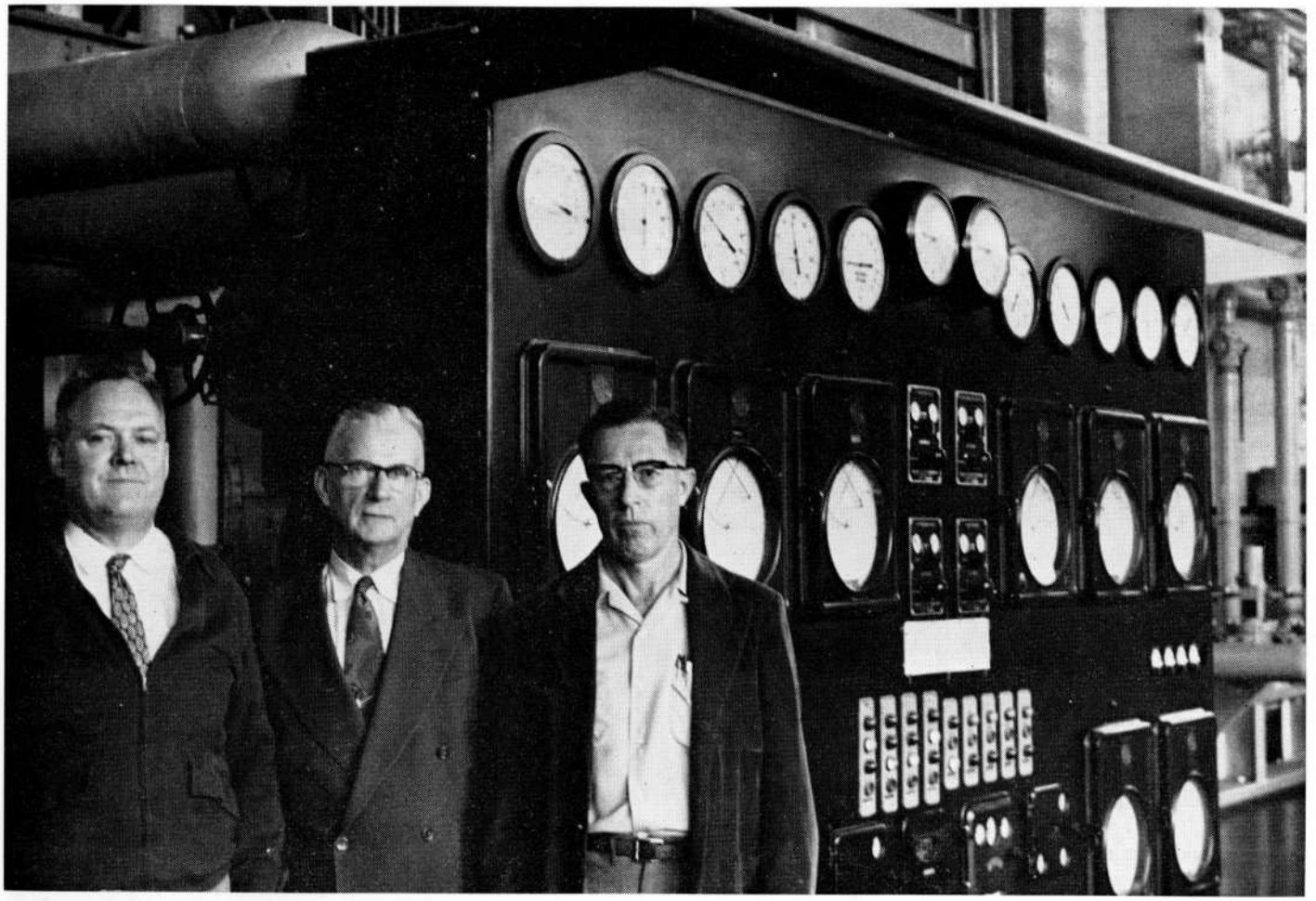


Bennie Shultz, assistant director of Physical Plant, Walter Kraft, director of Physical Plant, and Lendon Hunt, chief engineer, stand in modern power plant that serves the University. Once, Physical Plant consisted of one man, brooms, soap, water, feather duster. In '53, operation cost $1,400,000.

