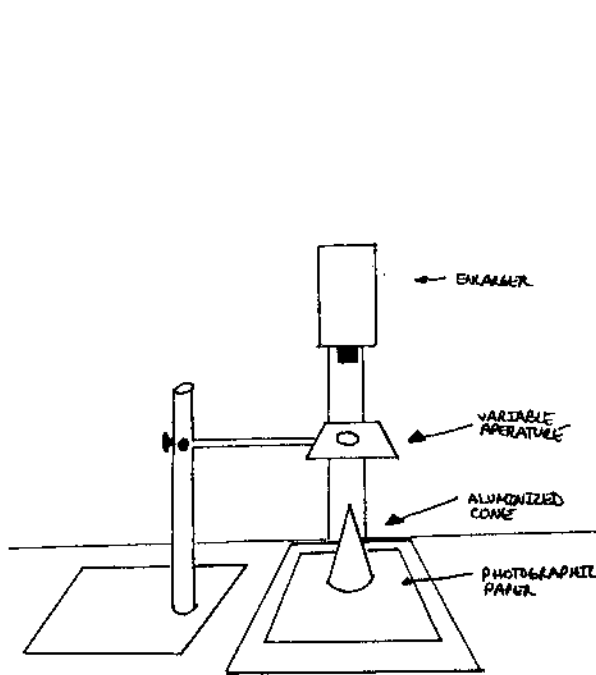


**OPTICAL ENGINEERING NOTE #67
CONE MIRROR PHOTOGRAPHS**

There are guides in the literature to producing anamorphic drawings, like those in the THE MAGIC MIRROR¹ book. Making an anamorphic photograph is not that difficult for those who have darkroom skills.

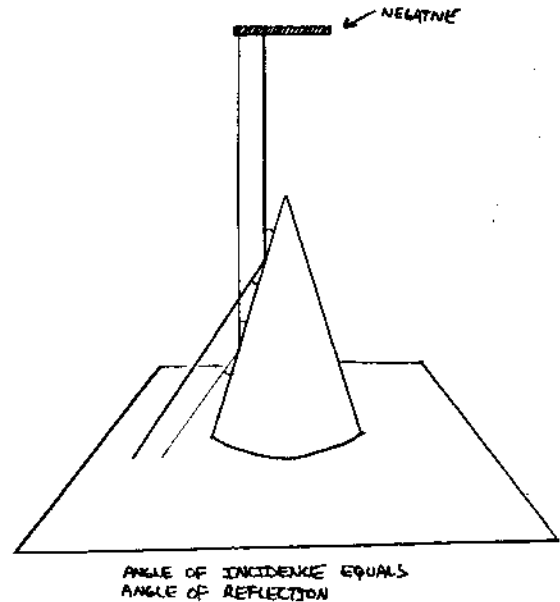
The first trick in making a **CONICAL ANAMORPHIC PHOTOGRAPH** is to fabricate a cone to be used in the darkroom and then for the viewing. Mike Kozlowski, (Columbia College, BFA, 1988, Class Valedictorian) made his out of mylar over acetate. (Thanks for the sketch!)

The second appliance necessary is a variable aperture that can be raised and lowered into position so that the projected image falls cleanly only on the cone, and not directly onto the photographic paper. See Mr. Kozlowski's drawing below.



EQUIPMENT SET-UP FOR
CONICAL ANAMORPHIC
PHOTOGRAPHS

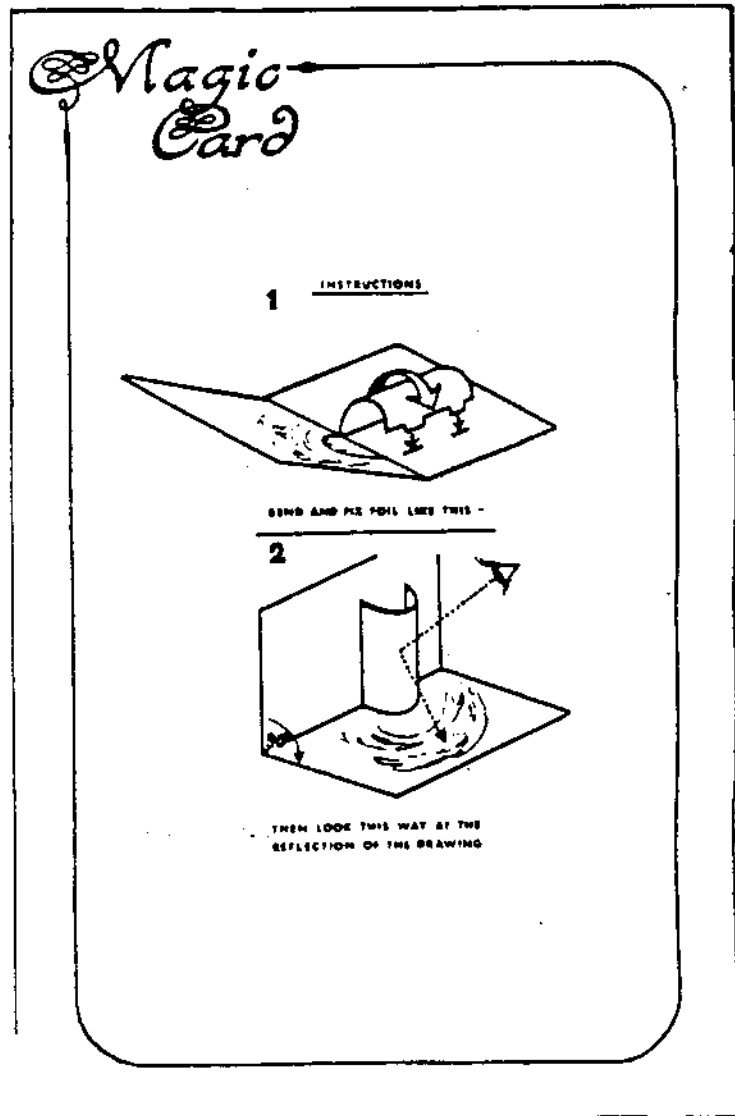
MIKE KOZLOWSKI FALL '87



HOW LIGHT INTERACTS WITH
ALUMINIZED CONE - WHY
PHOTOGRAPHS ARE INSIDE-OUT
OF PAPER

More details may be found in the book, SEEING THE LIGHT², and the original Scientific American³ article. The former also describes the mapping technique for making drawings. (I wouldn't be surprised if there is an anamorphizing filter for Adobe Photoshop.)

CHALLENGE: Can you figure out a way to make a CYLINDRICAL ANAMORPHIC PHOTOGRAPH?



REFERENCES

1. McLoughlin Bros., THE MAGIC MIRROR: An Antique Optical Toy, Dover Publications, Mineola, NY, 1979.
2. David Falk, Dieter Brill, David Stork, SEEING THE LIGHT, John Wiley and Sons, New York, 1986, pp. 79 -83.
3. The Amateur Scientist, Scientific American, May 1984, pp. 176-187.