astronomy, telescopes
and the age of space...

Nothing is more fascinating than ASTRONOMY, the study of the moon, the stars, and all the heavenly bodies. It is man's oldest science, and yet it is the basis for man's newest endeavor -- the conquest of space.

Above all, Astronomy is fun! Few experiences equal the thrill that comes from observing the skies through a telescope. The amateur astronomer sees stars so distant that it took millions of years for their light to reach us. Even the smallest telescope brings out startling details in the 240,000-mile-distant Moon, Saturn, with its famous rings, violent raging storms on the face of the sun, comets, double stars, far-off galaxies, all are among the wonders a telescope can bring to you.

Man's destiny is the stars. The young boy or girl astronomer of today, peering through the telescope at Mars or Venus, well may be the first to step on their surfaces. The age of space dictates that we all know about space. Your children can learn, painlessly and with enjoyment, through Astronomy. As a matter of fact, you'll find it equally enjoyable. Astronomy is one hobby that has no bounds of age, or sex, or creed.

Astronomy is not an expensive hobby. For less than thirty dollars you can make or buy a telescope that will bring the grandeur of the heavens to you. And astronomy is not necessarily a lonely hobby. You'll be able to join a local amateur astronomer's organization and enjoy intellectual, companionable associations. Star parties combine social life and stars.

Eventually, you'll want to specialize. Astro-photography is as easy as it is fascinating. You can, as you advance, study variable stars, meteors, pattern detection, or specialize in moon or planetary work. Highly-skilled amateurs are now studying sun spots and their effect on the ionosphere, much is still to be learned of the skies -- you can add to man's knowledge, even find and have a comet named for yourself.

If you are just beginning, please read the next page carefully. Whether you are beginner or expert -- telescope "build-it-yourself" or "looker-through", we can supply you with low cost, high quality optics and parts -- designed and produced for the amateur.
THE TRUTH AT TELESCOPE POWER

Most beginners think only of "power" or magnification when planning to buy a telescope. Power is important, of course. But, it is only one of three functions of a telescope. Two others are: collecting the apparent brightness of objects--LIGHT GATHERING POWER, and bringing out detail that cannot be seen by the unaided eye--RESOLUTION.

Objective diameter alone determines the light gathering power of your telescope. Resolving power is related to the quality and diameter of the optics in your telescope.

Theoretically, there is no limit to magnification. However, in practice, there are four limitations to the use of high powers of magnification:
1. Over-magnification decreases clarity.
2. Over-increase in magnification causes decrease in the brightness of the image.
3. Increase in magnification decreases the actual field of view in the sky.
4. Over magnification increases twinking of stars and interference with observation of stars that are close together.

Telescope experts agree that the top useful power of magnification is about 50 to 60X per inch of objective aperture; that is, 180 power for a 3" telescope, 255X for a 4 1/4", or 360X for a 6". High power magnifies, but it magnifies EVERYTHING. As you go above 50 to 60X per inch, it magnifies the distortion pattern to the point of producing a fuzzy image. It also magnifies heat waves, dust, clouds and air currents.

While you can get higher magnifications than 60X per inch of aperture with any telescope, it is simply empty magnification and of little or no value to you. Although many of the new companies that have rushed into the astronomical field to "cash in" on increased interest in outer space make fantastic claims which put us at a competitive disadvantage, we prefer a factual, honest approach. Hence we list the powers of our telescopes according to the rule of 60X per inch, rather than list theoretical, non-usable powers.

Do not be misled by power claims. Any telescope can give you extremely high powers. The catch is, you can't use it, and it actually is a disadvantage if your telescope image lacks clarity and sharpness. For optical quality, you have to depend on the reputation of the manufacturer. Our reputation is well known. We will not jeopardize it by making greatly exaggerated claims. Our telescopes, etc., are all "satisfaction guaranteed." You risk nothing and have much viewing pleasure to gain when you order an Edmund telescope.

WHAT KIND OF TELESCOPE SHOULD IT BE?

After you decide to make your own telescope, you should give some thought to the type of telescope you want. There are two basic types: the refractor and the reflector. While each has its advantages, as shown below, the reflector seems best for the beginner because of its economy of labor and materials.

THE REFRACTING MIRROR TYPE

The refractor telescope receives an image through an achromatic objective lens. For the amateur, this is a difficult task, since it requires precise color correction and expensive materials. However, once made, it is easy to use. It requires no adjustment of its optical system except for the entrance of dust and moisture into the telescope, thus eliminating the need for servicing of the optical components.

THE REFLECTING MIRROR TYPE

The reflector telescope receives an image through a dichromatic mirror, bender of the path of the image through a right angle and up through the eyepiece, which is generally located at the top or front end of the tube. It is a great deal easier and cheaper for an amateur to grind his own reflector or to buy a finished mirror than it is to make or buy an objective lens of equivalent diameter. Assuming that your skill is good, the ability to solve fine detail is usually a function of the diameter of the primary lens or mirror. Thus, with a reflecting telescope, you can see more and better for less money and effort.

grinding your own mirror, generally produces a telescope as good, if not better, than any you could buy except in the very high price range. If you have the time and a little practical ability, you may want to try your own mirror.

However, our finished 4 1/4" mirror is priced so low that it may not be worth your time and effort to attempt to grind your own mirror. Our reflector, the cost factor becomes great enough to make real economies possible by grinding your own. We supply the mirror blanks, the grinding and polishing compounds and the "tool."
HIGH-POWERED—
"THE SPACE
60 TO 180 POWER
ONLY

This wonderful telescope is the ideal, low cost introduction to astronomy and the mysteries of space and the stars. You can pursue a fascinating hobby with a small investment.

THE MIRROR IS THE HEART OF YOUR TELESCOPE

If it is accurately made, you get good results. Otherwise, you do not. For several years we have sought a good, economical mirror. We are proud of the 3" finished aluminized and overcoated 1/4 wave mirror, F.L. 31", f/10, that we now supply. It provides true viewing quality.

FORK TYPE MOUNT AND HARDWOOD TRIPOD

This scope has a fork type equatorial mount with a 40° polar axis, a feature just not found on other telescopes in this price range. It allows a viewer to follow a star's movement with only one movement of the telescope, making it easy to keep the star in field of view. The tripod is 36" high.

MANY FEATURES FOUND ONLY IN BIG TELESCOPES!

From a construction standpoint, our 3" SPACE CONQUERER has many features experienced telescope enthusiasts consider necessary for viewing the heavens. The mirror is easily adjusted with three spring tension set screws. Tube is ventilated to prevent condensation on the mirror.

You get all the power you can use effectively. Instrument is sturdy made and really easy to use. You will get years of enjoyment.

