineering, we submitted our plan for the electric company approval.

Then it was time to go. With ten trucks, two boats, ten pieces of special wire handling equipment, two bulldozers, radio and telephone systems, and six crews of men, we were on our way.

We had to place three conductors and two ground wires between the east anchor tower, through the river suspension towers, and to the west anchor tower. The east anchor tower is located on top of Mount Johnson Island, the river suspension tower is on the man-made island in the middle of the river, and the west anchor tower is on the west bank of the river.

The wire for the crossing came in pre-determined span lengths, that is, the wire was made up to fit exactly between the towers, with the hardware, which goes to make up part of the attachment of the wire to the tower, already on the ends of the wires. This was a real problem because of the size of the hardware. It would not fit through our special wire handling equipment.

The plan was to set up a wire-pulling machine on the west bank of the river and a machine to act as a brake and hold back the wire on the east bank of the river. Once you handle the wire, it may not be dragged along the ground or be allowed to drop into the river.

To start the operation we had to get ropes across the river.

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We used a polypropylene rope, as this would float. Then, with an outboard motor boat, we towed the rope across the river.

After attaching running sheaves (pulleys) to the towers, placing the rope in these sheaves, threading the rope through our pulling machine, we were ready to pull a steel rope across the river. This steel rope, in turn, was used to pull the wire across the river. The use of steel rope is required to hold the approximately 18,000-pound tension needed to hold the wire in the air while we pulled it across.

At this time we laid the wire on the ground. Attaching the steel rope from the pulling machine to the lead end of the wire, and on the back end of the wire we attached a second rope that was to cut through our brake machine.

At intermittent points along the wire, we supported it in running sheaves so as to lift the wire clear of the ground and then pull the wire to its proper place in the river span. After one wire was in place, we repeated the total operation until all five wires were complete.

Russ Trembly was project manager; George Conaway, field superintendent on this job. Some of our crew foremen who helped with this work were Jack Lucas, Carl Neil, Bob Chrisswell and Clyde Payne; General Foremen were Herb Steel and Robert Glass.

We were able to pull the job through despite numerous unnecessary obstacles. The principal union involved, instead of living up to their verbal agreement that the men report at the job site, arbitrarily moved it to the nearest town, Oxford, making us pay the men for twelve miles travel each way. The cable supplier shipped these big spools in box cars. That rendered useless our unloading equipment. They had to be rolled out through the car doors, and don't think that isn't expensive.

To build both the river tower and the Mt. Johnson Island tower required boats, barges, a floating pile driver and other water equipment, as well as two-way radio equipment for communications and professional divers to check the river foundation below the water line.

The length of wire spans required to cross the river and the extremely high tensions required to string these spans were noteworthy. The spans between island tower, the river tower and the

mainland were 3200' and 3300' feet. These were precut at the factory. To keep these long spans out of the water it was necessary to string them with hold-back tensions up to 30,000 pounds. This type of wire stringing was a first for Henkels & McCoy.

It was the experience gained on this job and the techniques developed through necessity that later enabled Henkels & McCoy to do the longest and heaviest river crossing in the eastern United States.

Other pioneering electrical jobs came before that. One was in community television.

In mountainous country, one local station was the only way television could be presented. Even Philadelphia has reception on only four stations.

Meadville, Pennsylvania has rebuilt its system to give people access full time for eight commercial stations from Pittsburgh, Erie, Cleveland, Youngstown and London, Ontario. The system also has been constructed for future developments with one channel for Round-the-Clock Weather and Time Service with FM Radio Reception, one channel for Educational Television, when the latter is available and two channels reserved for community and special services. The procedure is to erect a tall tower on a mountain, as the waves proceed by the "line of sight," and is limited always by the curvature of the earth or intervening mountains.

We started this work in 1953 with reception on three channels. In 1957, this was expanded to five channels. The procedure is to run cable from the mountain top on telephone and electric poles to an area of 25 square miles and place an amplifier on the pole at the home of each subscriber. Later we replaced the old cable with 500,000 feet of aluminum sheath cable, making it the television system with the most trouble-free reception in the world.

