Resourceful Oklahoma
Gas Companies Plan Merger

A merger of Oklahoma Natural Gas Co. and Consolidated Gas Utilities Corp. is scheduled to be completed January 1, the heads of the two companies have announced.

Oklahoma Natural President Joseph Bowes and Consolidated President Richard Camp said the merger will become final the first of the year if all stipulations are met.

Officials said Tulsa may be headquarters for the consolidation, which will operate under the Oklahoma Natural Gas Co. name. Under the agreement, Consolidated common stockholders will receive eight-tenths of a share of ONG stock for each share of Consolidated.

ONG serves some 320,000 customers in 100 Oklahoma City towns while Consolidated serves 54 cities in Oklahoma and southern Kansas. Consolidated employs about 500 persons and ONG about 1,800.

Miss Oklahoma... Mighty Pretty

The talent that is providing part of Miss Oklahoma's ticket to Atlantic City September 6 is designing clothes although the 5-foot 5-inch blonde could make a gummy sack look fashionable.

Charlavan Baker, 20-year-old blue-eyed, blonde-haired Miss Oklahoma, has a wardrobe full of clothes, most of which she designed although she only designs when she wants something different.

A native of Perkins, Miss Baker came to Oklahoma City two days after she graduated from high school. A few months later she began modeling clothes for Town and Country, Peyton-Marcus and Van Dyke's. She was chosen Miss Oklahoma City this year and later named Miss Oklahoma.

One of Charlavan's top outfits modeled in the statewide contest was a dawn to dusk type combination that she designed and made. Fashioned of light blue cotton trimmed with white cotton lace, the outfit consists of shorts and top, a short skirt to wear over the shorts, an outside skirt, and white collar and cuffs. Worn with a hat and gloves, the dress is for afternoon. Minus the cuffs, collar and accessories, it becomes an after five dress.

At present Charlavan is going in for modified squaw dresses. That is, cotton materials made like squaw dresses but done in pastels with less brilliant trim. She also likes tote bag pants and has several sets of the tight-legged fancy pants.

With measurements of 35½ — 23 —

New Plant Slated

Officials of Continental Baking Co., Tulsa, have announced they will build a $1,250,000 plant in the Sheridan Industrial Sites, making the third company to move into the new industrial area.

Plant manager Sam F. Peet said the plant will cover about two acres and should be ready for occupancy early in 1955.

The Continental plant now is located on part of the site of the proposed civic center.

Preliminary construction of Poteau's new $100,000 National Guard Armory is underway. The one-story brick building will have a large drill floor, three rooms for office space, a completely equipped kitchen and facilities. The armory is scheduled to support the military needs of a large part of southeastern Oklahoma.

Our Cover

Charlavan Baker, Miss Oklahoma, likes all kinds of sports including sailing. On our cover, the beauty queen is posing at Lake Overholser in Oklahoma City.

Pipe Line Firm Purchases Long Line System

The Cherokee Pipe Line company, owned equally by Continental Oil and Cities Service, has purchased a 1,050-mile crude oil pipeline gathering and trunk system and two crude oil lines extending 395 miles.

W. Alton Jones, board chairman of Cities Service, and L. F. McCollum, president of Conoco, said the new company assumed ownership of the lines September 1.

The two crude oil lines extend from Glenn Pool, Okla., to Wood River, Ill. Plans call for conversion of parts of the two systems into an 8 and 10 inch products pipeline system, and work is scheduled to start early this fall officials said.

Also to be purchased by Cherokee and converted to products transportation is a 32-mile oil line extending from Guthrie to Cushing and owned by Cities Service, and an 82-mile line from Tonkawa to Oklahoma City, owned by Conoco.

The products line system then will extend 582 miles from Ponca City to the Oklahoma City area, and to a point just north of St. Louis. Its initial daily throughput will be 22,000 barrels of petroleum products, officials said. Both Conoco and Cities Service have large refineries at Ponca City. The products line will be operated by Continental Pipe Line Co.
Plush Play Planned

Oklahoma's big recreation program is finally on the move and Sooners who like to play outdoors can look forward to first-class accommodations and equipment in the state parks by next summer.

The 72 million bond issue for park improvements, recently validated by the state supreme court, is the largest expenditure ever made by a state on a self-liquidating basis, said Morton Harrison, chairman of the Oklahoma Planning and Resources Board.