The Stage Is Always Ready

BY WALTER KRAFT, DIRECTOR, PHYSICAL PLANT

Relatively few people have had occasion to look behind the scenes of the Physical Plant Department to see what is required to keep the University stage in constant preparation. So long as the services performed by the Physical Plant are uninterrupted, there is little reason to give it any thought. It is when the unusual happens, resulting in the interruption of one of the many services, that attention is directed to it.

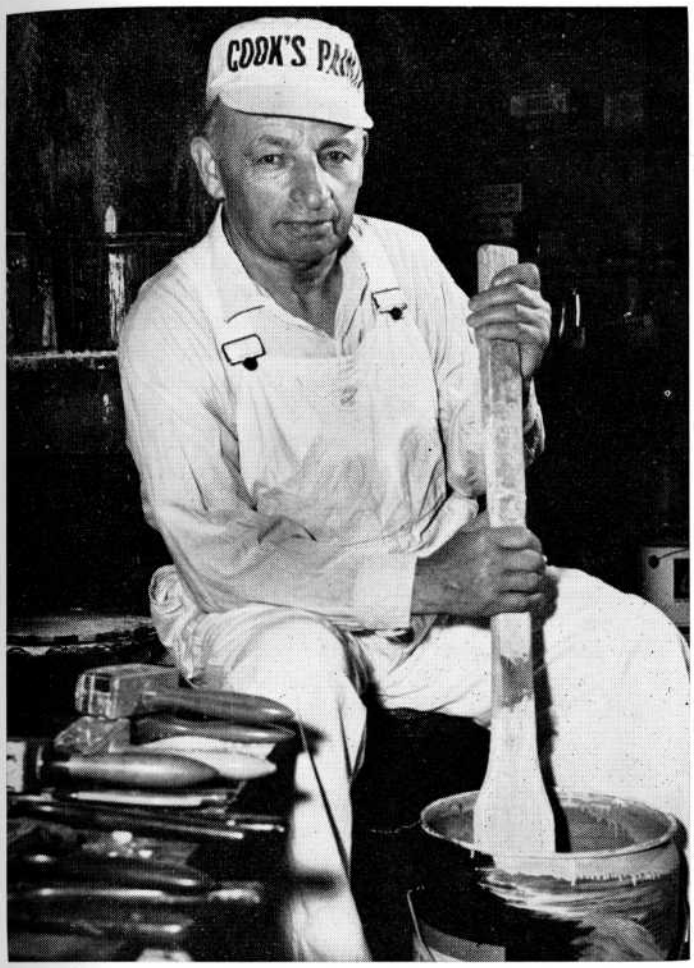
The responsibility of the Physical Plant Department, in general, is to provide the necessary physical services required by the teaching departments to effectively carry on the academic program of the University. It is the service department of the University and exists only for the purpose of rendering service to and providing suitable conditions for the teaching and research programs of the University.

Specifically the responsibilities are as follows:

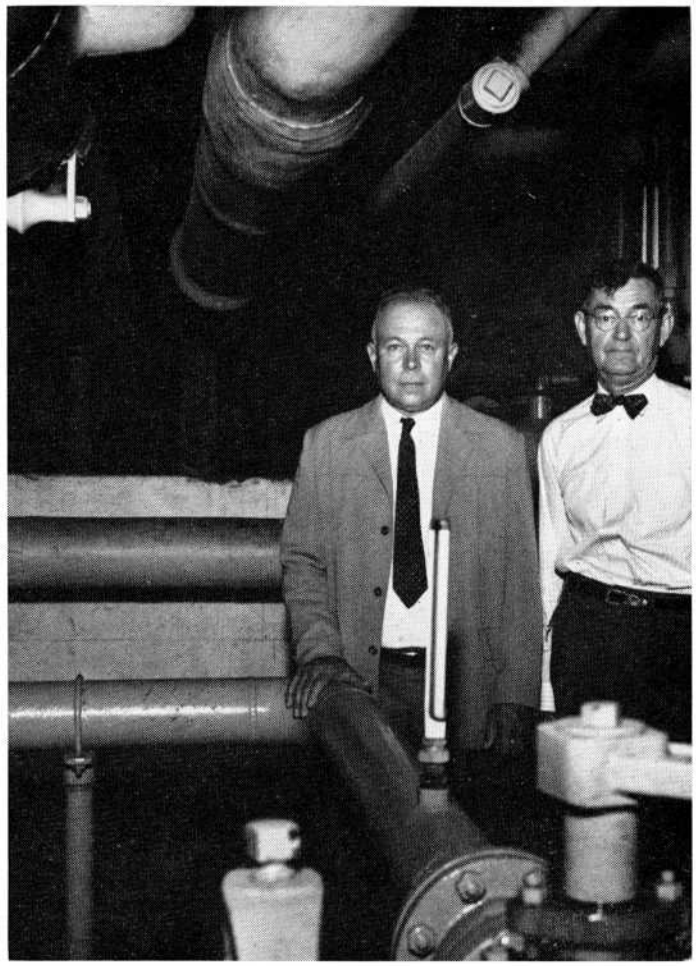
1. The structural maintenance of the buildings.
2. The heating, ventilating and air conditioning of the buildings.
3. The housekeeping or janitorial services.
4. Maintaining power, light, water, gas, and other utility services in the buildings as required.
5. Landscaping and maintenance of the campus.
6. Construction and maintenance of streets, sidewalks, and parking lots.
7. Construction and maintenance of the utility distribution systems.
8. Operation of the Power Plant and the Chilled Water Air Conditioning Plants.
9. The Police and Watchman service.
10. The Fire Protection service.
11. Inventory, Warehouse and Truck service.
12. Construction under the Modernization and Repair program.
13. Supervision of new construction.

The responsibilities cover a wide range of interests requiring the services of persons ranging from common labor to highly skilled mechanics and professional engineers. There are, at present, 228 persons regularly employed in the department, and in addition there are many students and other persons employed by the hour or by the day as needed. The maximum number of employees has, at times, exceeded 350. The total cost of the operation of the Department last year, including work done for other departments, was approximately $1,400,000.

This is a vastly different picture from the horse and buggy days of 1893, when the first University building was completed, accepted, and occupied. It was located on high ground between DeBarr Hall and the



Jake Kaplan, supervisor of painting for the Physical Plant, has been at O.U. for more than 25 years. He's pictured in workshop mixing paints.



Jay Kelso, supervisor of electrical work, and L. R. Benning, supervisor of plumbing-heating, stand before tunnel that feeds heat, power to campus.

The Physical Plant Department cleans, heats, cools, lights, paints and plants in season in order that the University stage is constantly prepared for the basic job of teaching. Last year the cost of operation was $1,400,000—a far cry from the first Physical Plant operation that consisted of one man, mops and water.

Pharmacy Building, on a treeless 40-acre tract donated to the Territory of Oklahoma by the citizens of Norman as the Campus of the University of Oklahoma. In addition to the land, the citizens were required to donate $10,000 in order that the University might be located here. That was in the day when the dollar was worth about four of our present dollars and since the community was small and was struggling to get by, the donation of $10,000 plus the purchase of 40 acres of land was a great undertaking. Furthermore, when the $10,000 bonds were sold the best offer was only $7,200. It was therefore necessary for the citizens of Norman to raise an additional $2,800.

The following is from Dean Roy Gittinger's book entitled *The University of Oklahoma, a History of Fifty Years.*

"On August 18, the regents accepted the new building and paid the contractor such additional amounts as made the entire cost of the completed structure $32,000.