It is easy to see why comparatively small cities in isolated places can give more and better reception than some localities in the largest cities.

Williamsport, Carlisle and Meadville in Pennsylvania are among the twenty-five or more cities east of the Rocky Mountains where we made these installations. This work, with our conventional telephone work and railroad signal systems, makes us the largest and best rounded communication construction com-

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pany in the world.

We had three jobs in Mississippi, where our competition was non-union. Our good men and splendid supervision enabled us to compete favorably with low-priced and, I must say, low-skilled labor. Hattiesburg, Mississippi is another modern installation with aluminum trunk cable.

We put in a system at Greenville, Mississippi, and I remember with horror a newspaper account of an accident with pictures showing the fall of a towering mast with two men on it riding to their deaths. I called up our superintendent to inquire the cause. It was not our job. It seems our price for the mast was too high and a local man took on the job. The correct procedure is to put up a length and then guy it off permanently before putting up the next length with a gin pole. Each section was guyed permanently at once. The low-priced man saved time by guying temporarily with rope. A section broke loose and instead of sliding down the heavy guy wires, it sliced through the ropes and the whole mast fell to the other side.

An interesting installation was Key West where we could get Miami beams from 140 miles away, but Havana was closer, so the subscribers doubtless are familiar with the marathon harangues of Castro. This community television system has wider applications even in a large city like Philadelphia, with nowhere near the channels available in Meadville.

As the electric loads increase so rapidly, new generating plants and transmission lines are necessary for large cities. In Philadelphia, the heavy load used to be in the winter, darkness and incidental heating being factors. Now, with air conditioning the heavy load is in the summer. Some bright person in the Philadelphia Electric thought up the brilliant idea of overbuilding the railroad catenaries of the Reading and Pennsylvania Railroads. This meant riveting extensions of from thirty-two to eighty feet long on the top of the catenary beams and putting transmission lines at the top of these. We overbuilt the New York Division, the Washington Division and practically all the suburban lines on both railroads. Much of this work had to be done at night when trains are few, as for safety we could not work over trains. This was heavy and dangerous work and we accomplished it with

only one accident.

We were working at Sharon Hill on an extension over the four tracks of the Pennsylvania Railroad to Washington. Our gang was twenty-three men and our big piece of equipment was a rail traveling crane that we rented from the railroad and that was manned by the railroad. We were paying \$32.00 per day for the railroad crane which was almost a museum piece (such a piece of equipment should cost approximately ten times that). It slipped a little one day and the railroad inspector had it repaired. Next day it gave way completely, dropping a forty-foot beam across the catenary wires for four tracks, blocking the New York-Washington trains. By a miracle, no one was killed or injured, but it took some time to put the wires back. The railroad had the crane repaired for the next day, but we had had enough of it and waited for some post-diluvian equipment.

We were billed \$23,000 for the interruption based on an agreement the Railroad had with the electric company, to which we as contractors were obligated. The reasoning for the save harmless clause, while rough on us, had logic behind it. If there were no electric company overbuild on the right of way, there could have been no accident. We had about twenty of these overbuilds in all. The latest was for the Potomac Electric Power Company over the Pennsylvania Railroad from Bowie to Washington, a really busy stretch of railroad. We had one for the Public Service Company of New Jersey.

I saw one dangerous part of this run, where the twenty-foot beam was almost the maximum distance from the crane and at the rate capacity of the crane. Of course, there always is supposed to be an ample safety factor, but this can't be assumed. We not only used rail grippers to hold the crane upright, but blocked it up with timbers. Bob Ratayski took no chances. We put the beam ten feet further away, lifted it a foot and examined all his safety factors. Then he went to work with perfect assurance.

The utilities for whom we did this work were so well pleased that we have won about twenty-two out of twenty-seven jobs on which we bid.