The bonds will provide for lodges at Texoma, Sequoyah and Quartz Mountain state parks plus new camps and other improvements. The number of rooms in the Sequoyah and Texoma lodges will be four times the size of the present Lake Murray Lodge. Quartz will be twice the size of Murray and Murray lodge itself will be doubled in size.

Lodges Pay Off

Records indicate the annual income of these new lodges alone will be over the $3 million mark per annum, said Harrison, and this is only a portion of the tourist spending.

Construction will get under way first at Lake Texoma in south central Oklahoma. A 106-room lodge will be built plus 30 deluxe cabins, a fisherman's house with 20 rooms, 20 fishing area cabins of two units each, a service building, swimming pool and necessary utilities.

The lodge will be located on the west side of the Washita arm of the lake, about 1,700 feet south of US Highway 70, overlooking the lake and the Roosevelt bridge. The cabins will be south of the lodge on the bluffs along the lake. The swimming pool will lie north of the main lodge, between it and the highway.

Modern Plans Drawn

The modern lodge will be fireproof and air-conditioned throughout. In addition to the 106 rooms with private baths, the building will provide a lobby, dining room, kitchen, ballroom, office and necessary storage and linen rooms.

The deluxe cabins also will be air-conditioned. The fishermen's lodge, for use of men only, will be equipped with twin beds, package kitchen units and common washrooms. The fishing area cabins will accommodate up to four persons and have a bath and kitchenette.

Total cost of the Texoma construction is scheduled to be $2,029,942. Architect's plans are complete and bids soon will be requested.

Sequoyah state park near Wagoner will have two lodges, one in the peninsula area, the other in the bay area. In the peninsula area will be a 109-room lodge, 6 cabins with four rental units each, 13 cabins with two rental units each, a fisherman's lodge with 20 rental units, a service building and swimming pool and bathhouse. Total cost will run $1,600,858.

26 Rooms

In the bay area of Sequoyah park will be a 26-room lodge, 6 cabins with four rental units each, 2 cabins with two rental units each, a fisherman's lodge with 20 rental units and a swimming pool. Cost will be $584,421.

A 26-room lodge will be built at Quartz Mountain state park in southwest Oklahoma. Cost of the lodge plus a swimming pool and service building will be $522,807.

Lake Murray's 26-room lodge will have 30 rooms added to it in addition to 2 new quadruplex cabins, a swimming pool and bathhouse. Expenditures will run $292,321.

The remaining nine parks will have less spectacular, but just as useful, improvements. Alabaster Caverns near Freedom will have a new service building including a waiting room, souvenir display room and work shop.

Model of the new lodge at Lake Texoma State Park

Clubhouse Cabin Slated

A new clubhouse cabin accommodating 16 persons will be built at Beavers Bend in southeast Oklahoma. Boiling Springs near Woodward will receive 2 four-unit cabins and 2 two-unit cabins.

Greenleaf Lake, newest of the state parks, will undergo renovation of the swimming pool and improvement of the youth camp. One duplex cabin will be built at Lake Wister near Potomac.

A swimming pool, bathhouse and concession building will be at Osage Hills between Pawhuska and Bartlesville. Robbers Cave near Wilburton will have a clubhouse cabin accommodating 16 persons and 1 four-unit cabin.

A 20-room group cabin will be built at Roman Nose near Watonga, and Tinker will receive 2 duplex cabins.

Jet Plant Slated

A modern new plant for manufacture of high-temperature jet engine parts is planned by Products Engineering, Inc., a two-year-old Tulsa firm.

The plant will be located on a two-acre tract near the Douglas Aircraft Co., said R. W. Graddy, vice-president. Some $225,000 worth of new equipment for the factory has been ordered, Graddy said, and construction of the $60,000 building will begin as soon as possible.

Graddy said the plant should be in production by October with 60 to 75 persons employed. Employees should number 150 ultimately, Graddy added.
Petite, Rugged -- Both from Pryor

Two garment factories are located in Pryor but they're not in competition. In fact, they recommend each other's products.

One, Wilson's Frocks, is a plant that turns out demure party dresses for little girls. The second, Cherokee Toggery Manufacturing company, makes leather jackets and belts.

Wilson's is operated by Joe and Zelma Wilson who create a furor by delivering their dainty dresses in a sleek gray Jaguar.

Started four years ago, Wilson Frocks have expanded into 17 states and go all over Oklahoma. The dresses run from toddlers through 3x and from 3xs through 6xs.

**Daughter Needed Dress**

The Wilsons dreamed up the idea of making party dresses because they couldn't find a suitable dress for their four-year-old daughter. (They now have two daughters and a son.)