AVAILABLE EYEPIECES

1.25" focal length. Gives 120X with SPACE CONQUERER and about 320X when used with Barlow.
NO. 30,195 $3.75 Postpaid

1" focal length (31X). Excellent for ground observation or looking at the moon.
NO. 30,194 $3.50 Postpaid

Mounted Symmetrical Eyepieces. A fine war surplus eyepiece, 3/4" focal length (41X). Contains 2 achromatic lenses. Excellent for wide field viewing or for taking photographs through your telescope.
NO. 30,315 $5.95 Postpaid

INEXPENSIVE
CONQUERER
3' REFLECTOR TELESCOPE

$29.95 Postpaid

you can introduce your children to the space age that will be so important to their futures. See Saturn's rings, Jupiter's moons, Mars' craters of the moon and the other wonders of the heavens. You'll enjoy hours of educational fun.

POWER

You receive a 1/2" f.l. Rameden eyepiece which gives 60 power, more than enough for viewing the wonders of the sky. In addition, we include a Barlow lens, which when used with the 60X eyepiece brings power to 180X, the maximum effective magnification for this size scope.

Tube is strong spiral wound Kraft board with an attractive covering. Inside is a dull black to prevent glare. Included is an optical finder to help locate stars, planets, etc.

FREE WITH EVERY TELESCOPE

HOW TO USE YOUR TELESCOPE, 36-page booklet of telescope information; 272-page book, HANDBOOK OF THE HEAVENS, covering star clusters, asteroids, meteors, etc., and STAR AND SATELLITE FINDER plus booklet, STAR PATHS, and complete directions.

NO. 85,050
A REAL VALUE ONLY $29.95 Postpaid
ONE OF OUR MOST POPULAR
4 1/4" PALOMAR
40 TO 255 POWER REFLECTOR

"DELUXE SPACE CONQUERER"

We call this telescope "DELUXE SPACE CONQUERER" because it brings all the pleasures of astronomy within the budget of almost everyone. The quality-minded beginner who wants to start right, the serious amateur who wants a scope with most of the features of ultra-expensive professional instruments, or schools or colleges, which want to launch Space Age educational programs, will find this unit ideal.

Your SPACE CONQUERER will show you the craters and seas of the Moon, Rings of Saturn, Double Stars, Moons of Jupiter and many other astronomical phenomena. It is so powerful that you can read a newspaper headline at a mile. It gives all the power that can be used effectively in an instrument of its size. Higher power would be simply empty magnification.

COMPARE THESE QUALITY FEATURES AGAINST

SPHERICAL MIRROR
This telescope has a fine precision spherical mirror, thoroughly tested and guaranteed to resolve detail right to the theoretical limit. It is made of Pyrex, aluminized and overcoated for protection and long life. The mirror is f/10, accurate to 1/4 wave. Note: This 4-1/4" spherical mirror of f/10 will give the same results as a parabolic mirror. See page 191 of Thompson's MAKING YOUR OWN TELESCOPE.

ALL THE POWER YOU CAN USE
Although "power" is a term with most beginners, most viewing is done with low power eyepieces. We provide a deluxe Reticular (1 achromatic) eyepiece of 1 inch F. L. that gives 45X and an 1/2" F. L. eyepiece that gives 90X. Included too is a MOUNTED BARLOW, which, used with the above, triples or doubles the magnification and gives powers of 135X and 180X.

BEAUTIFUL STYLE

IN STURDY CONSTRUCTION
This quality American made telescope is ready to use. Has a real aluminum tube 5" in diameter and 46" long. Provides a rigid mounting base for all components. Non-breakable and will last a lifetime. Well painted. Chrome nuts used in mountings. Truly a telescope you will be proud of.

EASILY PORTABLE
The convenience of handling this telescope is a big advantage. Many fine telescopes of 6" or more are stored in attics and cellars simply because they are too massive to be readily moved. This telescope is easy to carry to friend's houses, on vacation, to club meetings, etc.

REAL EQUATORIAL MOUNT ON OUR NEW VIBRATION VIBRATION-FREE ALL METAL PEDESTAL
This mount enables you to follow moon, stars, and planets with only one movement. Adjustable to your own latitude. Correctly counter-balanced. Bearings for smooth movement. Large locking knobs. Sturdy construction. On vibration-free all metal pedestal that gives sure steady support to eliminate any wobble, torque or vibration.

SATISFACTION GUARANTEED!
We are so sure that you will get the full enjoyment you expect from our DELUXE SPACE CONQUERER that we unconditionally guarantee it. It is sturdy constructed, American made, will give years of service. You will find this scope compares very favorably with expensive, larger telescopes and will fill your needs at a considerable savings in cost. Order yours, today.

NO. 85,105 COMPLETE $79.50 TRANSPORTATION CHARGES COLLECT Shipping Weight 14 lbs.

GIVEN FREE!
6X FINDER TELESCOPE
6X finder with crosshairs makes locating any sky object truly easy.

FOR THOSE WHO HAVE A MOUNT...
Telescope tube, finder telescope, mirror, eyepieces, everything but equatorial mount and pedestal mount.
NO. 85,111 $61.00 plus Trans.
IMAGINE!

AND ONLY $195.00
PLUS SHIPPING FROM BARRINGTON, N.J.

THE SUPER SPACE CONQUERER IS COMPLETE! NO EXTRAS TO BUY!

The six inch SUPER SPACE CONQUERER is a superb instrument. Most important, it is complete! It includes electric clock drive, setting circles, heavy-duty equatorial mount and a pedestal base. As is, without any expensive extras, it fills the demands that most serious amateurs, colleges or universities place on a telescope.

With the SUPER SPACE CONQUERER you can see, clearly and sharply, Rings of Saturn, Jupiter's moons, Mars, craters of the moon and all the wonders of the sky. It will reveal faint stars to nearly 11th magnitude, and split double stars separated by less than one second of arc. Its optical quality and stability have brought us many compliments.

Compare these features with any telescope even telescopes costing $295.00 to $350.00.

PYREX PARABOLIC MIRROR, hand-finished to 1/4 wave, corrected to the theoretical limit of resolution, aluminized and overcoated. F/4, 45° F, L.

FOUR EYEPIECEs include a wide-field 1st achromatic corrector for 45 power, 11/2" and 11/4" Ramsden for 94 and 192 power and a Barlow that will double and triple these powers to as high as 570X, although this is beyond the recommended magnification for this size of scope. You get all the power you can use. Eye pieces are all standard, 11/4" outer diameter.

