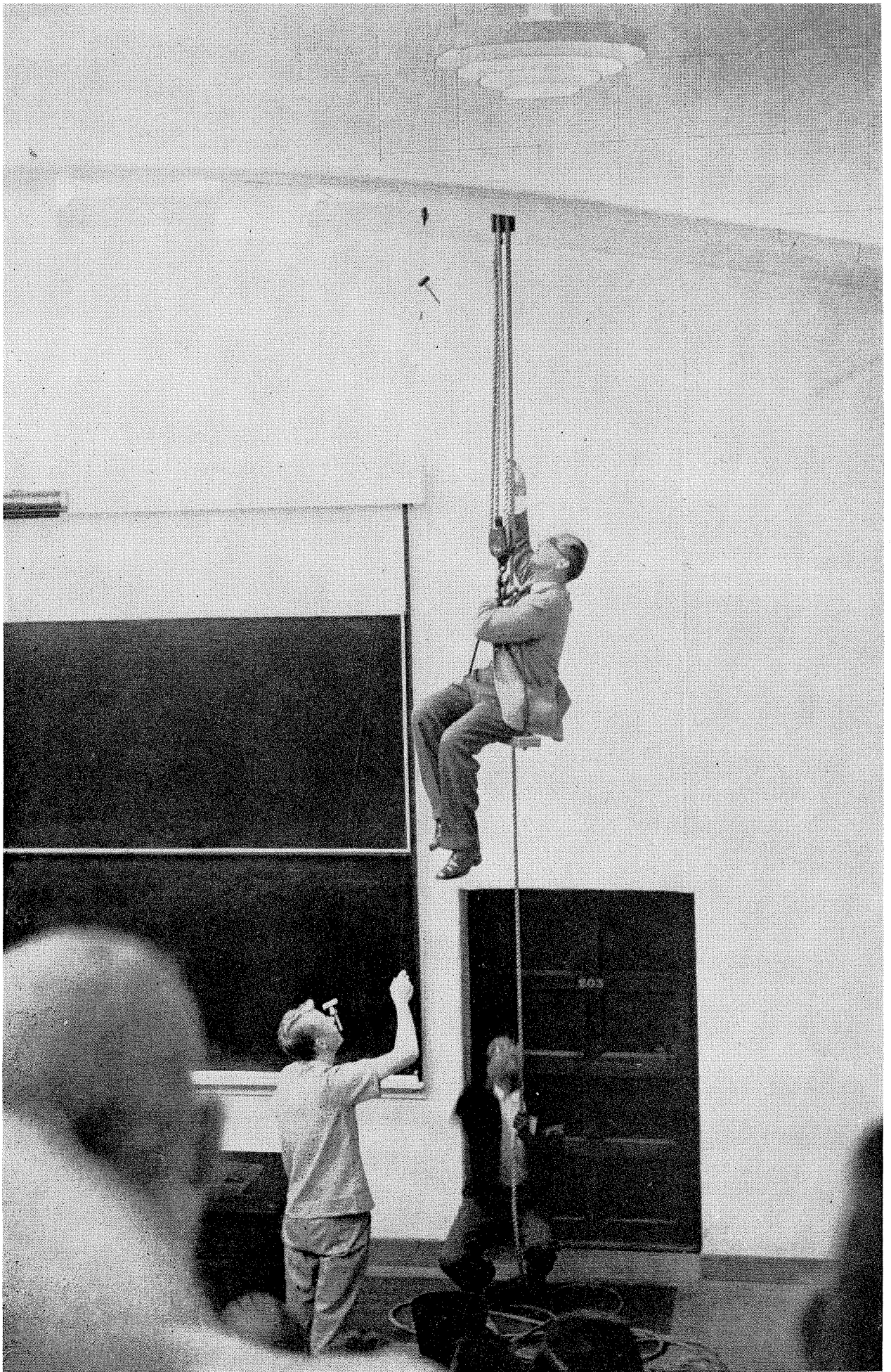


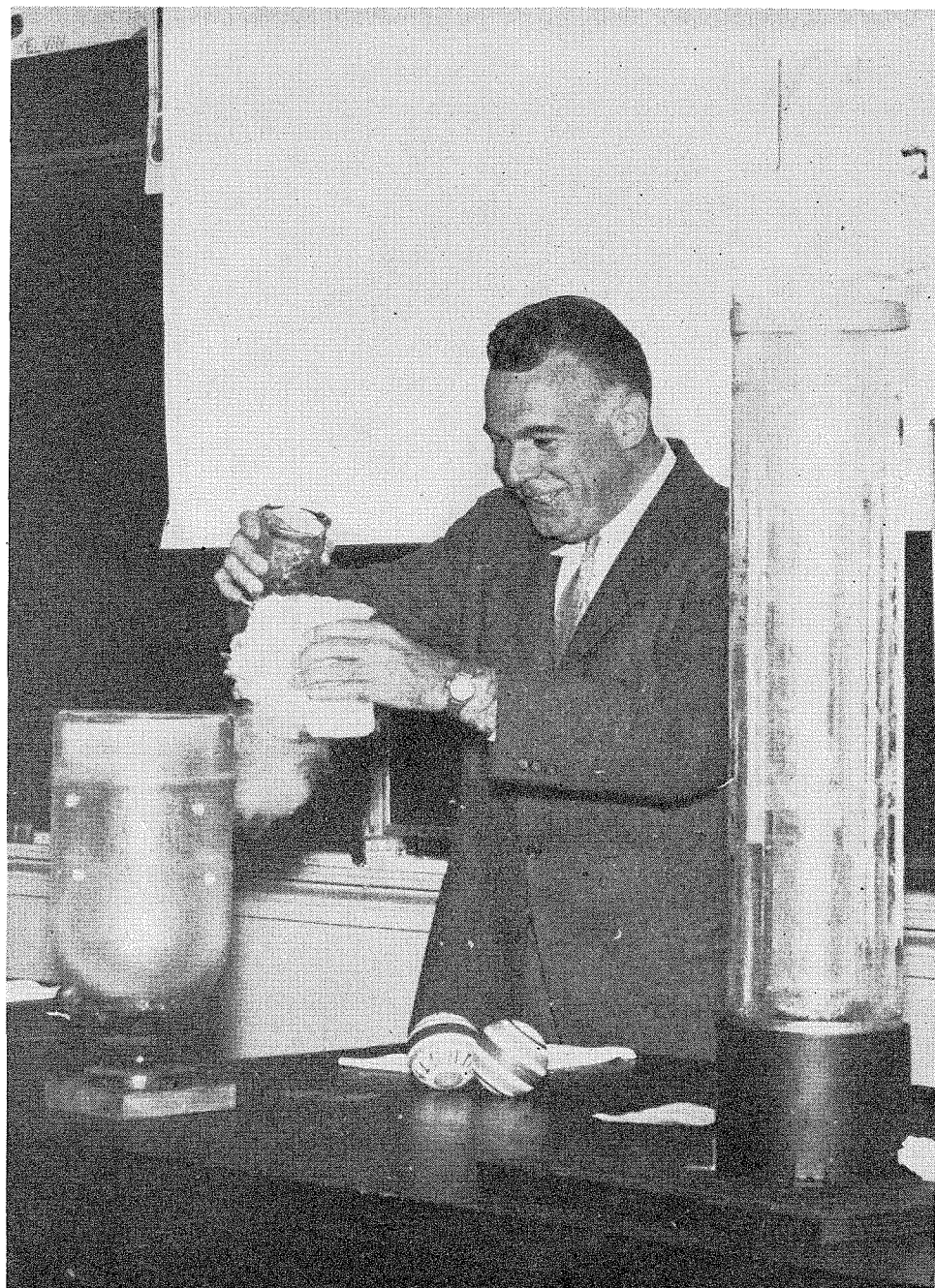
*President L. A. DuBridge gives a demonstration lecture on Radar in Peace and War*

## DEMONSTRATION LECTURES

**More than 30 years ago Caltech launched a temporary series of lectures on science for the public. It's still going strong today.**



*Left — Foster Strong, Dean of Freshmen and Assistant Professor of Physics, demonstrates a pulley system in which one of the weights falls with an acceleration greater than that of gravity. No one ever believes it can be done until they see Dean Strong do it, so he makes this trip annually.*



*Right — John R. Pellam, Professor of Physics, enthusiastically pours below-freezing helium into liquid nitrogen in his demonstration of Phenomena at Absolute Zero.*

**I**N 1929 the Caltech physics courses were being revised, and it was decided to start a series of weekly demonstration lectures to give students contact with the principal professors in the department.