"I wasn't going to pay $30 for a dress," Mrs. Wilson said, "And I wouldn't have the $3 ones even for her to play in."

So Zelma started designing. She, Joe's mother and another woman made the dresses, each making an entire dress. "It took days," Joe commented.

They bought machinery to facilitate the process and now have 19 machines and 26 employees.

**Quality Stressed**

Wilson Frocks stress quality and include all the little things that make a well-dressed little girl. For instance, the belts are always 3 1/2 to 4 inches wide and long enough to have a graceful bow with the ends hanging.

They also put tiny belt loops in the back of the dress, on each side of the bow, to keep the bow from dropping down the child's back.

There are many accessories, tiny bows or rosettes, which are pinned on so they can be removed easily before the dress is laundered. One employee does nothing but pin on the accessories.

Another feature, they pick only washable—and in many cases, non-ironing—materials for their dresses. "You can't always be sending children's dresses to the cleaners," Zelma pointed out.

**No-Iron Fabrics Best**

The Wilsons use only the best fabrics they can get. "We try to use every type fabric, but the no-iron really goes best," Zelma said.

The two make from 2,500 to 3,000 dresses per month and work several months in advance of the season. In July, they were making up their Christmas holiday line and already had received reorders on their fall dresses.

They have had their lines copied frequently, but "it never hurts us, because by the time they're copied, we're already putting out a new line. They can't get ahead of us," Wilson said.

The dresses sparkle with lace and dainty trim. "Before we use any trimmings," Zelma said, "We make sure they're going to stand up well. If they ravel after being washed three times, we don't use them."

**Dresses Reinforced**

The dresses are reinforced around the waist and down the side seams from the arms. "That's where children rip them out," Wilson said. The waists have a cord around the middle, bound with the dress fabric. The sides have French seams.

The machines the Wilsons bought made dress-making easy. The sewing machines have oil pumps like a car to operate the motors. "They have to," Joe pointed out.

"They make 5,000 stitches per minute compared to a home machine that makes 350 to 500 stitches per minute at high speed."

There are two cutting knives, one straight and one for round cutting, that will cut material up to six inches deep. Other machines are used only for joining the blouse to the skirt or sewing, binding and gathering the sleeve into the blouse. Another machine puts in a piece of bias and pinches the seam.

**Buttons On in Flash**

Still another machine stitches and cuts buttonholes in a matter of seconds. A button-sewing machine can put all the buttons on a dress "while a woman is getting her needle threaded at home," Wilson said.

A vacuum clipper removes all strings from the finished dresses. Then the fluffy little garments are pressed and have the accessories pinned on.

Each dress has its own hang tag that identifies the material and tells how to launder it. The Wilsons wholesale all their garments, which are retail at $8 to $15 each.

Wilson said that quality was the most important thing in the frocks. "We make
"There's not much to tell about our place," and Richard Smith, owner of Cherokee Togs Manufacturing company with his wife Louise. "We just make leather coats and belts."

"My wife started with a borrowed sewing machine, and the first woman we hired is still with us."

In addition, Smith employs 35 to 40 persons in the plant and six wholesale salesmen. Cherokee Togs are sold in all the states except three or four in the deep south.

**Varied Coats**

Smith makes leather and suede coats and jackets in all sizes for men, women and children. There are 15 different colors and 14 styles of coats. "We try a new one here at the plant," Wilson said. "If our people like it, we put it on the market."

The business came into being because Mrs. Smith had a gift shop in Muskogee and had trouble getting leather coats. Smith made saddles and knew how to work with leather.

"We decided to make coats," Smith said. "One style called for another and we just kept on."

That was in 1941. Now, in addition to coats and belts, the firm makes western shirts and Indian suits for children, leather vests for women and chaps for both children and adults.

"We had a good business in chaps when we first started," Smith said. "But now the only ones who wear them are drug store cowboys. Back in the brush, they herd their cattle by plane."

The little Indian suits are tiny outfits with breechclouts covering regular shorts. They come in leather suits, kacki with leather fringe, and denim. The suits, in production about two months, have been selling rapidly," Smith said.

"Our things are just about what Indians wore 60 years ago," said Smith.

The company recently completed a government contract for overseas caps and garrison and fatigue caps.

**Fancy Pants Are Sideline**

In addition to leather-goods, Mrs. Smith makes outfits for rodeo queens. "Each one has to be different," she explained. She trims some with sequins, others with satin or both. The pants are hardest to make. "They have to be skin tight but the girl has to be able to ride in them."