OTHER FEATURES INCLUDE: 6X ACHROMATIC FINDER SCOPE, STUDY ALUMINUM TUBE IN WHITE BAKED ENAMEL FINISH, PLAT BLACK INSIDE.... HEAVY-DUTY EQCATORIAL MOUNT, correctly counter-balanced,...SETTING CIRCLES,...NEW ALL-METAL "no wobble"..."no vibration" PEDESTAL BASE,...BACK AND PINION FOCUSING,...and of course, THE ELECTRIC CLOCK DRIVE, ideal for long or group viewing sessions and astro-photography, operates on house current. Includes "Handbook of the Heavens," "Star and Satellite Finder," "How to Use Your Telescope" and full directions.

Optics is our main business: we are the world's largest optical mail order house. For that reason we have added all the little touches that many people don't notice, that most manufacturers don't bother with. For example, we optically coat surfaces to eliminate glare and improve star images. Our mount is extra-nomer-designed—compare its rugged construction with any other! Our optical parts--mirrors, eye pieces, etc. are unsurpassed. The SUPER SPACE CONQUERER is truly one of the few cases where you can save money without sacrificing quality. Order yours today--start on years and years of pleasurable viewing.

This SUPERB 6" REFLECTOR COMPLETE WITH ELECTRIC CLOCK DRIVE, SETTING CIRCLES, EQUATORIAL MOUNT AND PEDESTAL BASE

A complete, attractive instrument ready to use. See the planets, stars, moon and all the wonders of the sky in sharp detail. The 3" airspaced achromatic objective has been tested by famous astronomers and pronounced equal to any you can buy. An excellent telescope at an amazing low price.

LOOK AT THESE QUALITY FEATURES:
Standard 1-1/4" outer diameter Eye pieces: one 1/2" F, L 90X, one 1" F, L 45X, 1-Barlow lens that will triple or double the above eye piece powers. Giving you a power range of 45X, 90X, 135X, 270X.

Equatorial Mount with counter-balance gives you fingertip control of the telescope. Large 1-1/4" dia.

knobs operate the rigid axis locking mechanism. May be easily adjusted to an altazimuth type mount for terrestrial viewing.

Tripod legs are 60" long of natural finish hardwood.

3' ASTRONOMICAL REFRACTOR TELESCOPE UP TO 100X AND MORE
NO. 85,032

TRANSPORTATION CHARGES COLLECT Shipping Weight 30 lbs. 3' diameter airspaced achromatic objective, low reflection coated on four surfaces. 45" L, 1/15. A fully tested precision objective. Back and pinion eye piece holder of aluminum, brass and chrome gives real smooth focusing. Takes a standard 1-1/4" eye pieces.

Main tube is white enameled aluminum with gray crinkle finish and chrome finish on other parts. Overall telescope length is about 40". 6X optical finder telescope with crosshairs. A prism star diagonal is included for comfortable viewing at high angles.

Precision American made although a few parts are imported to keep cost down. One of the reasons we offer better quality and lower prices than our competitors. Free star chart and star book included. Fully guaranteed.

4' REFRACCTOR UP TO 240X AND MORE
NO. 85,038

TRANSPORTATION CHARGES COLLECT Shipping Weight 60 lbs.

Everything about this refractor is massive—the mount is built from heavy iron castings with machined bearing surfaces. The electric clock drive is smooth operation. The tripod has extra heavy 60" hardwood legs. This telescope's sheer weight (42 lbs.) allows steady viewing such as you wouldn't believe possible with a tripod.

The big 4" objective is an air-spaced achromat, with elements coated on all sides for low reflection. Focal length of the objective is 60", speed 1/15. The three eyepieces supplied with the telescope give you 60X, 120X and 240X. A special Barlow lens also supplied, 400X, 720X. A star diagonal is included for comfortable viewing at high angles. The tube is white enameled coated on the outside for attractive appearance, and specially coated on the inside to cut down stray light reflection. Stops are provided inside the tube for better image quality.

Back and pinion focusing gives you smooth operation with a full 4-1/8" travel. All metal parts are plated to prevent rusting. The mount is gray krinkle finish. Adjusting knobs 1-1/4" diameter for more positive locking. Equatorial mount is adjustable for all normal latitude. Finder is 6-power, easy adjustments for accurate finding.

Free star chart and star book included. Fully guaranteed.

Same telescope with Clock Drive

NO. 85,087

TRANSPORTATION CHARGES COLLECT Shipping Weight 60 lbs.

EDMUND SCIENTIFIC CO., BARRINGTON N.J.
LOW PRICED REFRACTING
TELESCOPES

For Only $16.95 to $19.95 Postpaid

CLAMP MOUNT

Comes complete with a clamp you can attach to auto, back porch, past in ground, etc. This gives a much sturdier mount than inexpensive tripods. Clamp is tapped with 1/4-20 thread hole for use with photographic tripod if desired.

STURDY CONSTRUCTION

Tube is of deep black color, impregnated with plastic. Lens mount of brass and aluminum. Clamp is of plated steel. Tube holder has two-point contact for rigid holding. No finder scope is included but it is easy to sight along tube to line up star.

THOUSANDS OF PEOPLE HAVE FOUND TELESCOPE MAKING EASY!

This telescope has all the features of the above one, except objective is 42mm (1-1/2”) diameter and provides adequate eye piece power for use with the low power eyepiece that comes with the telescope. This telescope is small and will be easy to transport and carry. It is the best telescope for the money in its price range.

ACCESSORIES

ACCESSORIES FOR THE ABOVE TELESCOPES

These are true astronomical telescopes and give an upside down image which doesn’t matter for astronomical viewing. To view objects on the ground you need an erector lens assembly. This slides into the focusing tube and eyepiece goes in other end. Used one way it gives power in half, the other way it doubles power. NO. 30,267 $2.95 Postpaid

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.

16

Powers are 67X, 100X and 200X.

SUGGESTIONS FOR THOSE WHO WANT TO BUILD THEIR OWN REFLECTING TELESCOPE

Need eyepieces. — Best to start with 1-1/8” or 1-1/4” F. L. ones

Need focusing eyepiece holder. — Best to use one that takes standard 1-1/4” O.D. eyepieces.

Need mirror holder. — Need a diagonal mirror or prism as well as a diagonal mirror holder.

Need a mount. — Need a tripod or post in the ground.

Telescope Parts

6” Reflecting Scope
50, 077 or 60, 067
60, 049 or 50, 025
30, 168 or 534
56, 117
Tube (not drilled or painted)
85, 008 or 85, 014
85, 023
Mounts and tripods
85, 023 or 85, 009
80, 005

The above stock numbers are listed with prices in Astronomical Section of this catalog.

Choose your eyepieces, finder, etc., from selection we offer.

