Simple, adjustable lens holder

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The construction of a simple, adjustable lens holder is described. This lens holder is unique in that it will firmly hold small lenses without taking up space at the edge of the lens or stopping them down.

There are many times when one needs a small lens holder that takes up very little room and does not restrict the lens aperture. When one is trying a variety of lenses, it would be advantageous if this lens holder were adjustable. In this note, we describe such a lens holder which has been found very useful. These holders are simple to make (the first one took only 15 min), inexpensive, and can be made to hold lenses of nearly any diameter. We have found them especially useful for lenses 5–40 mm diam.

The construction of such a lens holder is illustrated in Fig. 1. The post is made from a hollow brass tube, 6–12 mm o.d., depending on the size of lens to be used; the larger the lens, the larger the post. The length of the post is arbitrary, say 5–10 cm. The lens-holding element is a steel band, 2–3 mm wide, 0.1 mm thick, and long enough to go around the largest lens desired, with enough left over for soldering the lens to it.
into the threaded rod. This threaded rod passes through the center hole of the post and is fitted with a suitable nut. The lens is simply placed into the loop formed by the steel band and the nut is tightened. A lens mounted in this manner is held securely and firmly enough for even the most demanding work.

Not only is this holder good for lenses, but it is also useful for holding other round components, such as filters.