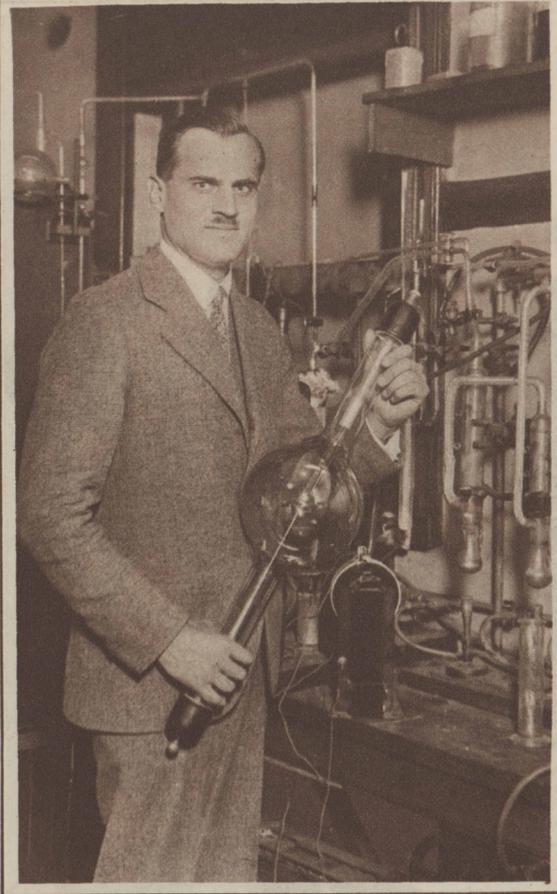
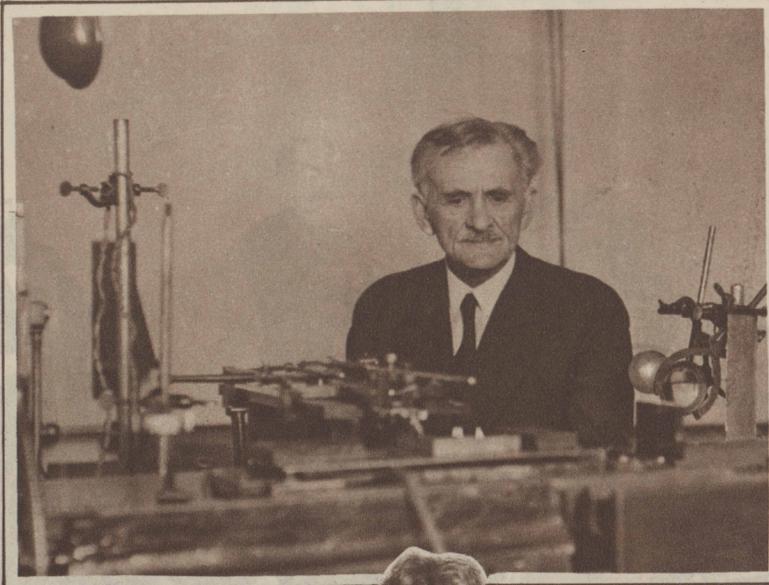


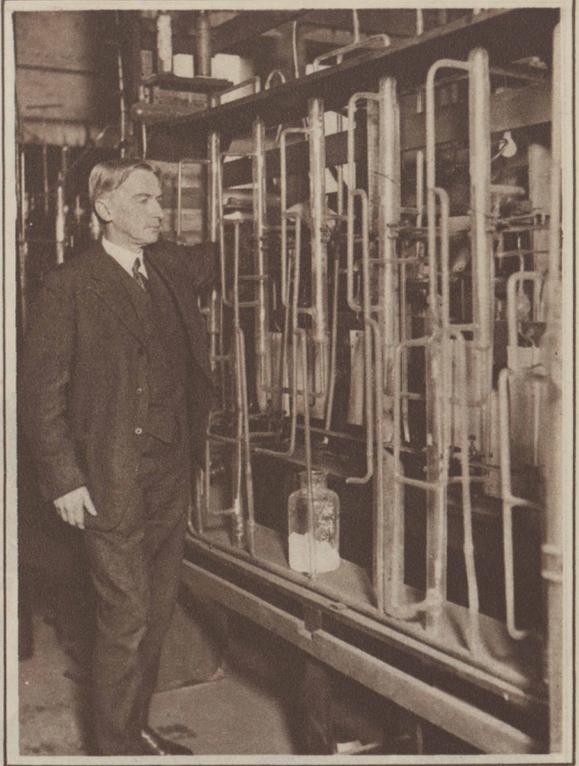
The University as a Workshop



PROF. ARTHUR H. COMPTON of the University of Chicago, winner of the Nobel prize in physics for 1927, in his laboratory at Ryerson hall. The X-ray tube he is holding was used in verifying the spectacular "Compton effect," which proves that X-rays collide with objects in their path, bouncing back with reduced energy and increased wavelength. Prof. Compton is an expert glass blower and he blew all the glass for his original experiments.



