

FIG. 1. (Below) A 1-mm-scaled ruler obtained from 10-0 Ethilon suture (Ethicon, Ltd., U.K.). (Above) The 0.1-mm-scaled microruler that we developed.

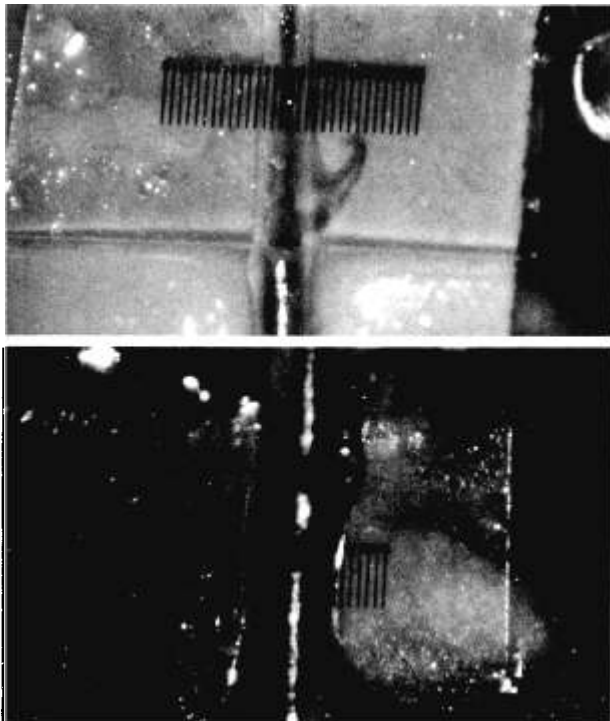


FIG. 2. Application of microruler onto (above) and beneath (below) a vessel under the microscope.

#### REFERENCES

1. Jacobson, J. H., II. The Micro-Mike: A device for measurement of small structures. *Surgery* 63: 917, 1968.
2. Erol, Ö. O., Spira, M., Feldman, L., and Sutherland, B. A micrometer for microsurgery. *Plast. Reconstr. Surg.* 68: 959, 1981.

#### RELATIVELY INEXPENSIVE COMPUTER IMAGING SYSTEMS

Sir:

I was perplexed recently when attending a cosmetic

surgery symposium to see various companies offering computer imaging systems priced at approximately \$20,000.

I have a Mac II computer with a 13-inch RGB monitor. I bought a Computer Eyes color video digitizer from Macintosh Computers, manufactured by Digital Vision Incorporated, 270 Bridge Street, Dedham, Mass. I placed the NuBus card in the Mac II, and then I attached my video camera, which is a standard video camera recorder, using the cable provided, to the computer. I was then able to capture an image on the computer, which I then saved as a 24-byte color PICT file. Using the Mac Cheese software published by Baseline Publishing Incorporated, 5100 Poplar Street, Suite 527, Memphis, Tenn., approximate cost \$99, I was then able to import this PICT file and to modify it using any of 256 colors and a track ball or a mouse attachment. For greater precision, I could have purchased a Wacom Graphic Tablet, approximate cost \$400, to modify the picture with more accuracy.

This is one method of arriving at a computer imaging system. Most IBM-compatible computers will accept a video card that could then be used with a similar setup to merge with a photo editing program, of which there are many. The approximate cost of setup is somewhere between \$1000 and \$2000. Since most of us have a video camera already, this would not be included in the setup cost. The same would apply to a personal computer and possibly a color monitor. Color monitors run anywhere between \$500 and \$2000, depending on the size and the quality. The average \$500 color monitor will provide you with 256 colors, which is more than adequate. Having thus arrived at my computer imaging system, I have had a tremendous amount of fun playing with it, although I personally have no intention of using it in my clinical practice. For all who may wish to do so, I would suggest that they examine the many products available so that they can build their own system and save themselves approximately \$18,000.

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#### RETIREMENT

Sir:

Prompted by our editor, I am writing this letter about retirement, since I will soon be a 5-year survivor!

The old adage about traveling, "Take half as many clothes and twice as much money," also applies to retirement. Most people find that their pension is about 50 percent of what their income was before retiring. Major financial adjustments must be made. This probably means not going to the leading bookstore in town to buy the latest hardcover books. You put your name on the list at the local library or wait a few months until the paperback edition is published. While many doctors (and especially their wives) would consider it very "bas class" to go to a flea market, this can be the next step to saving money on your reading material. I must warn you, however, finding a beautifully bound first edition of some classic book you have always wanted at a flea market or garage sale for a dollar or so can become most addicting. Being retired, I now have time to read all those books I could not get to while practicing full time.

As a working man, my father used to say that "your hobbies must pay for themselves." This means race horses, yachts, and antique Rolls-Royces will probably not fit into a retirement budget. Since I could not afford several 12-cylinder Packard