Although electrical construction for the Delaware Power & Light has stopped for the time, we are still doing some for the

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Delaware Turnpike. In fact, we are doing all the lighting. Occasionally we have small emergency jobs for various municipalities such as Dover, Milford, New Castle and Newark. I remember Dover particularly, where we ran a new aluminum transmission line to the airport. This was our first aluminum line and we were astonished at the length of the tie wires. They were several times as long as for copper.

In the early days we built a wood pole transmission line from Wilmington to Smyrna cross country. We rigged up a tractor to carry the poles to their locations and set them. I must confess that this was not the most successful operation of its kind ever "seen on this diamond."

We worked overland. We worked over water. Soon we were underground in a big way. We began boring operations.

Equipment for boring long distances has been much improved since we started this work. Originally, if we hit an obstruction head on, the borer either went on slowly or stopped. An obstacle at an angle would divert the borer in any direction, to one side or the other, down, or sometimes up into the tracks. It was good chiefly in sand, clay or weak rock. Different equipment unquestionably was in order, and obtained.

At Bear, Delaware, we put a twelve-inch pipe under six tracks of the Washington Division of the Pennsylvania Railroad. We first dug a pit six feet deep and twenty feet long. We poured an eight-inch reinforced concrete platform with bolts imbedded for fastening the boring machine. These, of course, had to be sturdy and absolutely accurate. The set-up was so rigid that no deviation was possible. We have bored under City Line for gas lines, and dredged a trench under Darby Creek for a high pressure oxygen line for Linde Air. This stream is navigated by small boats and the line had to be buried deep enough in the bottom to eliminate the possibility of being snagged by some anchor. Our longest and biggest bore was under the Pennsylvania Railroad at Harrisburg, one hundred eighty feet of sixteen-inch pipe. This is quite a push.

You never can tell how fame or its antithesis, notoriety, will spread. After Bear we have been much in demand by the Highway Department at traffic lights, also boring for detectors, form-

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ing and pouring of junction wells and pole foundations. From there it was easy to branch out to perform similar services for contractors who do not have the specialized equipment for boring or driving conduit.

# 11

## LIGHTS AND SHADOWS

LEST YOU THINK Henkels & McCoy was being plagued by a monotony of success, let me make it clear that we were not. Some of our largest and most satisfactory accomplishments failed to prove profitable. Some of our new ventures were exciting, but not as lucrative as we hoped when we went into them.

One of the brightest associates we had was a Rensselaer Polytech graduate pre-eminent in sewage disposal work. Unfortunately, his talent for peaceful co-existence with customers and suppliers was less outstanding. Our work was the mechanical. Excavation, buildings and concrete work, all of them simple, we did not touch, but did the highly technical mechanical and electrical guts of the installations.

The first job we did was as a subcontractor to Thompson of Albany on the new plant of the City of Bethlehem. The job was completed successfully and unpleasantly, involving a suit against one of the subs.

When our first sewage engineer retired because of ill health, Lake Slacum took over. The water works at Havre de Grace was a complicated success. We did a number of small jobs and then

a modern system for Salisbury, Maryland, with remote control switch house and separate pumping stations to supplement the main Plant. Later we did Poughkeepsie, New York, and a gas pumping station at Bergen, New Jersey, for the Trans-continental Pipe Line Company, to pump gas under the Hudson River. These jobs took so much financing and supervision for such meager profits that we closed down the department.

However, all the sweat and tears were worthwhile because Lake Slacum brought into our organization, Stan Woodman, who has been such an outstanding success running the Wilmington office.

As part of this, we installed diesel electric generators in such places as Quakertown and South River. We installed 1300 horsepower units, the identical equipment used on almost all locomotives, minus, of course, the propelling parts. These are ideal for small electric installations, also as temporary boosters for large utilities in areas of low voltage. These were General Motors units bought from their plant at LaGrange, Illinois.