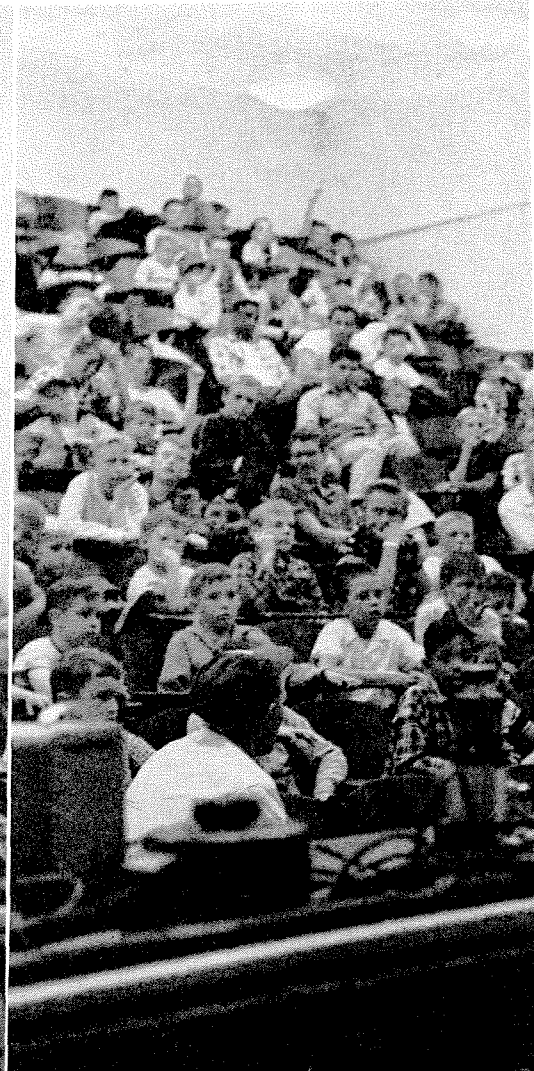
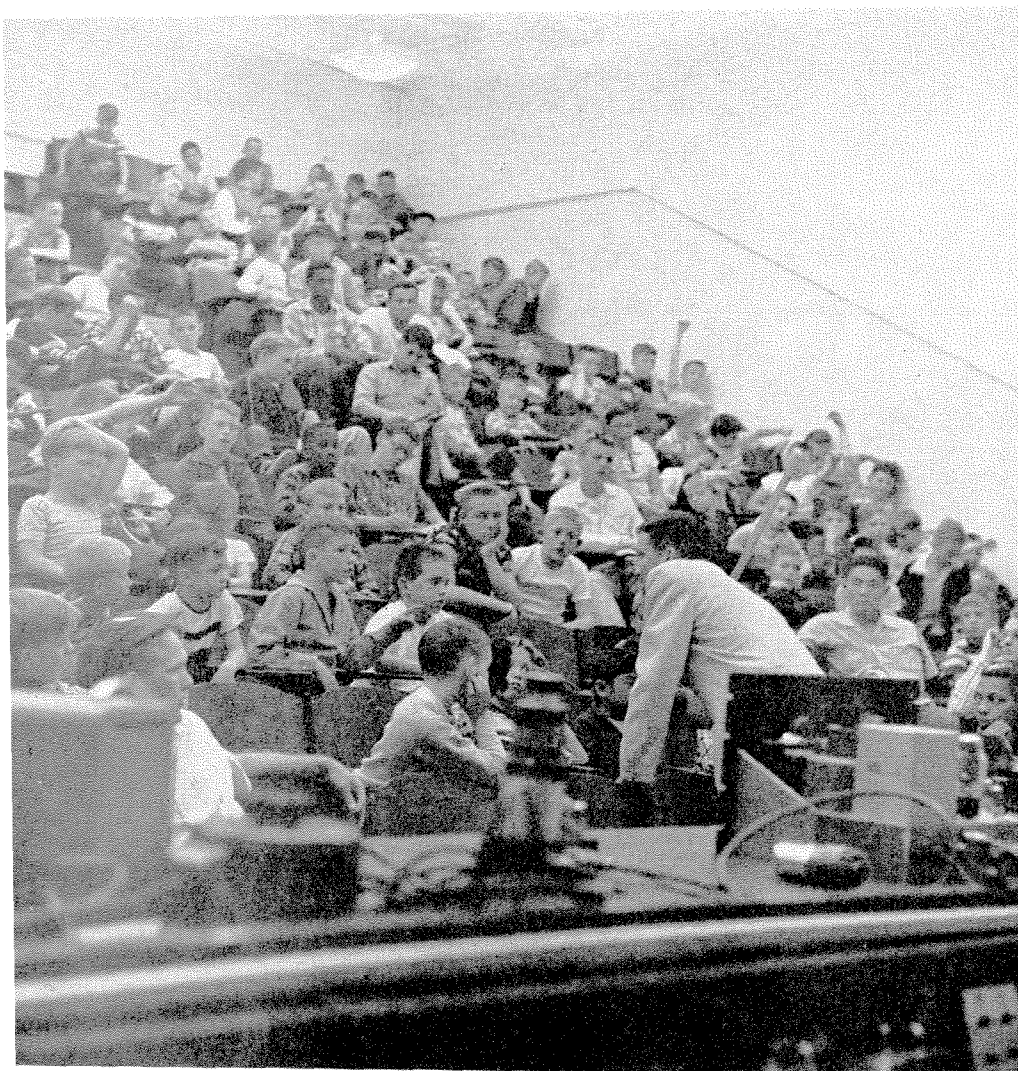
The lectures were so successful that, when the Norman Bridge Laboratory of Physics was built, it included special facilities for demonstration lectures. Soon after Bridge was opened, a number of high school teachers came to the Institute to ask for help in keeping up to date on new developments in physics. To accommodate the teachers, the physics demonstration lectures were repeated on Friday evenings, and opened to the public.

