

ENGINEERING AND SCIENCE

IN THIS ISSUE



On our cover this month—a picture of one of the colorful demonstrations set up by Caltech students for the edification of the hundreds of high school students who swarmed onto the Caltech campus for the annual Students' Day held this year on Saturday, December 1.

In our cover picture, Jon Harford, a senior in mechanical engineering, is demonstrating how research is conducted on a high compression test engine in the mechanical engineering laboratory.

For other views of Students' Day—see page 48.

Warren Weaver's article on page 27 of this issue has been extracted from a talk he gave at the Athenaeum on November 15, on the occasion of the dedication of Caltech's new Norman W. Church Laboratory of Chemical Biology.

Dr. Weaver, who is now vice president for the natural and medical sciences of the Rockefeller Foundation in New York, served as assistant professor of mathematics at Caltech from 1917 to 1920—when the school was known as Throop College. Which explains why Dr. Weaver calls his talk "Pasadena Revisited."

In 1917, as Dr. Weaver explains, this was a slightly different school. His salary at the time was \$1,800 a year—though the Weavers only paid \$17 a month rent for a cottage on Mentor Avenue. They couldn't afford a

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PICTURE CREDITS

Cover David Groce '58
pps. 16-23 Muriel and Thomas W. Harvey
pps. 24, 25, 30 (top) Thomas W. Harvey
pps. 30-31 Graphic Arts, Caltech
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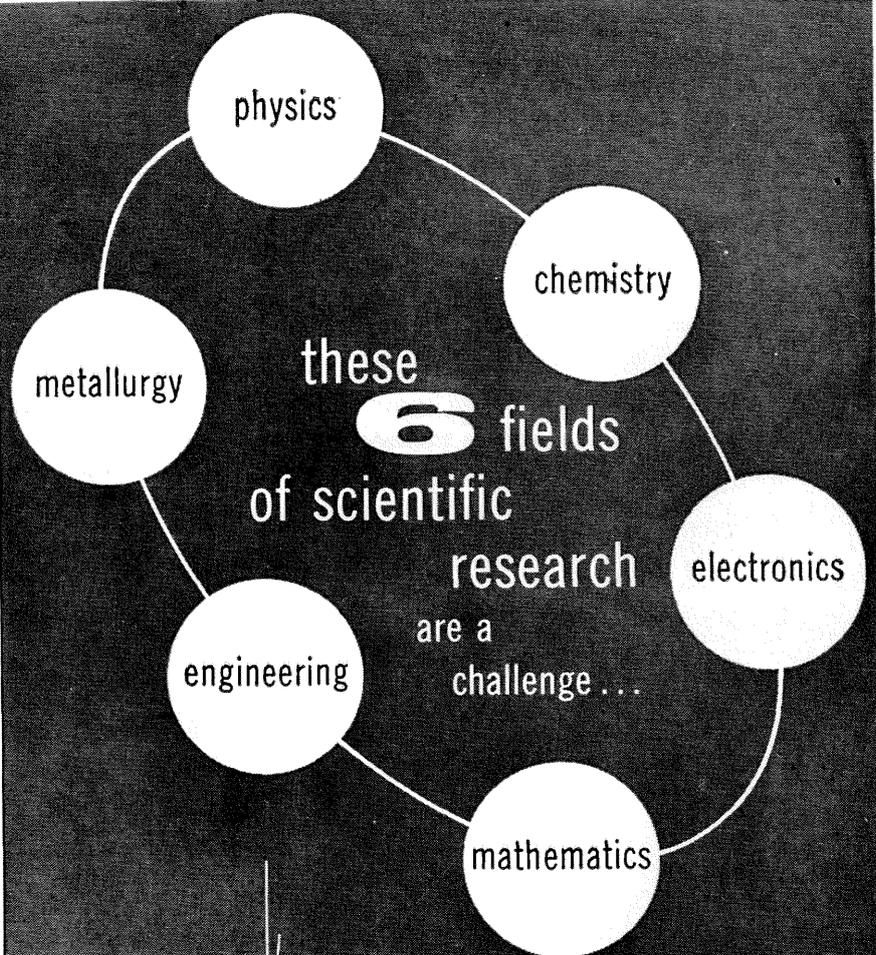
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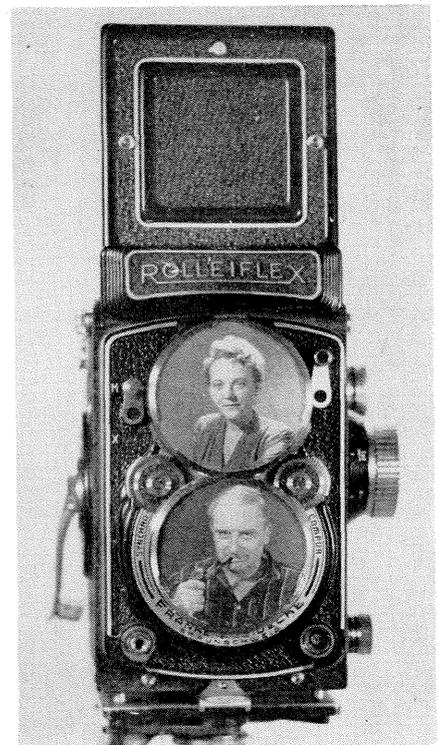
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Muriel and Tom Harvey

car, of course, but Dr. Millikan had one (known, for some reason as "Sir William") which could be—and was—borrowed fairly freely.

In his article Dr. Weaver not only revives some warm memories of the early days of the Institute, but traces the growing partnership between the physical sciences and the biological sciences—which has now been so firmly established in the new Church Laboratory.

When we say, on page 15, that Thomas W. Harvey took the impressive faculty portraits on pages 16 to 23, we are telling a half-truth, because some of the portraits—and only the Harveys know which—were taken by Tom's wife, Muriel.

Tom Harvey's interest in portrait photography goes back 25 years, when he was 14 years old. Muriel's dates, roughly, from the day, just a few years back, when her husband made her a present of a Rolleiflex. Tom now confesses that he expected his wife to have a brief romance with photography—and then to turn the camera over to him. Instead, Muriel developed a permanent attachment to photography and Tom had to buy himself another camera.

The Harveys have worked together on portrait photography ever since. To get a relaxed portrait they shoot a minimum of 24 exposures, in about 30 minutes. They can usually count on the first 12 being worthless because it takes this much time for most subjects to loosen up. Out of the 24 shots they usually get one or two worth printing—and some of these prints can be found on pages 16 to 22 of this issue.