About the name of the company, "we named it that because I'm a Cherokee, I guess," Smith grinned.

The leather for the coats is cut out with dies and a huge press. The pieces are sewn with special thread, and the company makes its own buttons.

One type button is a strip of leather rolled into a ball. A hole is punched into it, a thong put through it—and the button is done.

Another coat has leather strap ties with the ties pulling through the buttonhole. This is especially in demand in the east, said Smith, around Maine where there are some Indians.

**Fringe More Serviceable**

Smith puts fringe on most of his coats, although he admits he could save time and leather if he didn't. "It's more serviceable," Smith pointed out. "If the leather is torn, we can fringe it."

The fringing was quite a problem at the plant. For some time, the leather simply was cut into strips with scissors. Smith couldn't buy a machine to do it.

"We finally built one here in town," he said. "We worked six or seven months on it."

The plant's present capacity is 100 coats a day, but Smith is rebuilding machinery to increase capacity to 150 per day by September.

The leather is suede, regular cowhide and goatskin. Suede is made by buffing the back of the leather. Smith's stockroom holds stacks of bright-colored hides.

Small pieces of the skins, varicolored, are sewn together to make western suits for children.

**Togs Popular**

Cherokee Togs sell extremely well in New Mexico, Texas and Oklahoma, where Smith has an outlet in nearly every town.

"We try to have only one customer (retailer) in a town," Smith said. "But we have more in Oklahoma City and Tulsa."

Cherokee Togs make both fitted and loose-hanging jackets, and some custom work although Smith added he didn't do much of this.

"We don't do much here," Smith ended, "Just make leather coats and belts."
Pawhuska in the center of the Blue Stem Bowl, Osage county, was a picture straight out of Zane Grey's books during the annual International Round-Up Clubs' cavalcade.

Cowboys roamed the town, girls in boots and wide-brimmed hats were numerous, and sleek, healthy horses pranced at the Osage county fairgrounds.

The Cavalcade brought together some of the best riding horses in Oklahoma and Kansas for the three-day festivities. Palominoes, sorrels, buckskins, bays munched in the concrete stalls at the fairgrounds and waited for the shows.

First held in 1947, the Cavalcade has drawn as many as 800 horses to the super rodeo. All competition is amateur.

Round-Up Club members camp on the outskirts of the fairgrounds in tents, house trailers or just blankets. One club from Tulsa brought its own cook.

One of the finest training grounds for race horses in the Southwest is located at Pawhuska.

Osage Downs at the Osage County Fairgrounds near Pawhuska has everything to offer a race horse including a track, fireproof stalls and trainers. In addition, the fine limestone prairie hay is plentiful and inexpensive.

Thoroughbreds are sent hundreds of miles to winter at Osage Downs where their education is either started or continued, depending upon their ages.

"We have the best training ground and the best equipment from Omaha to Hot Springs or from Collinsville, Ill. to Denver," says John Tillman, an attorney and president of the Osage Downs Racing Association.

There are 129 fireproof concrete stalls and 48 wooden ones for the horses. The stalls are near the track so that the young horses aren't worn out by the time they reach the track.

The track itself is a three-quarter mile oval with a one-quarter mile approach. Starting gates, accommodating six horses, are on the tracks. Bleachers near the finish line seat 2,000 persons.

The horses arrive at Pawhuska usually in November and stay until the following spring. If an owner has several horses he sends his own trainer, but owners with one or two horses hire trainers near the track.

Colts are broken to race and older horses are trained to run. Colts usually are trained in the fall when they are yearlings. (All thoroughbreds are one year older January 1 regardless of their birth date.) Training includes putting a saddle on the colt, taking him to the track, teaching him to gallop, accustoming him to the starting gate—to break out, and "a general education as to the duties of a race horse," says Tillman.

After three months, most owners send the horses to pasture to rest up for three or four months. Then the serious training begins.
Thoroughbreds wait to race until they're two years old. Then they start with the quarter miles, gradually extending the length as they get older and stronger.

When the horses have been trained, and when spring comes, the animals start on the racing circuit. Pawhuska horses, and Pawhuska-trained horses, have raced at Chicago, New Orleans, throughout Ohio and Kentucky, Omaha, Denver, Albuquerque, Hot Springs and California.

The races at Osage Downs are held annually in May while some of the trainers still are there. There are three races: the Futurity for two-year-olds, the Derby for three-year-olds and the Dinner Bell Derby for colts.