"The building had three stories and a basement. Broad winding stairways with 'bannisters of the most elegant designs' connected the floors. The floors themselves were three-inch heart pine flooring and the 'doors and doorways' were 'simply trophies of the cabinet-maker's art' according to the *Times* of Kansas City.

"The twenty-two rooms were well-lighted and well-ventilated for that period. A heating and ventilation system was installed at a total additional cost of $5,500. Two wells furnished a good supply of water. According to the *Norman Transcript:*

" 'Both the interior and exterior of the Oklahoma University building is not alone a picture of beauty, and symmetry, but a model of art, an encomium upon the architect and a living panegyric upon the skill of the contractor. The inside furnishings are complete and so commodious that the professors all predict a much more interesting and progressive term this fall.'

"On Sunday, September 3, the new building was open to the inspection of the public. Blackboards, seats and other equipment were hurriedly installed. President Boyd had even been empowered to purchase 'two brooms, one hair broom, one box of soap, one mop, two water buckets, and one feather duster.' He was also empowered to hire a janitor at not more than $30 per month."

There you have the first Superintendent of Buildings and Grounds of the University of Oklahoma, complete with brooms, soap, water, buckets, and feather duster—all for $30 per month.

The Sixth Territorial Legislature prepared for the enlargement of the University by passing an act which became a law on March 8, 1901, providing $90,000 for "the

purpose of constructing such buildings and procuring the necessary machinery for heating and lighting the same and for remodeling and repairing the present University building, and the purchase of the necessary furniture and appliances to equip such building." The act also provided that the citizens of Norman must purchase and give to the state 20 acres just east of the original 40 acres for additional campus for the University of Oklahoma.

The $90,000 provided by the Legislature was planned by the Board of Regents to be used as follows: $70,000 for University Hall which was to contain a Library wing; $10,000 for a Gymnasium; $10,000 for a heating and lighting plant and repairs to the old building.

University Hall, as the new building was to be named, was to contain, besides classrooms, the President's Office and a Library Wing. The building was constructed on the site of the present Administration Building. Before University Hall was completed, a fire on January 6, 1903, destroyed the first University building which was constructed in 1893.

In 1903, the frame gymnasium was constructed northeast of University Hall. This building was torn down a few years ago to make room for the enlargement of the Union Building. Science Hall was completed in 1904 at a cost of $30,000, which was financed from the insurance received after the destruction of the first University building. In 1904, a Library Building was constructed from funds received from Andrew Carnegie. The building, until recently, was the Education Building, now again called Carnegie Building. In 1903, five temporary frame buildings were constructed southwest of Science Hall, known as Park Row Buildings—two of the buildings are still in use.

In the school year 1907-08, the first generator was installed to produce electricity for power and light. It was a 100 K.W. steam engine driven generator, and was in stalled in the Old Power Plant, which was located between the present Administration Building and the Women's Building. University Hall, which was completed in 1903, was destroyed by fire in 1907. This again placed an extreme burden on the University Administration in order to find space to carry on the University functions. The cause of the fire which destroyed the second building was not definitely determined, although it has been said that some disgruntled students were responsible.

In 1909-10, the Engineering Laboratory Building was constructed and paid for out of University maintenance funds. This building housed the College of Engineering from that time until the new Engineering Building was constructed in 1925.

At the close of the 1910 school year, the University found itself with four principal buildings, namely Science Hall, Carnegie Hall, the Engineering Laboratory, and a Gymnasium. In addition to the above buildings, five temporary frame buildings, known as Park Row Buildings, had been constructed to meet the shortage of space after the destruction of University Hall in 1907. In addition to the classroom buildings, the University had a heating and lighting plant, a water tower, and two wells. The total area available for instruction was 69,278 square feet. The estimated cost of the buildings was $145,373. The Campus consisted of 60 acres. The streets were unpaved and the sidewalks consisted principally of paths. Many trees had been planted on the Campus and in the town. President Boyd was largely responsible for the tree planting program. By 1910 many had grown to good size trees. The report of the Power and Heating Plant for 1909-10 indicated that 112,000 K.W.H. of electricity had been generated and that steam had been furnished for 15,135 square feet of radiation.

