

## Star-Gazing Is Their Business

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and  
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The University has at least three faculty members who will admit that they are star-gazers and wishful thinkers, and they aren't even reluctant to say so. The reason is simply one of pride in their work—star-gazing is their business. The wishful thinking is in connection with a new observatory they hope some day will replace the tiny-domed structure which stands just south of the Main Campus.

The three wise men of the observatory are J. O. Hassler, professor of mathematics and astronomy; Balfour S. Whitney, associate professor of mathematics and astronomy, and Robert D. McKnelly, instructor of mathematics. These men carry full-time teaching loads, and the latter two devote another like-portion of their time to astronomical research. Mr. Whitney is the active director of the research at the observatory.

When the present observatory was built, seven years ago, it was in the middle of nowhere and a cornfield. Since then, however, civilization has crept in, and the men in charge want to take the observatory back to the cornfield. The powerful electric lights of the dormitories and pre-fabricated houses which now completely surround the observatory have more than once fogged the photographic plates after tedious hours of focusing the large astro-camera. Dust, stirred up by passing automobiles on the adjoining unpaved street, does similar damage to the work of the astronomers. When the stadium floodlights are on, the plates are completely fogged. The moon may hinder, but does not completely stop the astronomer's work. Light, of course, is the major handicap in the way of our University astronomers. If an observatory is well located, longer exposures are possible which allows study of the fainter stars.

The University observatory is one of the few in the country which is engaged in active research work on the study of variable stars. Such stars vary in brightness over a period of time and, by a series of observations and photographs, these changes can



*The Comet, 1948L, as photographed by Balfour S. Whitney, associate professor of mathematics and astronomy, one day following its discovery in South America.*

be determined and recorded. Computations are made concerning the temperature, size, density, and radial velocity of a star, and the nature of certain elements of the gases in the atmosphere surrounding a star.

Photographs are being made nightly, when the absence of clouds permits, which are a permanent record of some portion of the sky on that particular date. Only once will the thousands of stars in that field be in exactly the same condition with respect to relative brightness. Photographs will allow the astronomer to refer to a picture of the sky as it was at that time and may never be again. Since January 12, 1942, over 6,000 photographic plates have been made and are on file for future use.

The 16-foot dome on the observatory houses a 10-inch telescope and a 3 1/4-inch astro-camera made by Zeiss of Germany. Both are used for pho-

tographing the stars.

All astronomers must be able to develop a photographic plate and the observatory has a well-equipped dark room. Many times Mr. Whitney has exposed plates all night and developed them before he went home in the morning.

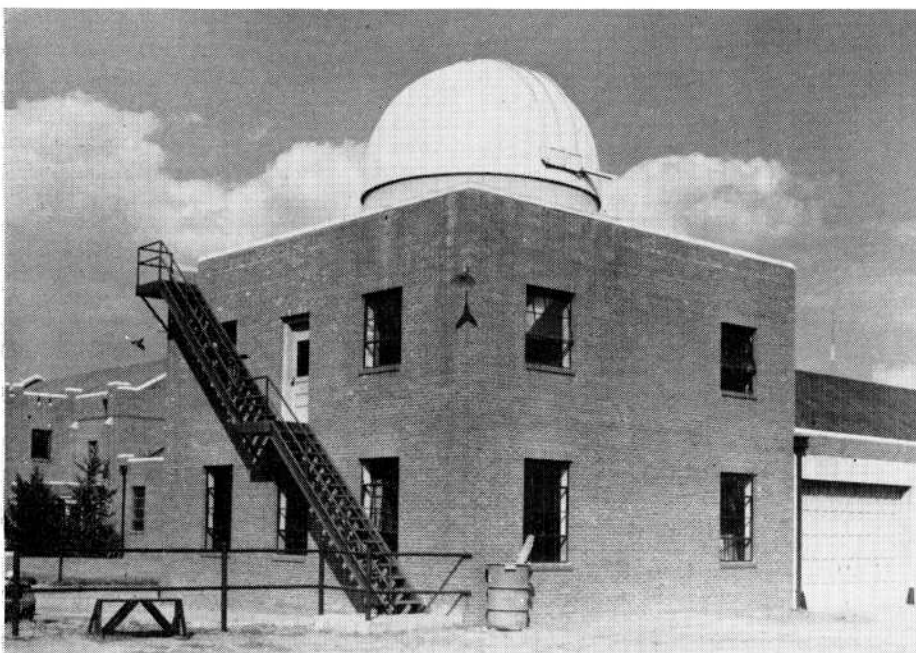
Another essential part of the equipment is a coffee pot, necessary because so much of the work is done at night. The ice box deceives the casual observer who expects it to be filled with food. Instead, sensitive photographic plates are neatly stacked in it so they can be kept at a constant temperature winter or summer.

Patience is a requirement for the study of astronomy. After matching a negative of a field of stars with its positive and mounting both on a tiny lighted view box, the skilled eye of one of the University's astronomers searches for variable stars in the field of thousands.

One of the most fascinating types of stars studied is the eclipsing variable. The source of its variation of light is that the star is really double, though the most powerful telescope would not show the two parts separately. Each of the two stars is revolving around the other and at periodic intervals passes in front of its companion. The amount of light is naturally reduced at such times. It is possible by a scientific study of the nature of this variation of light to determine many essential facts about the star (or the two stars).

The observatory has a library of about 1000 volumes of astronomical publications, and Mr. Whitney is especially proud of the most recent addition to the collection. It is a series of charts, accompanied by a catalog locating and numbering the stars on the charts, published in Bonn, Germany, in 1899, hard to obtain because of its rarity. The charts are invaluable to an astronomer doing research work.

