

Materiel Command! Most of us believe we're sent here as a token force, with menial tasks to perform, so that under public pressure we can be placed on display as an example of the manner in which the Army utilizes, "effectively," its skilled personnel. We perform primarily as file clerks, errand boys, housekeepers and simple record keepers. Of course our job descriptions each read as if we were a brain bank of super-scientists.

I for one (and many, many others too, I assure you) have been delivered to the vivid realization that it's the social and political, not the natural sciences, that are manifest with the strangest mystery and nastiest problems. My greatest contribution cannot be in physics, but in the search for the true nature of that malignant mechanism of our society by which these ills are sustained.

LEE R. ALLEY
Radcliff, Ky.

Older than she looks

Walter Harrison, in his article "Electrons in Metals" (October, page 23) treats the word "phonon" as he would a beautiful woman whose age he gallantly underestimates by far.

According to Professor Harrison's estimate the fundamental work in Bloch's thesis (c. 1929) "came some 20-30 years before the word 'phonon' was coined." This would put the birth of the phonon somewhere between 1949 and 1959.

The fair lady is much older than that. In an article dated October-November, 1929, the Soviet physicist Igor Tamm (*Z. Physik* 60, 352, 1930) used the concept of "acoustical quanta," a reference that is confirmed in an article by Jacob Frenkel in *Phys. Rev.* 37, 1289, 1931. Professor Frenkel wrote this article while spending a year's leave at the University of Minnesota, where he revised the first volume of his book on wave mechanics. The preface of the book ("Wave Mechanics, Elementary Theory," Oxford, 1932) is dated July 18, 1932 at Leningrad. Section 37 (pages 266-272) is entitled "The Theory of a 'Phonon' Gas."

July 18, 1932 may not have been her birthday but the lady in question is surely crowding forty.

HUMPHREY MARIS
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