On a proposed installation at Ephrata we noticed that another General Motors subsidiary out of Cleveland was bidding on the installation. When I objected to this competition, I was told it would not be serious, as Cleveland was running heavily in the red. This was patently ridiculous as they could do the work at cost and reduce their overall percentage of loss. Cleveland bid the installation at less than our cost. We lost all interest in trying to sell these units, and in the jargon of the day "phased out" this department too, despite the great interest each installation presented.

Occasionally, fortunate as we have been, we have had to phase out an individual as well as an operation.

We had a brilliant young man working for us who had a queer personality. Buck and I went out to look over one of his jobs. Seeing us off in the distance, he maneuvered himself unostentaciously to a position where we had to wade through deep mud to get to him. For months he never came into the office even for his check but would stay down in the repair shop until it was ready, then have it sent down to him. My boiling point is not abnormally low, but he got me to it, so was fired with the advice to go to a psychiatrist.

The psychiatrist sent for me, with a "why for" for the dis-

## *Lights and Shadows*

charge. Poor profits? No, the best. My only reason was company morale. As John said, "If that doctor had prolonged the interview another fifteen minutes, you would have had him on the couch."

We did a tremendous amount of work on airfields prior to World War II. It was inevitable that we would be in it. The first job was runway lighting at Northeast Air Field. We started about December 6 with a rotary trencher. By ill fortune we had a killing frost the day we brought our trencher on the job. It froze solid to a depth of eight inches, impossible for the equipment to handle. We struggled through breaking the top by hand.

Bainbridge was quite an adventure. Buck spent eleven months there. I remember one of the early organization meetings at which I was present. Eggers and Higgins, a thoroughly competent firm, were the architects and engineers. They recommended fifty thousand feet of three-conductor 500,000 circular mills copper cable, about as thick as your arm.

The naval man in charge of the camp, a commander, told them to play safe and order 500,000 feet, ten times the request of the engineers. That was approximately 100 miles for a property of 1,000 acres. And we wonder at unbalanced budgets.

Bainbridge gave us another breath. We always seemed to evade the sheriff just as he was about to close in on us.

At that time, we looked at another government job at Syracuse. When the commanding officer, a Major Dudley, gave me three hours to submit a firm bid on a job involving 1,000 poles, as he had already driven two contractors bankrupt on the same job, I told him we were not interested. It was also a really tough union situation; one of those old time business agents who considered his job was to be at mortal enmity with contractors at all times.

One competent army man was Captain Samuel La Penta, who had spent his life in the contracting business, before being commissioned captain in the Engineers. His idea of the inspectors, who worked for him, was that they were there to get these facilities ready for occupancy as soon as possible. If that required the inspector to tell a contractor he was embarking on a mistake, it was done. Completely revolutionary. Imagine a government inspector trying to get a job done instead of waiting for the con-

tractor to complete his error and then gleefully telling him to tear it down and start over.

The government had taken over the antiquated Disston Saw Works to convert to making light armor for tanks. The new roads were impossible from rain and mud. We had a lump sum contract for base and top. I went to the captain and said it was impossible to build a road on such a sub-base. He asked me to show my quantities of stone. These he declared adequate and gave me an order paying for any additional tonnage to dress up the subgrade. Incidentally, the whole operation, roads and indoor equipment, was completed well within scheduled time but never used.

During the war all types of work except for the government were prohibited. This quickly accelerated the trend whereby the caprice of some inexperienced bureaucrat had complete power over railroad, utility, airplane and banking mergers.

The rapid expansion of our Air Force for World War II and the intricacy of the planes called for airfields as free from dust as possible.

So expensive were the engines that it was deemed a good risk to plant grass even at unfavorable times on the chance of getting a good catch. We did thousands and thousands of acres with Lou McCloskey as boss.

I remember one job in South Jersey. We were doing a Navy field almost adjoining an Army field. The Navy had retained Marshall Farnham of the Philadelphia Country Club as consultant. I have always respected Mr. Farnham as the best turf expert I know. In this case, we worked for him. The Army had imported topsoil to a depth of four inches. Mr. Farnham imported no topsoil although on similar ground. Our results, at his direction, were highly superior.