The latter race is made up of three-month-old colts, placed in the starting gates with their mothers stationed at the finish line. The little horses break through the starting gate and race to their mothers and the one that gets there first is the winner.

Entry fees are required and all jockeys must wear colors. A purse goes to the winner. The futurity pays an average of $1,500 to first place.

The Osage Saddle Shop is a meeting place for cowboys and cattlemen around Pawhuska. Until recently, the shop was the only place in town where ranchers could get saddles and other equipment.

Art Sheppard, owner of the shop, is a friendly leather craftsman who knows the cattle business inside out. The son of a cowpuncher near Ada, Art ("they called me "Bapni in Texan") has been on and around ranches all his life. His grandfather rode up the Chisholm Trail from Texas to Dodge City.

Art suffered a bone disease when he was a child and couldn't ride, so it came about naturally that he should repair the saddles and harness around the ranch. He liked the leatherwork and later served an apprenticeship in a leather shop at Dallas. After working in San Angelo and San Antonio, Texas, he came to Pawhuska three years ago and opened his own shop.

Art has saddle trees, wooden saddles that serve as patterns for the leather cutting, to fit most of the cattlemen around Pawhuska. The saddle trees are made in Denver to individual specifications. He stocks all kinds of cowboy gear and makes most of the leatherwork in the shop including harness, belts, boots, chaps and saddles.

The saddles are cut from one large hide so there is no patching. It's harder to get big hides now than it used to be, Art said. Cattlemen used to let their beef get older and bigger before it was butchered. Now they butcher the cattle younger so the meat is more tender, but the hides are smaller.

Art custommakes the saddles and does the hand-tooling himself. A handtooled saddle runs $200. He uses no patterns for the tooling, and each of his designs vary. Even a leaf on the back of a saddle will be different from the same size leaf on the front of the saddle because he draws freehand.

If designs are large, Art draws them before cutting the leather. But with small decorations, he starts immediately with the cutting.

He also dyes the leather, such as in belts, and embosses leather. Embossing is done by heating and pressing the leather. Sheppard explained that leather has oil just like the human body. When the leather is heated, the oil concentrates and that part of the leather looks darker than the rest. The leather is "getting a tan."

Art turns out about two saddles per month and has orders for months ahead. He also makes a lot of belts. His saddles are sold in about seven states with many of the sales going to the same customers.

"A man comes here from Iowa or Nebraska looking for a good horse," Art said, "Then he needs a saddle to go with it. The horsemen send him to me."

The saddles have to be made both for the horse and rider, Sheppard said. There are dozens of different saddle trees, and each rider has his own idiosyncrasies.

"More than half the saddles I make are cushioned with foam rubber," Art grinned. "These boys are finicky about their gear."

Art figured the minimum cost for outfitting a cowboy, not counting his horse, would be $250. "That's not anything fancy, just good plain stuff."

Outfits include saddle, hair pad to go beneath the saddle, a blanket, two bridles and a hackamore (woven rope that slips over the horse's head but doesn't go into the mouth like a bit).

Sheppard has half a dozen different styles of bits. "Horses are individuals, they sure are. They are finer quality now. More breeding, but not as much stamina."

Art does a lot of leather repair work and some boot-making. "I don't like making boots but you can't refuse a friend." He likes making saddles. The horses around Pawhuska are among the best in the nation and Art Sheppard makes sure they have saddles to match.

Dinner Bell Derby is unique race at Osage Downs.
Phillips Makes August Fortune

Phillips Petroleum Company of Bartlesville was the subject of an article in the August issue of Fortune magazine under the headline "Phillips Petroleum—Youngest of the Giants."

The story tells how Phillips began "as a $3-million outfit over a bank in the boom town of Bartlesville" and 36 years later "burst breathlessly into the nation's most select industrial circle, that of the 18 U.S. manufacturing corporations whose assets have passed the billion-dollar mark."

Written by Richard Austin Smith, the story goes on, "What makes Phillips unique is a matter of magnitude: to be a growth company in three growth industries—oil, natural gas, and chemicals—has demanded extraordinary effort and agility."

Fastest Growth

In ten years, 1944-53, the article says, Phillips had more than tripled its assets, growing faster than any other major oil company. It had "increased gross revenues by 275 per cent (to $765 million), boosted book value per share by 108 per cent, and more than tripled net income (to $77 million)."