EDMUND IS HEADQUARTERS FOR SUPPLIES FOR MAKING YOUR OWN TELESCOPE OR FOR ACCESSORIES TO IMPROVE THE PERFORMANCE OF THE SCOPE YOU HAVE.

In the next pages we list kits and materials for making your own telescope, or eyepieces, clock drives, better mounts ideal for making your present telescope more useful to you. Look them over. Remember, all are sold to you under the Edmund guarantees of satisfaction.

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.

17
EDUCATIONAL SCALE MODEL
UNIQUE, DIFFERENT HOME DECORATION
GIFT OF GIFTS FOR AN ASTRONOMER FRIEND

TIDE AND MOON MOTION INSTRUCTIVE

NEW EDWARD STAR FINDER——

IDEAL INTRODUCTION TO ASTRONOMY

NO. 70,515 $12.50 Postpaid

NO. 70,445 $5.00 Postpaid

NO. 70,501 $9.00 Postpaid

NEW MINI-MOON
Edmund designed and developed.

Eduational relief scale model of the moon.

This three dimensional model is as exact a replica, in
relief, of the moon as seen through a telescope as the
model-maker's art will permit. You can study various
features of the moon—from Ocean of Storms, 2 million
square miles, to craters such as Aristarchus, 29 miles
in size—all proper surface size and distance relations-
ships. Principal peaks rise 1/8" from surface. In all,
much more than 50,000 formations can be studied.

The beauty of this model and its low cost of only
$12.50 make it the ideal gift to a astronomer friend,
or as an outer space "conversation piece" in your
or living room. Its accuracy is such that schools,
museums and institutions will find it doubly valuable
as a teaching aid, and an outstanding space science
display unit. Can be sidelighted, and a motor or our
display turntable (MISC.) used to rotate it. With
proper rotation and lighting, you can show Moon Phases, Or
"black-light" can be used for spectacular effects.
It is 12" in diameter, with stand, and weighs approxi-
ately 3/4 lb. It is molded of tough washable plastic,
in black and gold. Can be marked to emphasize fea-
ture without damage. Reverse is blank and you
paint with watercolors to indicate present Russian
satellite information, and update as more informa-
tion is acquired.

NO. 70,170 "NEW PYREX SCHMIDT MIRROR BLANKS

Here is a bargain in a pyrex mirror blank.
It is 6-3/4" diameter. Thickness 5/8". Place for hole in center 1-5/4" in diam.,
glass here only about 1/8" thick so it can
be cut out easily if necessary. Made for a
mirror with a radius of 34" (8-7/16") f.1.25,
but surface not polished.

NO. 70,170 $2.50 Postpaid

MATERIALS FOR GRINDING MIRRORS

ABRASIVES
Now you can buy abrasives without getting larger quanti-
ties than you use. The abrasives listed below from coarse to extra fine and should be used in the or-
ered list. We pack them in shaker top containers to
help you do a neat job and to reduce waste. All are
guaranteed free from contamination.

No. 45,025 #80 Alumina 16 oz. 1.25
No. 45,021 #120 Alumina 6 oz. .80
No. 45,020 #220 Alumina 4 oz. .65
No. 45,019 #320 Alumina 3 oz. .60
No. 45,018 #400 Alumina 3 oz. .60
No. 45,017 #600 Alumina 4 oz. 1.50
No. 45,016 #303 Emery 2 oz. .60
No. 45,015 Red Jewelers Rouge 8 oz. 1.00
No. 45,152 Cerium Oxide 4 oz. 1.50
No. 45,153 Cerium Oxide 8 oz. 2.75
No. 45,158 Boraxite 4 oz. 1.60
No. 45,158 Boraxite 8 oz. 2.60

ACCESSORIES

NO. 70,171 RUBBER PITCH LAP

A rubber pitch lap mat is used for forming the pitch lap chan-
els. Pour the melted pitch on the tool, lay our pitch lap mat on top and press it in with your
mirror to form channels. When it sets, easy pull will remove the mat. In minutes instead of hours you are set to polish. Eliminates time consuming and tedious hand cutting of chan-
nels in the pitch lap.

ALL those disappointed break-outs off the pitch, com-
mon when hand cutting the channels, are avoided, some-
times taking necessary the pouring and cutting of two or
three, before getting a usable lap. With our Rubber
Pitch Lap Mat you can use the first one.

No. Size For Min. Dis. Pitch Price
No. 50,171 13-1/2" x 13-1/2" 8" 1/2 12" $2.00
No. 50,961 13-1/2" x 13-1/2" 8" 1/2 4-1/4" $1.00

TEMPERED BURGUNDY PITCH

For making "pitch lap". No resin or beeswax need be added. In 1 lb. container. No. 40,023 50¢ Ptd.

6" MIRROR GRINDING TEMPLATE

Includes template to use when grinding 6", 1/8 mirror, setting ring or collimating directions for 6" telescope.

No. 40,316 25¢ Postpaid

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.
TELESCOPE KITS W. COMPLETED MIRRORS

Make your own telescope with these mirror kits containing a finished mirror, eyepiece lenses and diagonal! Complete instructions with every kit.

3" MIRROR TELESCOPE KIT
All the optical parts you need to make a 31 power astronomical reflector telescope.

You get:
1. A 3" dia. mirror, aluminized and overcoated with silicon monoxide. Ground and polished to 1/4 wave length.
2. Aluminized diagonal mirror.1/2 in. #3/4 in. F. S.
3. 2 PCX lenses to make a 1" focal length Ramsden eyepiece.
4. Directions for mounting, mounting rings, etc.

NO. 50.081 $9.95 Postpaid

4½" MIRROR TELESCOPE KIT
All the optical parts you need to make a 45 power astronomical reflector telescope.

Same parts as above except: Alum. Diag. Mirror 25x33mm. A 4-1/4 dia. Pyrex mirror, aluminized and overcoated, 1/3 wave length. Ground and polished to 1/4 wave length accuracy. Focal length 45".

NO. 50.074 $16.25 Postpaid

NOTE: The above items are telescope optics kits. They do not include tubes, mounts, etc. You can make your own or buy completed ones from us. See listings by parts.

ATTENTION - BEGINNERS’ CLUBS
MAKE 8 POWER ASTRONOMICAL TELESCOPE FROM LOW COST BEGINNER’S KIT

Every boy or girl of today dreams of being a part of the exploration of outer space. That dream makes building his own telescope a real thrill. Now, any boy or girl of Cub Scout or Brownie age on up can make his own astronomical 8-power telescope in one evening without tools or machinery.