I remember the Dover Airport. We plowed the cable for runway lights. The cable plow was towed behind a line truck. The going was too rough, stalling the truck. Our foreman solved this situation in a sensational manner. He put a bulldozer in front of the line truck pulling the front wheels almost together, bending the front axle, also the truck frame; it looked like a tricycle. That ended the chassis of that truck, also the incumbency of the foreman.

We had the seeding of the airport. It was done at a time when

success of seeding was improbable, but our results were excellent. The job required seventy tons of grass seed, more seed than I thought was in the world.

I am tremendously impressed, incidentally, with the new treatment we are giving highway slopes. We had been planting a mixture of several grasses and hairy vetch, which did some good. But a new plant turned up, crown vetch, unbelievably good. It makes a dense cover of undulating green and in season it is covered with beautiful pink flowers, good enough for people to pick for bouquets. We have used it on many slopes. It is a happy solution to a difficult situation. The banks are raw clay, shale, gravel and rock. Like all legumes, crown vetch gets nitrogen from the air and builds its own soil. It requires no cutting and obliterates the sight of the bottles and beer cans that our litter-bugs scatter with such enthusiasm.

One of our projects was a long artificial spit of land that was built in Barnegat Bay to retard the gradual movement south of Barnegat Inlet. We sprigged this with salt-resistant grasses after a heavy mulching with salt hay. The lighthouse had been protected on all sides by deep interlocking sheet piling and a break-water of huge rocks had been run out. By the way, these rocks, weighing tons apiece came from the magnificent granite quarry at Port Deposit, Maryland. In their eagerness to achieve production, dynamite had been used instead of the black powder which was the explosive used for building stone and curbing. This dynamite so shattered the stone that it cracked to a great depth in the hill. The quarry is now useless.

It seems to me that instead of these rocks and the spit, a permanent job could have been done by driving two rows of piling from far out in the bay across the island and between the parallel rows of piling. Old maps show that the railroad station was at least a half mile north of the lighthouse and the island extended at least a half mile north of that. In other words, Long Beach Island is eroding on the north end, and the Seaside Park Island moving south at the same rate. Palliatives cannot arrest this steady erosion of one end of an island and the accretion of the island on the other side of the inlet. However, there is no uniform pattern. Sometimes the erosion is on the south end, some-

times on the north end.

My inspection of the work on the sand spit was one day before John was inducted into the army. He had flunked out of the freshman class in chemical engineering at the University of Pennsylvania. Immaturity and a martinet dean contributed to the debacle. The dean was one of those “educators” like the law professor at Yale. “Look carefully at the man on either side of you, for he won’t be there after this year.” I think this approach has been dropped in favor of careful screening of applicants. It was a waste of parents’ money, the boy’s time and a serious blow to morale.

I was talking to Jim Frick, graduate manager of Notre Dame, and I assume his views are of the current trend. He told me out of approximately 1,500 freshmen, 371 of whom had been high school valedictorians, thirty had flunked, and eight of these had made up their deficiencies at summer school. They have no physical education course or other snaps. Well, John flunked mechanical drawing and gym, although he was on the Freshman swimming team. When the dean told me, I said:

“Nobody flunks those courses!”

“Your boy did.”

He passed his math and physics.

Anne and I took him with us to Barnegat so he could fish, while I looked at the job. I remember that all his bait did was to attract fish that a pair of loons gobbled up. At lunchtime, we went to our hangout, the Surf City Hotel. Anne, for years, received special rates for our family of seven. This enabled her to have a vacation, instead of twenty-one meals to prepare and clean up after.

Mr. Searle had sold out, and temporarily, Mr. and Mrs. Wida were running it. The government had commandeered their famous establishment at Brant Beach – Coast Guard, Wacs or something.

Mrs. Wida said she couldn’t cook us a meal as Mr. Wida was in the county seat, Mt. Holly, and she had to tend bar. We prevailed on her to let me tend bar and she cooked us some magnificent veal chops. I have always wondered when veal turns to beef. It must be veal today and beef tomorrow. These chops were on their last days as veal. They were huge and looked exactly like sirloin chops.