During the period from 1910 to 1925, inclusive, 13 buildings were constructed, including the present Administration Building in 1912, and the West Stadium in 1925. The original cost of the buildings constructed during that period was $1,508,370. The floor space was increased 260,609 square feet. The Campus at that time had grown to 170 acres which included the area from Brooks Street to Lindsay Street and the land formerly used as a polo field south of Lindsay Street. During this period the north oval had been paved; Asp Avenue, Brooks, and Felgar Streets had been treated with oil. A great many concrete sidewalks had been constructed and 3,725 feet of small concrete utilities tunnels had been built to bring heat and power to the buildings.

A new Power Plant was constructed in 1913-14, as an addition to the Engineering Laboratory Building. This building served as the Power Plant for the University until the New Power Plant was constructed and occupied in 1950. The electric generating capacity of the Plant in 1925 was 350 K.W. and the boiler capacity was 1,052 H.P.

During the period of 1925 to 1940, eleven buildings were constructed, including Buchanan Hall (Liberal Arts) in 1926, and Adams Hall (Business Administration) and Richards Hall (Biology Building) in 1936. The total cost of the buildings constructed during this period was $1,523,986. The total floor area added was 271,234 square feet. The Campus was enlarged by the addition of 54 acres which was the land east of Jenkins Street, formerly used as the golf course. In order to provide power, light, and heat for the additional buildings, the following Power Plant facilities were added: a 500 K.W. and a 625 K.W. turbo generator and a 600 H.P. boiler. The in-

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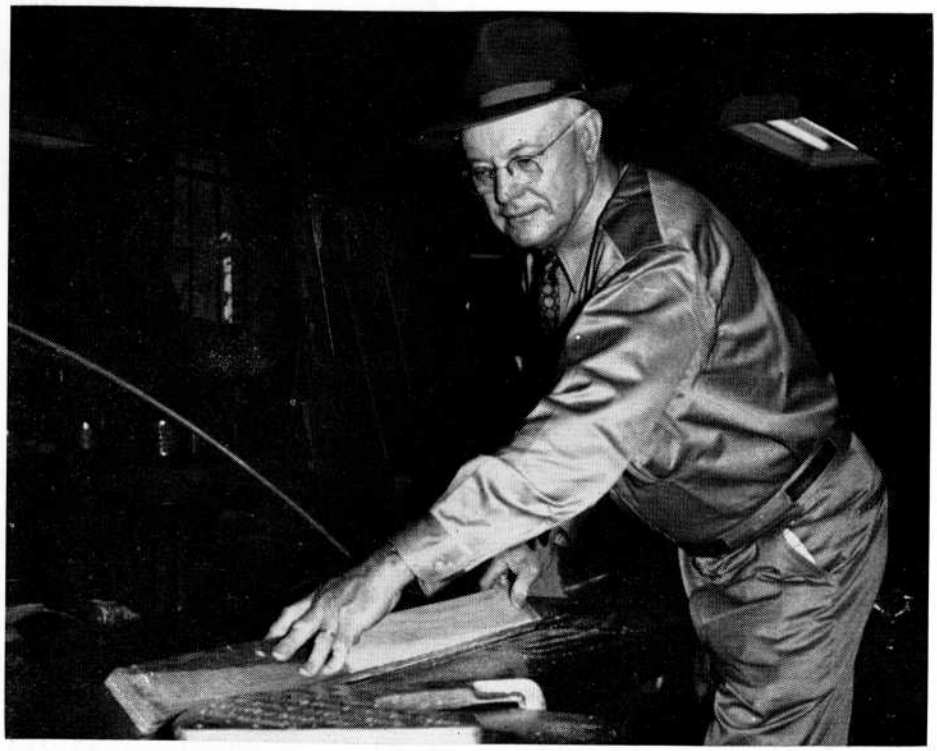

Dewey "Dutch" Hoover, supervisor of construction and building repairs, came to O.U. in 1929. All of the men pictured on the two preceding pages have been at O.U. for more than 25 years, also.