Here is an ideal attractive group project for scouts, junior astronomy clubs, or similar adult or younger groups. (See special quantity prices) Scope is powerful enough to capture craters of the moon, Jupiter’s moons, and many stars not visible to the naked eye.

Kits include objective lens, field lens, eye lens, glare stop, knurled tube, cadmium plated metal ferrules, etc., to make an 18" long, 1-3/4 diameter telescope of 8 power.

SPECIAL
NO. 70.038 $3.00 Each Postpaid
NO. 70.239 9 Kits $12.50 Postpaid
NO. 70.240 10 Kits $22.50 Postpaid

ASTRONOMICAL TELESCOPE MIRRORS ¼ WAVE OR BETTER POLISHED, ALUMINIZED & OVERCOATED

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<tr>
<th>Dia.</th>
<th>F. L.</th>
<th>Thickness</th>
<th>Price</th>
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PARABOLIC MIRRORS

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<td>44&quot;</td>
<td>1-1/8&quot;</td>
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<td>10&quot;</td>
<td>1-3/4&quot;</td>
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<td>100&quot;</td>
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EDMUND SCIENTIFIC CO., BARRINGTON, N.J.

ATOMIC TUBE 1/4 EYEPIECE MOUNT

Here is an economical plastic slide focus eyepiece holder for 1½" O.D. eyepieces.

The unit includes a 3½" long chrome plated tube that your eye-
piec e fits into for focusing. Diagonal holder in illustration is extra and not included.

Diagonal holders at top of this column also fit this eye-
pie c e holder.

NO. 60.045 $2.50 Postpaid

10" MIRROR MOUNT

Cast aluminum. Complete assembly. Metal clips hold mirror firmly. Outer diameter of mount is 6-13/16".

Fits tubing 85, 104, 154, 85, 80, or 85,008 cardboard, unassembled with directions.

NO. 50.077 $3.95 Postpaid

DELUXE QUALITY MIRROR MOUNTS

Here is the ultimate in mirror mounting. These are cast
aluminum flotation cells that support your mirror at nine
points. Each pad is accurately positioned, supports an
equal area of mirror. There is no uneven strain due to
mirror flexure. A special positive collimation lock is provided. Each is primed, painted black. Satisfaction, of course.

NO. 70.536 (8" Mirror 9¾" O.D.) $26.74 Pd.
NO. 70.537 (10" Mirror 12" O.D.) $33.75 Pd.
NO. 70.538 (12½" Mirror 15" O.D.) $42.50 Pd.

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.
EYEPIECES

The function of the eyepiece is to magnify and make clear the detail present in the image produced by the objective. Hence, the eyepiece should be well corrected. Some of the more commonly used types are listed here:

- **Concave Lenses**
- **Orthoscopic Lenses**
- **Ramden Lenses**
- **Hyugenius Lenses**

**HYUGENIUS LENSES**

Note image plane falls between lenses. Better color correction than the Ramsden. Excellent barlow lenses and telescopes. Field 25 to 400.

**RAMSDENS**

Mounted Ramsden Eyepieces

We mounted two excellent quality plano-convex lenses in black anodized aluminum barrels instead of chrome-plated brass to save you money. The clear image you get with these will surprise you. Directions for using short focal length eyepieces will be included with the 1/4" F.L., and 1/2" F.L. models.

**STANDARD 1/4" DIA.**

1/4" Focal Length No. 30,204 $4.75 Postpaid
1/2" Focal Length No. 30,203 $5.50 Postpaid

**Standard 1/2" Dia.**

1/4" Focal Length No. 30,195 $3.75 Postpaid
1/2" Focal Length No. 30,195 $3.50 Postpaid
0.917" Diameter
1/4" Focal Length No. 30,195 $5.50 Postpaid
1/2" Focal Length No. 30,195 $5.50 Postpaid
0.917" Diameter

**Mounted Ramsden Eyepiece with Crossline Reticle**

1" focal length. Outer diam, 0.917". Black anodized barrel, 1-1/8" long. Glass crossline reticle (etched) can be removed easily if not needed.

No. 30,334 $6.95 Postpaid

**Ramsden Unmounted Eyepiece Sets**

These sets contain two plano-convex or double-convex lenses and a diaphragm which illustrates the proper spacing. You can mount them in a short length of tubing to get inexpensive eyepieces of varying powers. Some of these lenses may be clipped edges or small scratches, but all are guaranteed to be usable.

Approx. Equivalent

No. 30,208 1/4" $1.75
30,210 1/2" $1.50
3195 1" $7.50
3193 1 1/2" $6.50
3192 2" $9.25
3197 2 1/2" $8.00
3194 3" $6.50
3196 3 1/2" $6.50

**SYMMETRICAL**

Two identical achromatic spaced a small distance apart.

**KELLNERS ALSO SEE PAGE 20**

**KELLNER EYEPIECE**

**KELLNER EYEPIECE**

LARGE 50" FIELD

MOUNTED—READY TO USE 1/4-1/5" OUTSIDE DIAMETER

Focal length 28mm, streamsight more than 1". This focal length is best suited for non-telescope viewing. It is the same set of lens used in quality military telescopes. We have put them into a new metal cell and added an extension to make them fit standard 1-1/4" astronomical telescope eyepiece holders. The cell holder is black anodized aluminum.

Eyepiece includes two cemented achromats, corrected for color and for other aberrations. Eye relief 22mm. Diameter of field lens is 55mm, eye lens 28mm. The wide diameter and long eye relief make it easy to find the image. For a good, clear image, you’ll find it hard to beat this fine quality surplus eyepiece.

No. 5223 only $7.95 Ppd.
No. 5314 same as above, but without adapter $7.00 (Diameter of barrel 1/4"")

**KELLNER EYEPIECE**

2" FOCAL LENGTH KELLNER EYEPIECE (1/4" O. S.)

Many of our customers have asked for a long focal length high quality eyepiece. We made this one from high quality German, surplus eyepieces. Mount is black anodized aluminum. Standard 1-1/4" O. D. Focal length is 21 1/4". Eye relief is 20," Clear dia. of lenses 7/16". Length of mount 2-1/8".

No. 30,189 $6.00 Postpaid

**MOUNTED WIDE ANGLE KELLNER EYEPIECE**

Focal length 30mm. For war surplus anti-aircraft telescope. Contains two cemented achromats. Clear aperture of eyepiece 1-1/8", clear aperture of field lens 1-9/16". Outer diam. of barrel 2-1/8". Good for rich field teles, and satellite scopes.

No. 5230 $4.50 Postpaid

**HUYGENS**

Here Are Some Really Terrific Values in Eyepieces

Mounted in chrome plated brass and black trim. Directions for using short focal length eyepieces included. Guaranteed terrific buys at these low prices.