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John had been appointed temporary sergeant in charge of the squad heading for Indiantown Gap. His weeping mother stood outside the train gate at old Broad Street Station. No John. They were just closing the gate when we heard running steps and a call to hold the train. It was John, who had been at the 30th Street Station. Anne joined in the cheer, as in his oldest clothes, he leaped over the rope holding back the spectators, and disappeared into the train. He certainly took the poignant grief out of that parting.

On the subject of army induction, Paul had good marks in electrical engineering at Haverford, but by 1944, the army was getting to the bottom of the barrel. He was plucked in his senior year and sent to Fort McClellan in Alabama, the infantry replacement camp. This was at the time of the Battle of the Bulge. At McClellan, the training simulated battle conditions, and when they climbed under barbed wire, it was in earnest. A few of the fellows took it as a joke, but it was a matter of life and death.

A few days before they were shipped out, Paul's captain sent for him. "Henkels, do you know where New Brunswick is?"

"Yes, Sir. It is in Connecticut."

"It is nothing of the kind. It is in New Jersey, 45 miles from your home and I am sending you there to study electrical engineering at Rutgers."

When Paul arrived one evening at Rutgers, he found that next day an important examination in electronics was scheduled. He had always been a power man, but a nice boy from Cooper Institute stayed up all night and Paul passed.

His work in Europe was inspecting our radar equipment in the Netherlands, Scandinavia and the British Islands.

Lou McCloskey, who was there, can tell better than I about another of these airport reseeding jobs. Here is the story in his words.

"As used by the classic Marxists, the term Means of Production included people as well as land, money and tools. It is fairly common practice to borrow or rent the latter three elements but not quite so usual to borrow people, too.

"At the end of World War II we picked up a little job to reseed the airfield at Dexter, Maine, for about \$8,000. None of us had had any recreation time for a good while so we decided to

take a week or part of a week off.

“We loaded a freight car with lime, fertilizer, seed, and harrows and sent it ahead, and Buck, Andy, Roy and I loaded up in my four-year old Plymouth and set off in a snow storm. We stopped for a fancy steak dinner at Cavanaugh’s on 23rd Street in Manhattan and drove all night to Portland. Mel Locke joined us there and after a couple of hours’ sleep we continued, to inspect the rocky ocean-front near Rockland which I owned then and have since given to Maker.

“After lobster in Rockland, we mushed on to Moosehead Lake for an exciting trip in a speed boat. Buck and Roy boarded a Piper Cub on pontoons for an excursion over the forests, which was a little too much for their companions’ courage.

“They dropped me at Dexter to recruit the necessary cohorts to get the job done. In a couple of hours a capable, intelligent, and reliable farmer with strong sons had been turned up. We covered the job together, agreed on rates and met the inspector. I spent a total of one day there and never saw it again. With a few phone calls our excellent friend did the work, had it accepted and shipped our dunnage home. I haven’t seen him since. The job paid for the week for all of us and left \$1,500 over. In my book there are good people everywhere.

“Another example was our first venture in foreign fields. About 1947 or ’48, Johnson, Drake and Piper were finishing a new airfield at Guantanamo and wanted a price to seed it. Being very reluctant to make a firm offer in an area that then seemed wildly remote, we came back with a counter proposition. We would lend them a boss man to go on their payroll and they should buy any necessary materials and equipment and meet all labor and other costs. At the end of the job if there was anything left under their cost budget, we would take half of it for a fee and they could keep the other half. If the cost was spent or exceeded, we would do without a fee. It was the best deal in sight so they took it,

“It is hardly necessary to add that we had no mind to spare one of our two-legged Means of Production, already profitably occupied, on a project as uncertain and even unpromising as this. Who? Who?