The Stage Is Always Ready . . .

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crease from 1925 to 1940 in the use of electric power, water, and heat was as follows: electric power 400 percent; water 282 percent; building heating 223 percent.

In the period from 1940 to 1953, the University experienced its greatest growth in its physical facilities. There were 16 new buildings or additions to buildings constructed. There were four temporary service buildings moved to the Campus and 11 North Campus buildings were put into the instructional service of the University. There were two buildings which had been acquired by the University and used for instructional purposes, the Old Faculty Club Building and Johnson House on Elm Street. The cost of the 33 buildings amounted to $7,328,685. The total area added was 647,261 square feet. Additional land purchased during this time increased the total acreage on the Main Campus to 302 acres. The North Campus, consisting of 1,380 acres, was taken over from the Navy in 1946. The New Power Plant was started in 1948 and completed in 1950. The New Power Plant is equipped with two 2,500 K.W. steam turbo generators and also two 600,000 pound per hour steam generators. A Chilled Water Plant was constructed in 1951-52 to provide air conditioning for University buildings and is equipped with a 1,000 ton steam turbine driven centrifugal compressor. The increase from 1940 to 1953 in the use of electric power, water, steam heating, and total steam generated was as follows: electric power 342 percent; water 248 percent; steam heating 207 percent, and total steam generated 247 percent. The electric power used on the North Campus is not included in the Power Plant production figures since this is purchased from the Power Company.

In order to distribute heat, light, water, and power to the campus buildings, we have constructed 2.8 miles of tunnels. These tunnels are constructed of reinforced concrete and are large enough to enable a man to walk through them. The tunnels carry the following services: Heating steam, medium pressure process steam, steam return lines, domestic water service, electric power lines, signal lines, and chilled water lines. Process steam and chilled water lines are not installed in all of the tunnels.

The total floor area for which janitor service is furnished amounts to 28.27 acres. This requires the services of 53 Building Custodians plus a number of students and hourly employees.

Maintenance of the North Campus grounds and the Main Campus requires intensive maintenance of approximately 400 acres. During the past 2½ months, the watering of the Campus lawns, trees, and shrubbery required approximately 23,284,800 gallons of water and the services of some 20 employees. In order to supply the necessary furniture for the operation of the University, it requires over 80,000 items. There are 346 different classifications of furniture, 10,250 tablet arm chairs, over 5,000 straight chairs, over 5,000 desks, besides a great many other types of furniture. This furniture is maintained by the Physical Plant Department.

The information which I have given pertains principally to the instructional phases of the University operation. Although the employees of the Physical Plant Department are used in the repair and maintenance of housing property and equipment, the management of housing is under a separate division of the University and is in itself a large project.

Just a few words about the period from 1946 to 1952, during which time the en-

rolment reached an all-time peak of between 12,000 and 13,000. With the facilities available on our Main Campus at that time, we could not hope to provide classrooms and laboratories for more than 8,000 students. Our housing situation was also critical. We had no provision for married students.

In May of 1946, the University obtained the use of the entire Naval Air Station, now called the North Campus and Max Westheimer Field. The buildings were suitable for converting to classrooms and laboratories were modified immediately. This work was completed by the opening of school in September. Entire departments and many classes were moved to the North Campus. The Land and Appurtenances, Buildings and Structures, and Personal Property were inventoried at over seven million dollars.

On October 14, 1946, the N.A.T.T.C., south of the Campus, was turned over to the University; a property transfer inventoried over 13 million dollars. We immediately began to remodel and equip 15 buildings which were used for classrooms and laboratories.

Housing facilities were also modified to accommodate the students.

That was a hectic time, but we did succeed in providing the space which was needed in this emergency.

