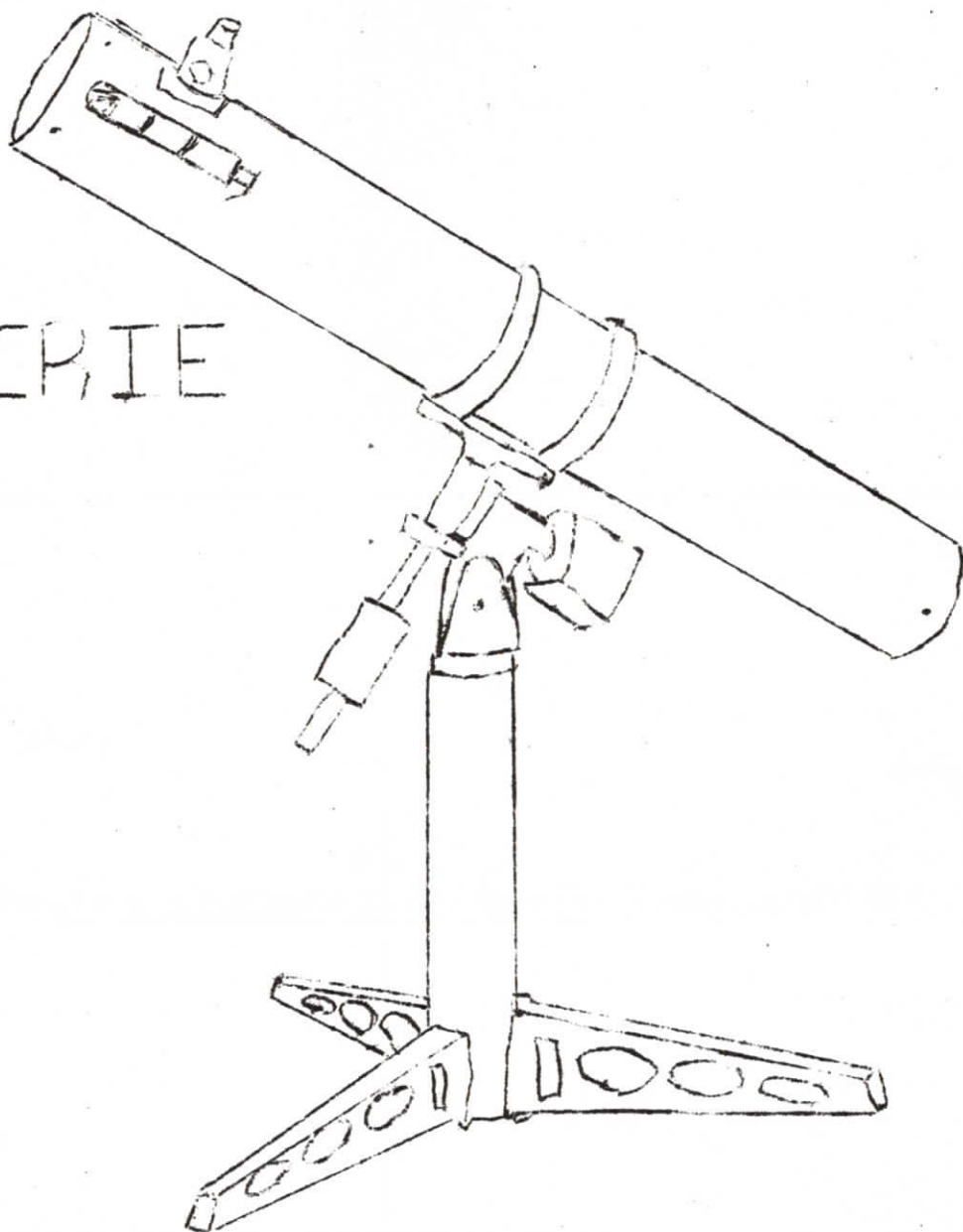


THE PRAIRIE

AMAZONIAN



Our meeting for this month will be held on Tues. April 29 at 7:30 in the Olin Hall of Science on the Nebraska Wesleyan Campus. Earl Moser will present the program this month, it is entitled Proper Polar Alignment of Your Telescope. There will also be a drawing for a door prize so come on out on the 29th.