**HUYGENS TYPES STANDARD 1/4" DIA.**

6mm (1/4") Focal Length No. 30,063 $5.50 Pdp
12.5mm (1/2") Focal Length No. 30,064 $8.00 Pdp

**COMBINATION EYEPIECE**

No. 30,065 $9.00 Postpaid

**COMPLETE ASSEMBLED BINOCULAR EYEPIECE**

No. 5201 $4.50
Used on Model M3, 6x20 binocular. No. 5203 $4.50
Used on Model M7, 7x50 binocular.

**KELLNER EYEPIECE**

F. L. 1" in 1-1/4" O. D. Mount of black anodized aluminum. Consists of single element eyepiece and achromatic field lens. Coated to have clear aperture of 7/8" so you get a nice wide field.

No. 30,274 $9.50 Postpaid

**ERFLES**

NEW WIDE ANGLE ERFLE EYEPIECE

Versatile wide-angle eyepiece. Particularly suited for binoculars, spotting scopes or binoculars. Lens has 5 elements, consisting of 2 achromats and a single positive lens. It has an effective F. L. of 32mm or 1", Made by B. L. for wide angle binocular mounted in black anodized aluminum mount, 1-1/16" long, 1-1/4" diameter.

No. 60,225 $12.00 Postpaid
No. 60,214 $13.50 Postpaid

**TERRIFIC VALUE! ERFLE EYEPIECE**

Giant, Wide Angle Eyepiece Gives You Full 60° Field — Wonderful Image Clarity! This eyepiece contains three coated achromats, diameters 45, 48 and 38mm. In spiral thread focusing mount. Pecos travel approx. 1-1/2" O. D. of mounting threads 2-1/8". Approx. weight 2-1/4". It was designed to give an exceptionally wide field and with good image quality by expert Army optical engineers. We have received numerous letters from our customers praising this eyepiece. It has now been recommended for use on Satellite telescopes because of its exceptionally wide - field and good image characteristics.

No. 5160 $17.50 Postpaid

**ADAPTER**

This screws onto the above Erfle eyepiece to convert to 1-1/4" standard eyepiece size.

No. 30,171 $3.50 Pdp

**LARGE ERFLE EYEPiece 13/4" F. L.**

WAR SURPLUS BARGAIN

COST APPROX. $700.00

Large telescopes should have one of these for wide angle view. Field of view 65°. Low reflecting coated, 5 element, field lens is made of Eastman Kodak rare earth glass for better aberration correction. Binoculars, 4"-6" diameter, Smooth focusing 3/8" movement. Outside diameter of attaching threads 3-3/4". Total 36 threads per inch, Clear aperture 2-1/4". Focal length 37.5mm.

No. 50,091 $11.95 Ppd.

**ADAPTER**

of black anodized aluminum tubing. 2-3/4" long. 3-3/8" wide, adapts lens to any 1-1/4" diam. eyepiece holder.

No. 50,358 $9.95 Postpaid

**EDMUND SCIENTIFIC CO., BARRINGTON, N.J.**

22

**ASTRONOMY**

"EDMUND SCIENTIFIC CO., BARRINGTON, N.J."
ERFLES - (Continued)

MOUNTED ERFLE EYEPIECE
P. L. 1-1/16" Complete 2 coated achromats and 1 single element lens. 
Diameters 36, 38, 35mm. Complete with adapter of 1-1/4" O.D. To use in astronomical telescopes.

NO. 30,272 ($12.75 Postpaid)

NO. 30,273 NO. 30,272

NO. 30,273 NO. 30,272 Spiral threads & adapter left on. $12.50

WAR SURPLUS ACHROMATIC EYEPIECE SETS

Here are some rare buys in "make-your-own" eyepieces. These sets were manufactured for use in military instruments. Simple drawings included show you how to space the elements. Sets marked with * are low reflection coated. Others are not marked and not coated.

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Focal Length</th>
<th>Type</th>
<th>Dia. of Lens</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>30, 340</td>
<td>3/4&quot;</td>
<td>Orthoscopic</td>
<td>16</td>
<td>$6.50</td>
</tr>
<tr>
<td>5223*</td>
<td>1&quot;</td>
<td>Kellner</td>
<td>16</td>
<td>2.50</td>
</tr>
<tr>
<td>5224*</td>
<td>1-1/16&quot;</td>
<td>Erfle</td>
<td>36, 36, 36</td>
<td>2.50</td>
</tr>
<tr>
<td>5228*</td>
<td>1-1/16&quot;</td>
<td>Kellner</td>
<td>16, 25</td>
<td>2.25</td>
</tr>
<tr>
<td>5229*</td>
<td>1-1/4&quot;</td>
<td>Kellner</td>
<td>28.5, 28.5</td>
<td>2.25</td>
</tr>
<tr>
<td>5230*</td>
<td>1-1/4&quot;</td>
<td>Symmetrical</td>
<td>34, 34</td>
<td>1.50</td>
</tr>
<tr>
<td>5235*</td>
<td>1-1/4&quot;</td>
<td>Erfle</td>
<td>34, 34, 34</td>
<td>1.00</td>
</tr>
<tr>
<td>5239*</td>
<td>2-1/4&quot;</td>
<td>Kellner</td>
<td>34, 34, 34</td>
<td>0.75</td>
</tr>
</tbody>
</table>

NOTE: Symmetrical eyepiece lenses are mounted with a 1/2" space between the lenses.

STACKED EYEPIECE TUBING: STOCK NO. LENGTH L. D. O. D. PRICE

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Length</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>117</td>
<td>3&quot; 1/16&quot;</td>
<td>1/4&quot; 90°</td>
</tr>
<tr>
<td>118</td>
<td>2&quot; 1/11&quot;</td>
<td>1/16&quot; 45°</td>
</tr>
</tbody>
</table>

Use as eyepieces, focusing rings, or pipe and holder respectively. See Retaining rings on next page.

NOW! A FULL SELECTION OF ORTHOSCOPIC EYEPIECES

Wide flat field—better correction under high magnification—excellent eye relief

The Orthoscopic eyepiece is one of the most important, and best corrected eyepieces for astronomical work. It offers an abnormally wide, flat field, excellent correction, both spherical and chromatic, freedom from ghosts and scattered light, and greater eye clearance than even the Kellner. These are of a four element design, with fluoride coated lenses, and are standard 1-1/4" outer diameter. Precision made of chrome plated brass or aluminum.

NO. 30,340 4mm E.F.L. (gives 200 power with 48" f.l objective) $14.50 Ppd.

NO. 30,404 6mm E.F.L. (gives 200 power with 48" f.l objective) $14.50 Ppd.