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“My friends at King Farms came up with the answer. Their former assistant field superintendent, Bill Carter, who had spent his life at large scale mechanized farming, was on the beach. He was shortly enrolled in Johnson, Drake & Piper’s employment and dispatched to Miami to find the stolons, which all advice told us were the only successful way to start grass in Cuba’s eastern climate. He did and soon hundreds of bags of them were on their way to the Naval Base by air.

“Unfortunately, the stolons dried up like straw, but Bill was not easily discouraged. We got him Bahia grass seed and other alchemical preparations and after three months he had the plantation off its feet and in the Navy’s lap, to mix metaphors. Bill was not as good at consultation as he was in the field, for he stayed incommunicado for forty-eight days, lest somebody spoil his sleigh ride. But the upshot was that I got a free week in Havana and Johnson, Drake & Piper and ourselves split the profit of \$6,000. Bill was a rolling stone by nature and training, anyhow, and was perfectly glad to resume his siesta.”

Airport work is never without hazards, and some of the men have had close calls on the job.

While working at Niagara Falls Air Force Base, Niagara Falls, New York, installing an airfield lighting system, we had to work along the active runway. One thing Frank Henderson tried to impress upon the men was to keep an eye out for aircraft in trouble. He had an old Italian fellow working who had a lot of energy but not too much upstairs. The day this incident took place he was excavating for a duct entrance crossing the runway. A P-51 came in to land and went out of control. Frank was on the down-wind side and safe but this laborer was in the center section. The plane veered on a long arc; and headed right for him.

He never looked up, just kept digging. The plane skidded right by him, missing him by only three feet. The mark of the wing tip was on the blacktop. As the plane went off into the grass and continued on out of control until it finally stopped, this man never looked up. Frank drove down to him all shook up. The only thing the man had to say was that he “No can a find.” The tower people watched this incident, also, and asked who the man was

that had nerves of steel.

Another aircraft incident took place at Schenectady County Airport with the same type plane. All the runways were done except one. The National Guard was taking off with a strong crosswind. Frank Henderson and his men were building a manhole and duct crossing along the edge of the active runway as this P-51 came toward them. It went off the runway and straight for them. The pilot didn't give up or we wouldn't be here today. Just before he reached us, he pulled up the plane and cleared the men by only a few feet. Some of the men jumped into the hole, some flopped down but luckily no one remained standing.

At Dover Air Force Base, we had another close call. The runway was 10,000 feet long, but we had closed 5,000 feet due to repaving. The heavy cargo planes had to be airborne before they reached the construction area. Each day they all seemed to be able to make it until one pilot must have underestimated. Truck drivers, equipment operators, and laborers took off in all directions. Frank, caught in his station wagon, just flopped down and waited. How the plane ever made it no one knows yet.

I hope by now, after many expensive lessons, we don't go after jobs where we are not wanted. A turnpike commissioner was asking for bids on installing guard rail. It was a total of 309,000 feet. A character whose name I had better omit had sold the commission on a certain beam guard rail. He recommended his son-in-law as an experienced contractor.

The commission delayed making the award, but we managed to force their hand to our everlasting regret. Our work was excellent and finished on time, but they could not believe it until the opening took place with guard rail and drainage complete.

One of our mistakes was promising them a machine that would, almost automatically, put in guard rail at an unbelievable rate. I was asked incessantly when this Goldberg would show up. It cost us \$30,000, was too heavy for any trailer or bridges and too high for underpasses. Since then I have deprecated excursions into the machinery inventing field. We have had only one invention since then, a mortifying failure of a cable plowing machine. Andy has said perspicaciously that we are a business of odds and ends, meaning of course high overhead and a multiplicity of fore-

men, making it a desirable place to work.

Back to guard rail. We had a number of simple rigs that pounded the posts into place. Also a big one which Lou, for reasons unknown, called the biscuit gun. It is called so today. One day, pouring rain, we heard of an informal inspection conducted with malice by the aforementioned character. He took the cavalcade to any imperfect work he could find. First, we had burned off the top of several posts where we had struck solid rock. Undoubtedly we had received permission to do this, as no attempt was made to hide it. The surplus top had been thrown over the bank, left in clear sight and no attempt had been made to dress up the post tops. Of course, when the zealous character stirred up so much mischief, the inspector recanted.

