commercial ultrasonic equipment for medical diagnosis and nondestructive testing.

It is well known (for example, from the Rayleigh resolution criterion) that angular resolution, for coherent propagation and linear processing of image information, is a function of the ratio of wavelength to some characteristic aperture dimension.

Theoretically then, one should be able to obtain optimum resolution by choosing a wavelength on the order of the target dimension and an aperture on the order of the available window. Optimum resolution can be found by decreasing wavelength and increasing aperture to achieve the desired image quality. Obviously, what can be accomplished by this means in the human body is limited by air and gas inclusions and by the non-uniform character of soft tissue. However, longer wavelengths should not only be effective in minimizing the attenuation problems to which Swindell and Barrett allude, but also be effective in minimizing the effects of soft tissue non-uniformity.

As manufacturers of commercial ultrasonic equipment fully utilize the principles of related fields such as imaging optics and antenna theory, ultrasonic imaging will begin to complement and compete more effectively with methods involving ionizing radiation.

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1/13/78

The Definitive Article

I wrote the definitive article
And sent it to PHYSICS TODAY.
It described every yet unknown particle
And explained every paradox away.
In elegant but simple prose
The writing flows and flows and flows
Everything with nothing missed
Of interest to a physicist.

The journal said it would not fit;
Let's undertake to shorten it.
Two hundred pages in precis
Is even long for *RMP*.
Fifteen pages—that will do
For the *Physical Review*.

But wait!
Boil it down, evaporate
Everything but name and date.
There . . . now we're set—
Send it off to *Phys. Rev. Lett.!*

M. KOCHER
Corvallis, Oregon

Correction

March, page 44, figure 5—The numbers of the flux axis should be inverted, to range from 10^{-1} at the top to 10^{-5} at the bottom. □