NO. 30,405 12.5mm E.F.L. (gives 60 power with 48" f.l objective) $14.50 Ppd.

NO. 30,406 18mm E.F.L. (gives 67 power with 48" f.l objective) $14.50 Ppd.


FOCUSING EYEPIECE WITH 3 ROTATING FILTERS

Focal length 3/4", Contains 2 achromatic lenses, 18mm dia., & 37mm F.L. Also, 3 filters, 15mm dia., 1 ea. of red, neutral, & yellow. Turn of knob puts either under eyepiece.

NO. 30,354 $6.00 Postpaid

NO. 30,319 $1.00 Postpaid

STANDARD EYEPIECE ADAPTER

Change your standard eyepiece to standard 1-1/4" O.D. Just slip eyepiece into this adapter and tighten small set screw to hold in place. 1. D. 0.917. Black anodized aluminum.

NO. 30,109 $1.00 Postpaid

BARLOW LENSES TO DOUBLE OR TRIPLE YOUR TELESCOPE'S POWER

A BARLOW LENS is designed to double or triple the magnification of a telescope with but a very slight increase in focal length. It eliminates the need for hard-to-use short focal length eyepieces or long, cumbersome telescope tubes. By narrowing the cone of light, it often works wonders in the performance of eyepieces, particularly those of Huygens or Ramsden type. It is a negative lens, and is often placed in the same tube that holds the eyepiece.

WE RECOMMEND:

OUR COLOR-CORRECTED TWO ELEMENT MOUNTED BARLOW

Don't fail to try this! You won't realize how much greater use you'll get from your telescope till you try it. We've received many compliments on this lens. We have mounted our color-corrected, two-element barlow in an attractive brass tube, glassy black outside, dull black inside. Slide into your 1-1/4" inside diameter, draw tube, slide your 1-1/4" standard eyepieces into it, and you get double or triple power plus increased eye relief.

Lenses are excellent, color corrected and will give you clear, sharp definition. Focal length is 46.4mm, 18mm diameter, in tube of black anodized aluminum, 1-7/8" long, 1-1/4" outer diameter.

NO. 40,477 $8.00 Postpaid

LENS only from above, ready for your mounting. NO. 30,448 $3.00 Postpaid

TRIPLE YOUR TELESCOPE POWER! 3X BARLOW LENS

These lenses are made for telescopes that have smaller diameter eyepieces than the standard 1-1/4" outer diameter. Mount these between eyepiece and objective and triple your power. Instructions included. Single element lenses, focal length 1-1/16", unmounted.

NO. 30,328 diameter 91/2" $2.50 Postpaid

NO. 30,185 diameter 93/2" $3.50 Postpaid

3X ADJUSTABLE DIAMETER BARLOW LENS

For telescopes with below the standard 1-1/4" outer diameter eyepieces. Prongs on mounting screw are expanded or closed to fit tubes from 13/16" to 1" outer diameter. Directions for setting included.

NO. 30,339 $5.00 Ppd.

NO. 40,122 $23.50 Postpaid

INSTEAD OF THIS SEE THIS WITH A BARLOW

MORE POWER FROM YOUR JAPANESE TELESCOPES

Don't fail to try this! You won't realize how much greater use you'll get from your telescope till you try it. We've received many compliments on this lens. We have mounted our color-corrected, two-element barlow in an attractive brass tube, glassy black outside, dull black inside. Slide into your 1-1/4" inside diameter, draw tube, slide your 1-1/4" standard eyepieces into it, and you get double or triple power plus increased eye relief.

Lenses are excellent, color corrected and will give you clear, sharp definition. Focal length is 46.4mm, 18mm diameter, in tube of black anodized aluminum, 1-7/8" long, 1-1/4" outer diameter.

NO. 30,370 $6.00 Ppd.

TUBING FOR MAKING YOUR OWN AND FOR OTHER USES

The two pieces of telescopic tubing described above. By buying this, you can make microscopes and other instruments to use with your telescope eyepieces.

NO. 30,368 $2.30 Ppd.

ORIGINAL GOODWIN ACHROMATIC COATED BARLOW

For many years, this achromatic coated barlow lens has been the pride and joy of serious astronomers. Due to the death of the owner, Mr. Goodwin, it has not been available for the past two years. NOW, we can offer it, in exact accordance with the original specifications. The Goodwin Barlow consists of a cemented (two-element) achromat especially made for this use. It has an effective focal length of 44mm. (1.73") or approximately 1-3/4". The coated achromat is mounted in a cell which is held by spring tension inside a 4" long blackened adapter tube for standard (1-1/4" O.D.) eyepiece. The position of the achromat inside the tube is easily changed to fit the characteristics of individual telescopes, one of the important features of the Goodwin. The Goodwin Barlow is achromatic, coated, mount- ed in blackened tube, and as optically perfect as any precision craftsmen can make it. Complete with instructions, in a 4" long adapter tube for standard 1-1/4" eyepieces.

NO. 40,122 $23.50 Postpaid

ASTRONOMY ASTRONOMY ASTRONOMY ASTRONOMY ASTRONOMY
EYEPIECES

The function of the eyepiece is to magnify and make clear the detail present in the image produced by the objective. The eyepiece should be well corrected. Some of the more commonly used types are listed here:

- **CONCAVE LENS**
- **RAMSDEN**
- **ORTHO-SYNTHETIC**
- **HYUGENIAN**
- **KELLENNER**

Note image plane falls between lenses. Better color correction than the Ramsden. Excellent barlow lenses and telescopes. Field 25 to 600.

**SYMMETRICAL**

Two identical achromats spaced a small distance apart.

**TRIPLET FIELD LENSES**

Two plano-convex lenses and a plano-convex lens. Excellent color correction and wide field up to 50°. Usually found only on the better telescopes.

**KELLENNER**

Achromatized Ramsden for better color correction. There are several varia-
tions of this type. Field up to 50°. The most popular type for telescopes.

**ERFLE**

An eyepiece designed especially for extra-wide field with good correction of all aberrations. Field from 65° to 70°. Usually quite expensive.

**MOUNTED RAMSDEN EYEPieces**

We mounted our two excellent quality plano-convex lenses in black anodized aluminum barrels instead of chrome-plated brass to save you money. The clear image you get with these will surprise you. Directions for using short focal length eyepieces will be included with the 1/4th F.L. and 1/2th F.L. models.