"In its main area of interest—petroleum—Phillips ranked eighth (in 1953) in proved crude reserves; in natural gas, it was first. Moreover, the company is now a major factor in petrochemicals, synthetic rubber, fertilizers, rocket fuel and atomic energy."

The magazine points out the most important factor in Phillips' growth is organization headed up by four principal executives: Chairman K. S. (Boots) Adams, President Paul Endacott, Executive Committee Chairman Stanley Learned and General Vice President W. W. (Bill) Keeler.

Any one of these men runs the company in the absence of the others, the article continues. A staff meeting is held each morning and "every important well in every domestic and Canadian oil field is discussed by the Phillips geologist with that field or section."

Another element in Phillips' success, Fortune says, is "the determination to get the last scrap of value out of everything the company turns its hand to."

Every Phillips man "is obsessed by a kind of corporate fixation called 'upgrading.' Natural gas must be upgraded into natural gasoline and natural gasoline upgraded by distilling out higher value components."

Recreation Areas Started

Work has started on a 33-acre recreation area near Langley on Grand Lake as well as on two other recreation areas in the vicinity, said Ernest Allen, park director of the Oklahoma planning and resources board.

The 33-acre park, to be called the Cherokee recreation area, was deeded by the Grand River Dam authority to the planning board. The legislature appropriated $24,000 for the tract and about half the appropriation was available in July.

Allen said the Cherokee park will be divided into three parts: northeast below the dam, east near Disney, Okla., and near the East Spillway.

Wells will be drilled, picnic tables set up and showers and restrooms built, said Allen.

The other two recreation areas, Honey Creek and Twin Bridges or Zane Recreation area (named for Chief Lawrence E. Zane of the Wyandottes) also will have picnic and restroom facilities, Allen said. The legislature appropriated $23,000 for the Honey Creek project and $24,000 for the Zane area.
City on the Make

The morning of April 22, 1889, the area that now is the city of Norman was occupied primarily by grasshoppers and woodchucks.

By night of the same date, Norman had a population of 500 persons.

The municipality now has an estimated 30,000 persons based on the 1950 census showing 27,006.

In addition to people, Norman has the University of Oklahoma, Central State hospital, a navy installation, the new Cerebral Palsy institute, and enough other advantages to make Norman residents beam with pride at mention of their city.

Norman's major advantage, said Chamber of Commerce Manager Carl Chaudoin, is its location. The town is exactly in the center of the state, and within a half-hour's drive of Oklahoma City.

Second item most important to the town, said Chaudoin, is its size-large enough to provide everything residents want, small enough that everyone knows everyone. Crime, including juvenile delinquency, is almost non-existent in the locality, and there are no other-side-of-the-track areas.

Third advantage is the educational system.

"We can take a child from kindergarten through a PhD," Chaudoin pointed out, "and he never has to leave home."

Norman's newest buildings include a million-dollar high school and two new grade schools. In all the city has 8 grade schools, 1 junior high, 2 high schools and, of course, the University which is undergoing so much construction that new buildings seem to spring out of the campus like mushrooms.

Medical facilities in the town also are good with a 58-bed hospital, two clinics and the Ellison infirmary at the university. A $650,000 addition to Norman Municipal hospital has just started which will increase the capacity to approximately 100 beds.

The Cerebral Palsy institute, with 50 beds, was completed in 1953. Central State hospital for the mentally ill, opened in 1915, has a capacity of 3,000 patients.

During World War II, the navy established a Naval Air Station north of Norman and a Naval Air Technical Training center south of the city. After the war, both bases were turned over to the university. However the south base was reactivated in 1952 and now has personnel numbering about 3,000.

The university's Max Westheimer airport is located on the north campus. A Class 5 airport, it is considered one of the best university-owned airfields in the nation.

Also on the north campus is the new Oklahoma National Guard Maintenance shops, $300,000 worth of building now under construction. The Oklahoma National Guard's rolling equipment, including tanks, trucks, etc., will be repaired at the shops, which will cover 20 acres and employ 40 persons.

Industries, although not numerous in the city, are well known. They include Dorsett Laboratories, which make RX7-11, Elledge Chili Co., Gilt Edge and Johnson dairies, the Ideal Mattress factory, Southern Scholastic Manufacturing Co., and John-Roberts Manufacturing Co., which makes jewelry.

The area surrounding Norman is chiefly agricultural land, although oilwells form a ring around the city. FFA, 4-H and home demonstration groups are active in the municipality.

Norman was one of the first cities in the state to have a paid and organized summer recreational program. There are four parks and two golf courses, Twin Lakes and the new University 18-hole course, one of the most rugged in the nation.