ALBERT A. MICHELSON, professor of physics at the University of Chicago, winner of the Nobel prize and one of the foremost physicists of the world, with one of his remarkable devices, the ruling machine. This machine will draw 10,000 to 50,000 absolutely parallel lines to an inch on a hard polished surface of speculum metal. A diamond point furnishes the cutting tool. The metal so ruled is known as a diffraction grating, and is used in spectroscopic work.



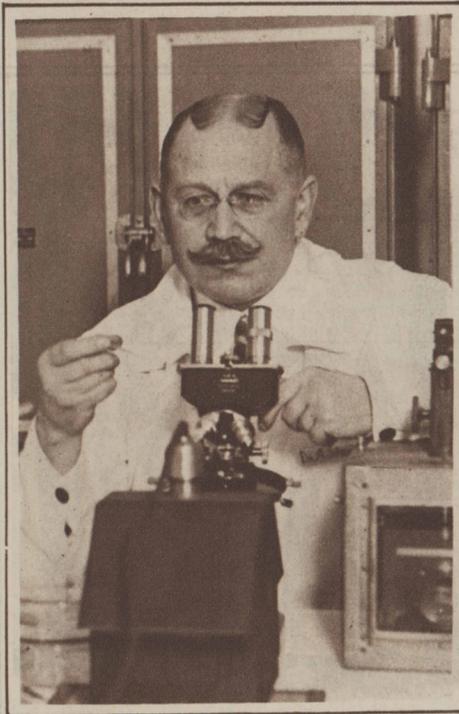
PROF. WILLIAM D. HARKINS of the department of chemistry was the first to separate an element into its constituent atoms. He did it with the apparatus which he is inspecting here.



TWELVE THOUSAND MICE whose ancestors have been in the laboratory for over one hundred generations are helping Prof. Maude Sly, a foremost cancer authority of the west, to determine the rules for the inheritance of cancer susceptibility. Each mouse is examined daily for the appearance of cancer, which in mice closely resembles the cancer in humans. Miss Sly lives in the laboratory and, with six assistants, takes the greatest possible care of the animals, keeping the laboratory at constant temperature and guarding against infection and epidemic.



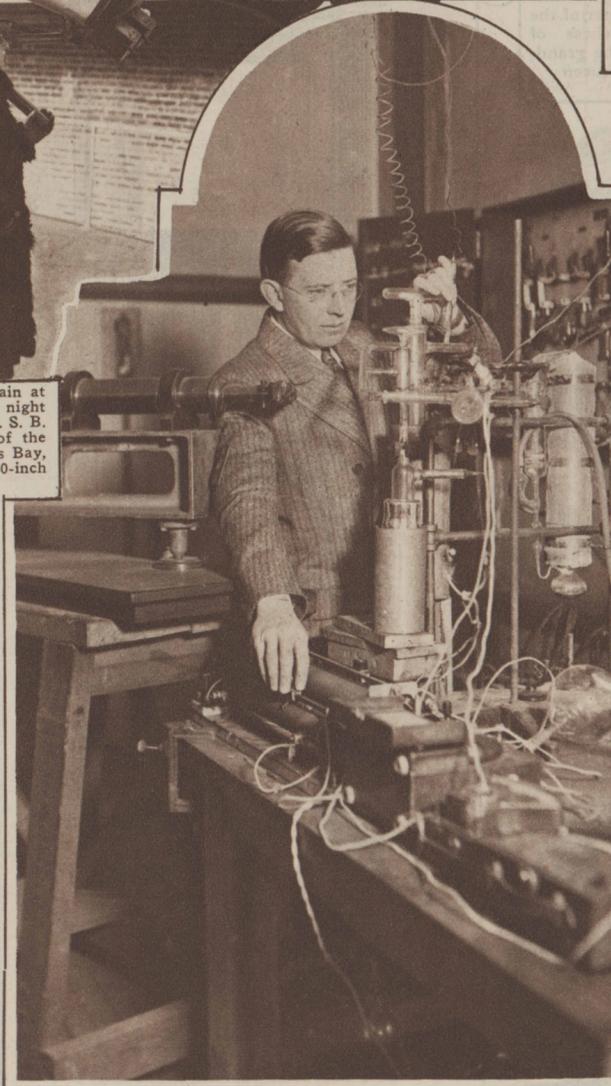
MORE THAN 2,000 GUINEA PIGS are housed in this annex to the Whitman zoological laboratories. The breeding of the guinea pigs is for a study of inheritance traits, which is being made under the direction of Prof. Sewell Wright.