****THE PRESIDENTS REPORT****

With spring here and summer not too far distant, it is time for the conventions of the Astronomical League to come into your planning for the summer. Below is a portion of a note on the Mid-States Regional Convention. I have left out the parts concerning the submission of papers and exhibits so if anyone needs information on either of these see me at the meeting.

The Mid-States Reigon of the Astronomical League will hold it's 25th Annual Convention at the Central Methodist College in Fayette, Missouri June 12 thru June 15th, 1975. This is being planned in connection with the 100th anniversary of the Morrison Observatory, built originally in Glasgow, Missouri, about 12 miles north of its present site and moved to this college campus some years later.

Welcome, all Amateur Astromomers, regardless of your activity in the subject. You can contribute your knowledge as well as learn from others. You will meet people of your own interest, making your visit more enjoyable. Bring a smile with you and let be a part of your contribution to this memorable occasion.

REGISTRATION

Details are still being worked out regarding housing, banquet, meals, preceedings, group photo, secondary observing sites, displays and others. Registratøons open Thursday June 12th at noon. Cost of registration was set at \$4.00 for individuals and \$5.00 for family. There is no monitary saving by pre-reg-istrating, but it will help to improve the service by advancing your fee to Sec'y-Treas. Mary Scott, R#2, Box 144, O'fallon, Missouri 63366.

HOUSING AND MEALS

Rooms are being made available, both single and double. Bed linens will be furnished, but you should bring your towels, wash cloths and a light weight blanket, The dormitory is not airconditioned so an electric fan would help make hot nights more comfortable. The charge for 9 meals and 3 nights lodging will be \$32.00 per person. The banquet will be held on Sat. evening and will be limited to the number of tickets sold in advance. Awards will be presented at this time. There are four Churches nearby, if you wish to attend services.

John Bruce
President

++++GATEWAY SHOW++++

Well the clouds did in our first show for the year, I hope that doesent become a habit with the weather! Our next show will be on Thurs May 22 with the 23rd being the cloud out date. Hope to see you there.

MIRROR-IMAGE
by
David Kubicek

In Through the Looking Glass (and what Alice found there). Lewis Carroll sends his young heroine into a world where everything is reversed. For example, Alice has to pass the cake around before she cuts it, and she must back up to be presented to the queen. Since the publication of this book, many other writers have described other mirror-image worlds. The original Star Trek television series broadcast an episode about a universe that differed from ours in one way: civilized people in our world were barbarians in the other. The animated Star Trek series also broadcast an episode about a mirror image universe where the people spoke English backward, the star field was composed of black stars on a white background, and the spaceships traveled backward. In "The Plattner Story," H. G. Wells tells of a man who is catapulted into another world by an explosion, and when he returns to this world, also by means of an explosion, his body has reversed itself (his heart is on his right side, his left and right hands have changed sides). These stories are entertaining, but they do not carry the reversal theme to its ultimate conclusion, which is that if material from our universe came into contact with material from a mirror-universe, an explosion would result.

To understand the reasons for such a catastrophe, we must begin with the atom. The atom is composed of three primary particles: the proton, the neutron, and the electron. Normally an atom's nucleus is made up of protons and neutrons. Electrons travel in orbits around the nucleus, thus making the atom resemble a miniature solar system. The simplest atom, that of hydrogen, is composed of one proton as a center with one electron revolving around it. The more complex atoms become, the more electrons they have and the more protons and neutrons are clustered together to form nuclei.

A normal electron has a negative electric charge, a normal proton a positive electric charge, and a normal neutron has no charge at all. But in 1930, Paul Adrien Maurice Dirac, an English physicist, working out mathematical formulas to describe the behavior of electrons, came up with some unexpected results. He theorized that, if his calculations were correct, two kinds of electrons existed: a normal negatively charged electron and an abnormal positively charged one as well. In 1932, Carl David Anderson, an American physicist, was studying cosmic rays. The cosmic rays entered a cloud chamber and penetrated a bar of lead, thus creating other particles. Among them, Anderson noticed a trail of droplets which resembled an electron trail, except that it curved the wrong way. This was the positive electron (or positron, as Anderson called it) that Dirac had theorized.

TO BE CONTINUED NEXT MONTH