



automated bridge

The bridge of tomorrow will be self-activating, equipped with electric-eye controls and an anti-freeze system. No overhead structures will obstruct the view, or interfere with radio reception, according to Robert J. Companik of Chicago.

In his design, the bridge is operated by pressure pumps that draw water from the canal into the hollow structure and hold it shut by the weight of the water. To allow boats to pass, pressure is released, counterweights pull the sections together, and the bridge opens. An electric eye down the canal activates the opening and the bridge does not close until an eye on the other side is passed. Heating units keep both eyes free from snow and ice, and a brine system keeps the bridge in operation in freezing weather.

Many ingenious solutions to traffic and other problems are on the boards today. To make their ingenuity clear, and to translate them from idea into reality, requires the best of drafting tools.

In pencils, of course, that means Mars, long the standard of professionals. Some outstanding new products have recently been added to the famous line of Mars-Technico push-button holders and leads, Lumograph pencils, and Tradition-Aquarell painting pencils. These include the Mars Pocket-Technico for field use; the efficient Mars lead sharpener and "Draftsman" pencil sharpener with the adjustable point-length feature; Mars Lumochrom, the color-drafting pencils and leads that make color-coding possible; the new Mars Non-Print pencils and leads that "drop out" your notes and sketches when drawings are reproduced.

The 2886 Mars-lumograph drawing pencil, 19 degrees, EXXB to 9H. The 1001 Mars-Technico push-button lead holder, 1904 Mars-lumograph imported leads, 18 degrees, EXB to 9H. Mars-lumochrom color-drafting pencil, 24 colors.



J.S. STAEDTLER, INC.
HACKENSACK, NEW JERSEY

at all good engineering and drawing material suppliers

SIRS:

In his article on "Admissions at Caltech" (*E&S* - January, 1959) Peter M. Miller, assistant director of admissions, makes a passing remark that is so obviously untrue as to demand rebuttal: "The applicants (for Caltech admission) must be male . . . The restriction seems to have had . . . no deleterious effect on the social blooming of the Caltech undergraduate."

Admittedly there are some who do fine socially at Caltech. Many people find that the lack of social competition or hard-to-break-in-to groups at Tech make it an ideal place to "come out of their shells" socially.

Yet, on several counts, the non-co-educational nature of Caltech does lead to "deleterious effects," and creates problems which really ought to concern the Deans (although apparently they choose not to be aware of the problems) and which ought to be explained to prospective freshmen (although usually they are not).

The fact that Tech students have to go to colleges which are anywhere from 7 to 25 miles away in order to find intelligent, college-age girls to associate with makes social life at Caltech into a strictly-weekends affair, and a highly expensive one, too (60 cents for a phone call, for example). The fact that, to the girls they associate with, Tech students are cast in the role of social outsiders tends to make their "social bloom" both frustrating and unrewarding.

The girls that most Tech students wind up dating leave much to be desired. They are often high-school girls, or girls who cannot make a go of it socially at their own schools.

Another major problem is that men who do not have cars (especially freshmen) are limited by transportation problems to attending the three or four "big" events each term.

The truth, which the Deans ought to face, is that a large percentage of Tech students wind up marrying the second or third girl they ever meet. And for most of the rest, undergraduate life at Caltech becomes, not something to look back on with fond memories, but rather something to forget as soon as possible.

Howard Weisberg '60

Engineering and Science