Our enemy led the cavalcade through the downpour to every slight imperfection he could find, which were few. He then asked Andy and me to his hotel room. As the people in North Chicago suggested that we take our loss with gratitude and run, he advised us to quit and let his son-in-law take over. Our real mistake was talking too much about the behemoth we had in construction, when we had perfectly adequate equipment on the job.

In fact, the type of guard rail furnished does not lend itself to volume setting. Any small inequality in length throws everything out, so there must be a multitude of small gangs each doing one post and one rail at a time no matter how long the run. So we were scattered over the entire length of the highway. We were handicapped also because the guard rail obviously had to wait until everything else was finished as it had to be installed on the finished shoulder of the road. This, of course, was the last thing the contractor did. It was an equipment operation for them and the concrete had to cure a certain time before it could stand the weight of the equipment.

This meant that we threw our entire force on the finishing. John, just back from his honeymoon, spent a month at Morgantown. We accomplished this on time, for which we received much praise, but it was an expensive victory. While we were using all our efforts there, we had a number of jobs in New York State where Charley Rees, unsupervised and unaided, lost \$82,000.

After the job was over, I presented alternate bills for extras

of \$40,000, \$30,000, and \$7,000. I was hoping they would accept the \$7,000 one, as it opened the door and established a precedent that ultimately gave us \$87,000 in extras.

The real trouble with the work, which repeated itself on another turnpike, was that separate contracts were awarded for the road, which I regard as the general contract, the electricity and the guard rail. Thus there was no co-operation among the contractors. I quote Babe Herman, who was once on second base with two other Dodgers. He yelled to the bunch, "All right, from now on its every man for their self."

To repeat and emphasize, we were not wanted in the first place. There are many places where we are, and we try to stick to them.

The new turnpike job was lighting the interchanges. Again came the handicap of three independent contractors at cross purposes, where co-operation was essential.

The lights were wired by underground cable. Sometimes the shoulders would be two or three feet above the final grade, which meant really deep trenches. At other places we built up the ground and laid our cables. The dirt-moving contractors constantly cut our cables. As a farmer told me when he posted his farm against hunters, "The average hunter doesn't know the difference between a deer and a cow, and what is more, doesn't care."

Again we finished on time, with experience as our sole profit. I reiterate, we should avoid, jobs where we are not wanted, and where divided authority discourages co-operation and promotes discord. In other words, I think this type of bid-taking is foolish, uneconomic and unfair.

We took the job of rebuilding the greens of the Hercules Country Club. It reminds me of a job we had for Dr. Mitten of P.T.C. fame. There, we were required to dig beds to twice the the depth of the topsoil. Our instructions were to dig out all the topsoil, dig the subsoil and haul it away, and fill with topsoil, half of it hauled in of course. We dug the first ten feet to depth, then saw a short cut much to the customer's advantage. We threw the other topsoil ahead and, then dug subsoil out and hauled it away. As you can see, except for the first few shovelfuls we moved the earth only once. The landscape architect, evidently on a percentage basis, was furious when she saw it and made us go

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back to the more cumbersome method. As Stan reports on Hercules, emphasizing the point that our talents lie in our initiative and supervision:

“Mediocre results were achieved because the owners retained not only the inspection, which is necessary, but so tight was the supervision that our talented foreman was unable to show the competent, reliable, energetic, resourceful running of the job, which is our greatest asset. In the end no one was satisfied.”



*Lou McCloskey, Andy Lewis, and Buck Faust (left to right) in a 1945 photograph, Andy and Buck are shown enjoying cigars, probably from the legendary supply that Buck always kept in his jacket pocket, ready to thrust into a customer's jaw (circled). Below: Resembling a scene from a Steinbeck story, a 1940s era Henkels & McCoy crew takes a lunch break and finds shade wherever they might.*