The Friday Evening Demonstration Lectures were expected to run for one year, but the public response was so phenomenal that they are still going on today,

more than 30 years later. At the start, the lectures were all concerned with physics. Gradually the base was broadened, though, until the lectures now deal with all branches of science and engineering.

Audiences for the lectures come from all over southern California. Aside from the general public, there is always a scattering of students from junior colleges, high schools and even elementary schools, and the lectures have proved so valuable to teachers that the Los Angeles County Board of Education gives official credit to teachers for attending them.

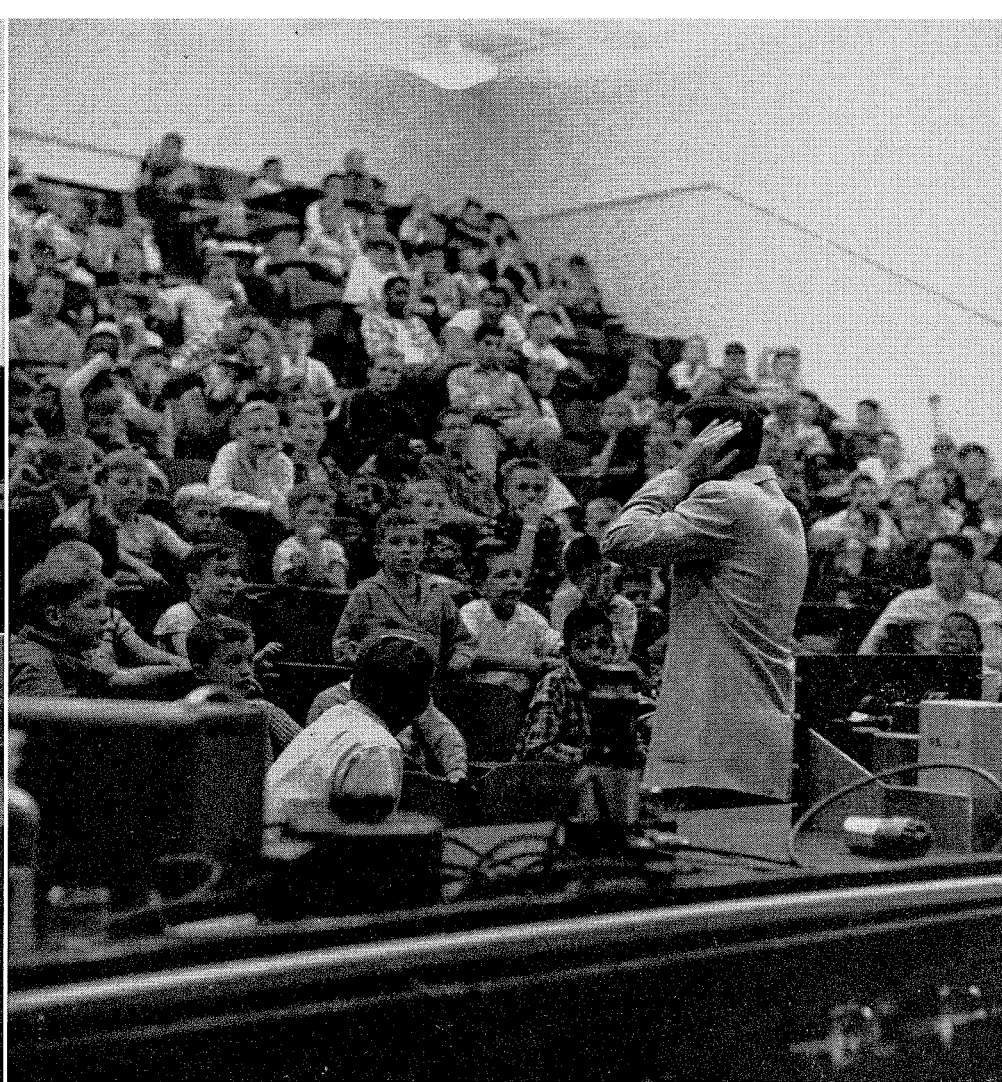
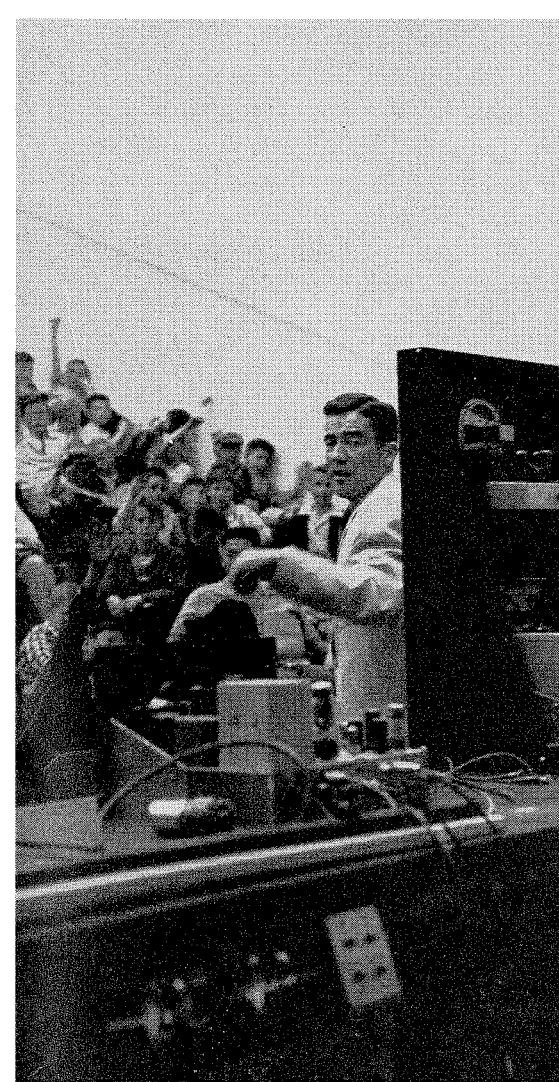
Most of the pictures on these pages were taken during the Friday evening lectures; some when these same demonstration lectures were previewed before freshman and sophomore physics classes at Caltech.