City residents also are proud of the new 76-room Lockett hotel, just west of the business district. There are 25 churches of various denominations, and five libraries.

"A person couldn't help liking Norman," said Chamber Manager Chaudoin, and pointed to himself as an example. He came to Norman in 1945 from McLean, Texas, where he was superintendent of schools. He planned to stay a couple of years and move on.

"I'm still here and I wouldn't leave if I had to dig ditches. This is a wonderful place."
Twenty-eight square miles in the northeast corner of Oklahoma are bisected deep below the ground by huge tunnels and chambers from which hundreds of thousands of rock tons of valuable minerals are taken each year.

The area is the world's largest producer of zinc and runs high in lead production. Production in 1953 totaled 2,797,071 rock tons of the two minerals, making Oklahoma 5th in the nation in zinc production and 7th in lead.

The area, in Ottawa county, is part of the Tri-State Mine district including Missouri, Kansas and Oklahoma. Largest mining company and zinc producer in the world is Eagle-Picher Mining Co.

By 1926 the Miami-Picher-Commerce area was filled with mills that processed the raw ore. There were more than 250 mills in the area, almost one mill for every 40 acres of land.

The mills were small and inefficient and, in 1928, Elmer Isen, a young metallurgist for the Commerce Mining and Royalty Co., suggested one centrally-located mill designed to custom-treat and commingle shipments of ore from other mines and leases.

Eagle-Picher adopted the idea in 1932 and built a large zinc-lead ore concentrator at Commerce. In 1938 the company purchased the Commerce firm and Isen later became vice president of the company. He has been succeeded by O. A. Rockwell.

Mill Grew

The Central Mill took ore shipments not only from all company mines but from independent mine operators. It soon became necessary to increase the mill's capacity and improvements have been steady since.

As much as 17,500 tons of ore have been milled in a single day at the Central Mill. Ore is carried from mine to mill principally by rail. Eagle-Picher has seven miles of standard-gauge track within the Central Mill yards and approximately 30 miles to district mines and connecting railroads.

An important by-product of the mines is chaf, waste material used for railroad ballast, concrete materials and macadam roads. Large mountains of the chaf are a common sight in the mining district.

Mine employees are residents of the area, and most of the jobs they perform require intelligence and skill. Wages at Eagle-Picher and throughout the area are among the highest paid in American industry, and working conditions often set the standard for other areas.

Safety Devices Developed

Tri-State mines also have been leaders in safety devices which have resulted in air-hygiene and safety methods that reduced injuries and compensation rates to a figure comparing favorably with any so-called hazardous industry in the nation.

Mechanical devices have revolutionized mining and here, too, Eagle-Picher excelled. Many of the developments and improvements have been accomplished by the company's engineers and machinists. For instance, hand loading of ore, once the most exhausting phase of mining, has been replaced with mechanical loaders. Other improvements have taken much of the back-breaking labor out of the industry.

In addition to the mines, Eagle-Picher operates a huge smelter in Henryetta which
Root trimming in the lead and zinc mines.

employs hundreds of persons. Early in the company's history, a gasoline plant complete with oil and gas properties and pipelines were operated to give the smelter plenty of fuel. These operations still exist although they are not the Henryetta plant's principal source of supply.

Mining Steps

First step in the mining industry is the actual mining, digging the ore from the earth. Next is the concentrating or processing like that done at the Central Mill. Eagle-Picher's concentrates, exceptionally high grade, are shipped to smelters from Oklahoma to Pennsylvania. The company smelts or processes all of this lead output and much of the zinc.

Smelting is next. The Henryetta plant is used in smelting the Tri-State and Mexican zinc concentrates. After the smelting comes the manufacture of actual products.

The Henryetta plant produces slab zinc and cadmium, and recently developed germanium, a product that has revolutionized the electronics industry. One tiny particle of this "miracle metal" will take the place of several tubes in electronic devices from radios to hearing aids.

The Nancy Jane

An abandoned mine is just a hole in the ground to most people but to two Ottawa county men it spelled money in the bank.

It also presented many problems.

When Eagle Picher Mining company abandoned in 1950 the Nancy Jane mine near Commerce, K. C. Jeffery and Claude Donica decided to use the mine as a tourist attraction for the many travelers of US 66.

First the mine and its entire operation had to be made absolutely safe. This called for the hiring of a safety engineer to make a survey and recommendations.