I would like to say something about the personnel of the Department. I have not referred by name to any of the employees of the Physical Plant Department. There are so many rendering fine service to the University that I would not name a few and leave out the others. The work of the Physical Plant Department of the University covers many phases of endeavor and the employees range in ability from unskilled workmen to highly skilled mechanics and professional engineers. These, together with the secretarial employees, form the back stage management of the University. On the whole these employees are industrious, conscientious and loyal. They are aware of the importance of their work and know that the "show must go on."

In my twenty-eight years of service I have seldom seen or heard of an employee who would refuse to work day or night in an emergency, and I want to add that in our work there are a lot of emergencies. These employees have enjoyed the good will of the President and of the Faculty. There is hardly a week passes that I do not receive a phone call or note from someone on the front stage commending the work of some of our employees. For these thoughtful reminders we are sincerely grateful and thankful that we are identified with a great and progressive University.

A Student Views Dallas . . .

Continued from page 25

Texans at Austin were saying the same thing, with a slightly different meaning.)

The campus has been quietly academic except for the Dallas weekend. With the back-to-school activities over and eight-week exams coming up, almost everyone has settled into a more conservative routine of life. The classroom is king, and many of us are now realizing that the mountain of study assignments won't get any smaller by just thinking about it.

No Feathers for This Indian

Continued from page 15

tered the eighth grade—"They had to put me there. I was too big to enter the fourth." At 21 he graduated from the Indian Institute of Wichita, Kansas and went on for three years at Wichita University before transferring to O.U., where he continued studying art.

By the time he hit Oklahoma he was well enough known that he could paint his way comfortably through tuition and spending money. His paintings already had been seen in most of the major cities of this country and in at least one overseas.

This implies that the Crumbo high road was smooth. It was not. Woody has a phrase for his life that he still uses, "Chicken one day, guts and feathers the next."

After a couple of years at O.U. Woody received an offer to set up his easel as art director at Bacone College near Muskogee and a while later he moved out into the professional world to free-lance and live his kind of free life. Chuckholes and detours—near hunger and stacked-up bills—came up too often. Woody accepted a position designing aircraft parts during the war, the only time in his life he was pinned down by a nine-to-five clock.

This lasted until the war subsided. Then luck boosted him onto his free-lance feet again. Woody received the last of a long series of Julius Rosenwald fellowships, $2,500—chicken for quite a while. For a pot to boil it in, Woody made a deal to collect Indian art objects for the Gilcrease Foundation.

In the meantime he traveled to Indian reservations over the country, studying the folklore of the tribes. On one of these trips he met dark-haired, attractive Lillian Hogue, a Creek Indian and a schoolteacher. As Woody told the rest of the story in his plain language, "After some fast talking, I married her."

The union has been a good one. Woody and Lillian have two children, Minisa, now 12, and Max, 8.

With Lillian, their children, and their chicken and their pot to boil it in, Woody moved to Taos, New Mexico, to join the somewhat-fabulous art colony there. "After six years we decided to leave. It was dog-eat-dog with so many artists around—almost a hundred—so we moved to Oak Creek Canyon.

And it was here in this little community that Woody realized one of his great dreams. Probably because of his life as a boy, Woody has nourished an urge to help lift up the Indian.

For several years at one time Woody ran a school for Indian artists to help them get on their feet in the only way he could. He wasn't rich, but he made sure his students were taken care of and were given an opportunity to show their work. More important, though, he helped them sell.

Woody had worked in nearly every medium—water colors, oil, silkscreen—and he taught his students his skills including silkscreening, a job so difficult that many artists send their work abroad for processing. This project, undertaken on his own in an old adobe building, planted the seed for a greater realization of his dream.

Now his students are in the big time. Mrs. Fowler McCormick of International Harvester wealth has opened a gallery in Phoenix strictly for Indian artists.

Crumbo is the pace-setter, the master that the students shoot to equal, and he admits this modestly. That's another aspect of the man.

When Woody casually says he's the foremost Indian painter in the United States, he mentions it with the same calm assurance that he would tell you he had eggs for breakfast. To him it is an obvious fact that no other Indian artist is turning out either his quality or quantity.