*Ward Whaling, Assistant Professor of Physics, demonstrating the use of the Geiger counter to*



*Victor Neher, Professor of Physics, demonstrates a change of state of matter as he mixes liquid air and alcohol.*

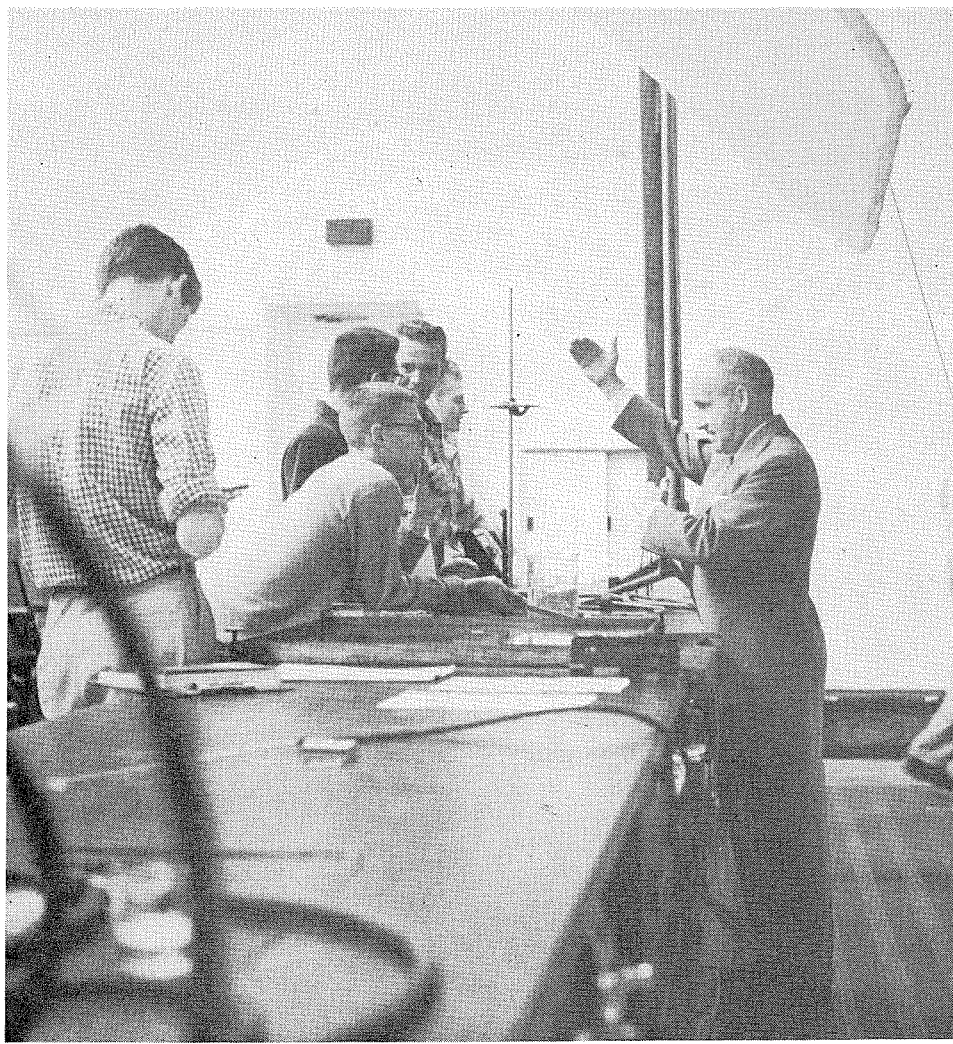


*an audience of grade school boys, asks for questions from the floor—and lives to regret it.*



*Arthur Galston, Assistant Professor of Biology (now at Yale) answers questions after his demonstration of Day Length in Plants.*

When Earnest Watson, Dean of the Faculty and Professor of Physics, talks on the Nature of Sound, half his audience comes back for more when it's over.



Robert B. King, Professor of Physics, goes deeper into the mysteries of Geometrical Optics after his demonstration.