In 1920, when Dr. Hassler came to the University, there was one course being offered in astronomy, and no telescope. In 1922 a 3 1/2-inch portable telescope was purchased. Many alumni may remember the telescope parties on the north oval and later on the roof of the Administration Building. This telescope was used for class demonstration, and in a limited way on visual observation of variable stars by Dr. Hassler. When Mr. Whitney and Mr. McKnelly were graduate students here in 1932, re-



*The University Astronomy Observatory, now surrounded by buildings rather than the fields of waving corn in which it once stood.*

search work on variables was begun in earnest. Philosophy Professor Howard O. Eaton loaned his 6-inch telescope to the University in 1932. It was the property of his astronomer father.

In 1935 the 10-inch telescope was purchased, but it was not mounted until 1938 when funds were available to build the observatory and the dome. The three telescopes are still in use at the observatory. Now, largely through the continued efforts of Dr. Hassler, it is possible to major in astronomy for a bachelor's degree and minor in that subject for a master's degree.

Practically all the equipment has been secured by the University in a used condition at about 40% of the "new" price. Now in storage is a Zeiss double astro-camera, which would allow two plates to be made at the same time. Its use would greatly facilitate variable star research, but proper equipment to mount this machine is lacking. However, with the observatory in its present "too well-lighted" location, it would not be worth the expense of mounting the double astro-camera.

The O.U. observatory is now listed among the active observatories of the world and it exchanges publications with many of them. Mr. Whitney's and Mr. McNelly's research papers are being published in the leading astronomical journals.

These men are lighting their star for O.U., but they wish it were shining from an isolated cornfield.

## Lawyers Hold Practice Court

With eyes wide open to the future, the University of Oklahoma Law School has taken another tremendous step forward in the interest of progress and better-trained, more-qualified graduates.

It all began last year when Dr. Maurice H. Merrill, '19ba, '22Law, professor of law at the University, and R. Dale Vliet, '38Law, associate professor of law, got their heads together to decide what would be the best way to supplement the theoretical side of the law curriculum with a practical working knowledge of the actual, everyday court practices and procedures.

These two men have revamped a course known

in the law barn as "Practice Court." Its purpose is to create, "in so far as possible, a wholly realistic trial complete in every phase from the filing of pleadings to the decision of the student jury."

The cases involve such things as fraternity house pranks and other campus incidents that, although of a litigatory nature, will not be prosecuted by the parties involved. A prerequisite to each case is the agreement by the parties involved that they will not litigate in the courts.

Fabrication of the procedure is avoided as far as possible. The decisions are based entirely upon the testimony of the witnesses and the evidence introduced by student lawyers.

Pre-trial conferences, which were recently authorized by the State Supreme Court for the state district courts, are also used. Although civil cases seem to predominate in the practice courts, criminal cases are handled whenever they are of a suitable nature.

The court is unique in Oklahoma in that more than 14 district judges have volunteered to come to Norman to participate and sit in judgment for one or more days in actually trying cases. This program, which was made possible by Dr. W. Page Keeton, dean of the law school, with the co-operation and approval of the State Supreme Court, gives the budding lawyers the rare opportunity of meeting and practicing before highly trained professionals while they are still students and not representing paying clients. The training and experience to be gained in this type of pre-degree litigation is invaluable to both the student and to the maintenance of the law school's high rating among the nation's top-flight institutions.

Evidence of the success of the new course is found in the fact that "the program received the endorsement of the district judges' conferences throughout the state," Vliet stated.

Among the many judges who plan to make a visit to the campus for the practice court sessions are:

District No. 2—W. P. Keen, Clinton.

District No. 7—A. P. Van Meter, '27Law, Oklahoma City; Clarence M. Mills, '23Law, Oklahoma City.

District No. 9—Henry W. Hoel, Stillwater.

District No. 13—William M. Thomas, Miami.

District No. 15—E. A. Summers, Wagoner.

District No. 16—Clyde M. Followell, Poteau.

District No. 19—Sam Sullivan, '38Law, Durant.

District No. 20—William J. Monroe, '35Law, Marietta.

District No. 21—T. Justin Hinshaw, '18Law, Norman.

District No. 22—Hoyt Driskill, Ada.

District No. 23—J. Knox Byrum, '27Law, Shawnee.

District No. 24—C. O. Beaver, Sapulpa; Jess I. Miracle, '21-'24, Okemah.

Other district judges will also participate in the program, but their names were unavailable at the time of publication.

In addition to the experience gained by actually participating in a trial, some of the members of the class are intermixed with the University students in the jury. Students from all the schools of the University are recruited on a voluntary basis to act, as jurors, however, the actual jury is composed of about one-third lawyers in order to give them practice in seeing the reaction of the layman to the trial proceedings. State law in Oklahoma forbids a lawyer from sitting on a jury, so this experience in jury-feeling and reaction is a valuable adjunct to the training of every student.

Dr. Merrill taught the course during the fall semester of the school year 1948-49. Vliet, who is teaching the course for the first time this semester has urged alumni, faculty and students "to volunteer any and all cases that they do not plan to take into court.

"We plan to build up a backlog of cases for reference purposes in the interest of turning out better-qualified lawyers from the University of Oklahoma," Vliet further stated.

▶ Keith Wallingford, instructor of piano, received his Master's Degree from the Julliard School of Music.

▶ E. Richard Page, University professor of electrical engineering, was a member of the Cornell University faculty from 1914 to 1918.



A close-up picture of a practice court session reveals an attentive jury listening to the testimony of a girl witness as Dale Vliet, '38Law, associate professor of law, hears the argument of the prosecuting attorney. Busy pencils and quick thinking characterize the practice court which convenes for two hours four times a week.