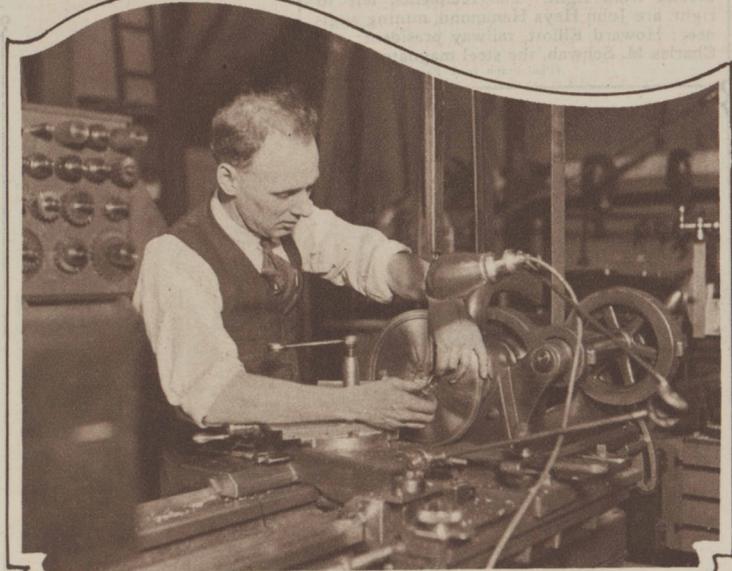
DR. ALEXANDER A. MAXIMOW, cytologist of the University of Chicago, has made distinguished studies of the changes in blood cells and the interrelation between types. He has produced all the types of cells from one single cell.



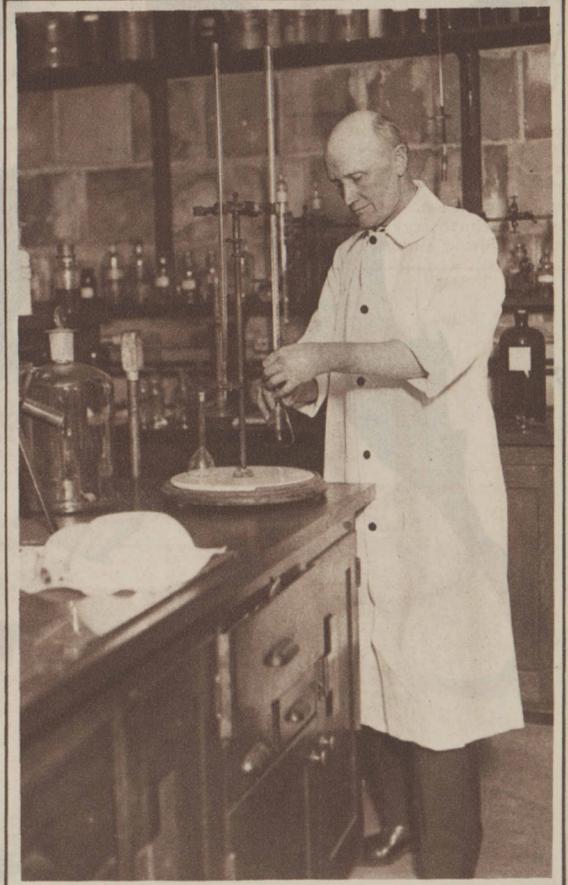
THE ASTRONOMER must remain at his work for hours, sometimes night after night for months. Here Prof. S. B. Barrett of Yerkes Observatory of the University of Chicago at Williams Bay, Wis., is working with the huge 40-inch telescope.



PHYSICISTS at the University of Chicago last month obtained evidence that there is argon in the corona of the sun. Harvey B. Lemon of the physics department is shown with the laboratory apparatus with which he is attempting to excite the same spectrum as the one discovered in the sun, to check on the previous experiment. Argon is used commercially to fill incandescent lamps.



MODERN MACHINE SHOPS are an adjunct to all scientific work. Here T. O. O'Donnell, foreman of the Ryerson physical laboratory shop, is operating a precision lathe, forming a pectrometer table for use in research apparatus. Many of the delicate and ingenious machines which the famous Albert A. Michelson uses in his researches are made here.



MANY PROBLEMS OF MEDICINE are in part chemical, and the physiological chemist is called on to go behind the surface facts and determine the chemistry of a diseased condition. Dr. Frederick Koch of the physiological chemistry department of the university is one of many investigators engaged in an unceasing laboratory attack on disease. (All photographs from Pacific and Atlantic)