When the mine was pronounced safe, the next problem was lighting. Two months and four miles of wire later the mine was opened for business.

Two weeks passed and the Nancy Jane had a total of two visitors—both state inspectors.

If At First

Jeffery and Donica almost gave up but first they decided to go a little further into debt and put up road signs along the highway. Business soon began to pick up and has improved every year since. In 1953 about 4,000 tourists made the underground tour.

Actually the Nancy Jane is just part of a vast underground maze of tunnels covering 28 square miles around the Miami-Picher-Commerce area. Entrance to the mine is a shaft six feet in diameter and 320 feet straight down, drilled through solid rock.

The car in which the ride down is made is a four-man bucket or basket cage lowered by a steel braided cable to the lobby or foyer of the mine, a huge room 40 feet high and roughly 50 by 50 feet. From this lobby, tunnels large enough to accommodate tractors and trucks lead off in all directions. Jeffery and Donica have smoothed out paths in these tunnels so walking is no problem.

A guide tour winds around the large stone pillars left to support the ceiling, and the excellent lighting affords opportunities to study the earth layers. The many small lakes formed by natural seepage provide scenic backgrounds for snapshots.

The tour is not only educational but the constant 65 degree temperature gives relief from the summer sun on the surface.

Eagle-Picher's mining operations cover Miami, Commerce and Picher in Oklahoma.

Zinc can be galvanized and used to coat iron and steel, protecting them from rust. It also is made into galvanized sheets, as much as two million tons per year. Another use is galvanized wire for telephone and telegraph lines, railroad fences along right-of-ways and bridge cables. The Golden Gate bridge at San Francisco called for the use of 80,000 tons of galvanized wire in the bridge cables alone.
A Shawnee family took a running leap at Oklahoma's scenic points recently and wound up with photographs, sunburn and new appreciation of the Sooner State.

Equipped with an Oklahoma Planning and Resources Board Guide Album, Mr. and Mrs. Gordon Richards, daughter Margaret Ann, 11, and sons Gordon Jr., 13, and Paul, 8, went on an 8-day tour of Oklahoma.

Their first stop after leaving Shawnee was Tishomingo where they saw rugged Devil's Den and visited friends.

**Biggest Tree Seen**

The second day the family went to Durant and Wright City, visited Deirks Lumber company, saw the big cypress near Broken Bow that is Oklahoma's biggest tree, toured Beaver's Bend State Park and the youngsters visited a forest ranger's lookout on Carter Mountain.

Following the old Indian trail to Talihina, the Shawnee residents visited the TB sanatorium. The beautiful Winding Stair Mountain led the vacationers to Wilburton and Robbers Cave State Park where outlaws hid in the days of Indian Territory.

The Richards paused at Tenkiller and Greenleaf lakes to the north, both state parks and both excellent fishing spots. They saw old Fort Gibson stockade, Oklahoma's oldest fort, and the Fort Gibson dam.

**Will Rogers Memorial**

Oologah, birthplace of Will Rogers, and Claremore, home of the Will Rogers memorial, were interesting to both parents and children. Stopping at the Mason hotel in Claremore, they viewed the enormous gun collection, 22,000 guns of all kinds, exhibited by J. M. Davis.

Taking the Turner Turnpike, the family stayed in Shawnee that night. The next day they visited WKY-TV at Oklahoma City for a behind-the-screen glimpse of television.

Next stops were the Masonic Consistory, largest in the world, at Guthrie, and Oklahoma A&M college at Stillwater.

The huge grain elevators at Enid, another "world's largest" in Oklahoma, were interesting to the whole family. From there, the Richards went to the salt plains near Cherokee where salt makes the ground white for miles, to Alabaster Caverns State Park near Freedom, the largest alabaster cave known, and Buffalo and Fort Supply, rich in pioneer history.

Then the Richards drove south to Clinton, Hobart and Quartz Mountain State Park. The W. C. Austin irrigation project, covering 50,000 acres in the area, was a lesson in modern farming to the family. They saw healthy green cotton plants growing in irrigated land and learned how man-made lakes of Oklahoma control floods and make fertile fields of drought-stricken areas.

The vacationers went to Lawton and Ft. Sill and saw the jail where Geronimo was held prisoner. Herds of buffalo and longhorn cattle roamed in the Wichita Mountains Wildlife Refuge to the delight of the children.

After visiting Craterville Park, Duncan and McAlester, and having a sumptuous meal at Krebs, the Richards returned home a great deal wiser and a great deal prouder of their state.