**STANDARD 1/4TH DIA.**

(1/4th) Focal Length NO. 30,204 $4.75 Postpaid
(1/2) Focal Length NO. 30,203 $5.50 Postpaid

**O.917 DIA.**

(1/4th) Focal Length NO. 30,195 $3.75 Postpaid
(1/2) Focal Length NO. 30,194 $5.50 Postpaid

**MOUNTED SYMMETRICAL EYEPiece**

O.D. 0.917" (Standard microscope size). 2 coated achromatic lenses. Clear diameter of lenses 11mm. focal length 3/4". NO. 30,316 $6.95 Postpaid

**WAR SURPLUS SYMMETRICAL EYEPiece**

Has two identical achromatic lenses, focal length 2", O.D. of metal mount is 21/4". NO. 30,107 $3.50 Postpaid

**HYUGENIAN EYEPieces**

Here are some truly terrific values in eyepieces mounted in chrome plated brass and black trim. Directions for using short focal length eyepieces included. Guaranteed terrific buys at these low prices.

**HYUGENIAN Types**

1.5mm (1/4) Focal Length NO. 30,063 $8.50 Pd
2.5mm (1/2) Focal Length NO. 30,064 $8.00 Pd

**COMBINATION EYEPiece**

NO. 30,065 $9.00 Pd

**FREE ASSEM. BINOCULAR EYEPiece**

Used in Model M2, 6x20 binocular. Field of view 37.5 mm. NO. 5201 $5.45 Pd

**KELLENNER EYEPiece**


NO. 30,274 $9.75 Pd

**NEW WIDE ANGLE ERFLE EYEPiece**

Versatile wide-angle eyepiece, particularly suited for wide angle spotting telescopes, spotting scopes or binoculars. Lens has 5 elements, consisting of 2 achromats and a single positive lens. It has an effective F.L. of 32mm or 1". Made by B & L for wide angle binocular mounted in black anodized aluminum mount, 1-1/16" long, 1-1/4" diameter.

NO. 60,214 $12.00 Postpaid

**TERRIFIC VALUE ! ERFLE Eyepiece**

Giant, Wide Angle Eyepiece Gives You Full 68° Field -- Wonderful Image Clarity! This eyepiece contains three coated achromats, diameters 45, 46 and 38mm. In spiral thread focusing mount. Focuse travel approx. 1-1/8", O.D. of mounting threads 2-1/8". Approx. weight 2-1/4 oz. It was designed to give an exceptionally wide field and with good image quality by experts in optical engineering. We have received numerous letters from our customers praising this eyepiece. It has now been recommended for use on Satellite telescopes because of its exceptionally wide field and high image characteristics.

NO. 5160 $13.50 Pd

**ADAPTER**

This screws onto the above Erefle eyepiece to convert to 1-1/4" standard eyepiece size. $3.50 Pd

**LARGE ERFLE EYEPiece 1" F.I.**

WAR SURPLUS BARGAIN

Cost approx. $100.00

Large telescopes should have one of these for wide field viewing. Field of view 65°. Low reflecting coated, 5 element, field lens is made of Eastman Kodak rare earth glass for better aberration correction. Bla. smooth focusing 3/8" movement. Outside diameter of attaching threads 1", 2" threads per inch. Clear aperture 1-3/8". Weight 3-1/2 lbs. NO. 50,091 only $9.95 Pd

**ADAPTER**

Of black anodized aluminum tubing, 2-3/4" long, 3-3/8" wide, adapts lens to any 1-1/4" diam. eyepiece holder.

NO. 50,358 $3.95 Pd
BARLOW LENSES TO DOUBLE OR TRIPLE YOUR TELESCOPE'S POWER

A BARLOW LENS is designed to double or triple the magnification of a telescope with but a very slight increase in focal length. It eliminates the need for hard-to-use short focal length eyepieces or long, cumbersome telescope tubes. By narrowing the cone of light, it often works wonders in the performance of eyepieces, particularly those of Huygens or Ramsden type. It is a negative lens and is often placed in the same tube that holds the eyepiece.

OUR COLOR-CORRECTED TWO ELEMENT MOUNTED BARLOW

Don't fail to try this! You won't realize how much greater use you'll get from your telescope till you try it. We've received many compliments on this lens. We have mounted our color-corrected, two-element barlow in an attractive brass tube, glossy black outside, dull black inside. Slide into your 1-1/4" inside diam. draw tube, slide your 1-1/4" standard eyepieces into it, and you get double or triple power plus increased eye relief.

Lens is excellent, color corrected and will give you clear, sharp definition. Focal length is 46.5mm, 18mm diameter, in tube of black anodized aluminum, 3-7/8" long, 1-1/4" outer diameter.

LENS only from above, ready for your mounting.

TRIPLE YOUR TELESCOPE POWER! 3X BARLOW LENS

These lenses are made for telescopes that have smaller diameter eyepieces than the standard 1-1/4" outer diameter. Mount these between eyepiece and objective and triple your power. Instructions included. Single element lenses, focal length 1-1/16", unmouted.

3X ADJUSTABLE DIAMETER BARLOW LENS

For telescopes with below the standard 1-1/4" outer diameter eyepieces. Prongs on mount can be inserted or removed to fit tubes from 13/16" to 1" outer diameter. Directions for sizing included.

WE RECOMMEND:

MORE POWER FROM YOUR JAPANESE TELESCOPES

MOUNTED BARLOW FOR JAPANESE TELESCOPES

In inserting this mounted barlow lens in the eyepiece end of your Japanese telescope, and inserting your regular eyepiece in the end of the barlow tube, you can increase your telescope's power one to three times. Thus, instead of 60X, you will get 120 to 180 power. The mounted barlow is mounted in two pieces of telescoping brass tubing each 4" long, satin chrome plated on the outside, inner diameter of large tube and eyepieces. Outer diameter of small tube are .965". This is standard size for most Japanese telescopes, Measure your before ordering. .965" is approx. 31/32" or 24.5mm.

INSTEAD OF THIS

SEE THIS

WITH A BARLOW

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.
TELESCOPE PRISM ERECTOR SYSTEM

This will give your refractor telescope an erect image when you want to use it for ground viewing instead of on stars.

This consists of a penta-prism system similar to a binocular erecting system. Fits all refractor telescopes taking a 1-1/4" O.D. (standard eyepieces). Chromed plated brass tubing and black wrinkle cast aluminum. Optical length of system 8".

NO. 70,078 $12.50 Postpaid

REVOLVING TURRET FOR TELESCOPE EYEPIECES

Now, change the power of your telescope just by turning this turret. No need to fumble, feel about. Holds eyepiece of standard 1-1/4" outer diameter. Fits any refractor or reflector taking that size. Requires no alterations on your telescope, inverts as easily as on an erecting. Brings much, much more convenience. Made of aluminum and brass, chrome plated on barrels. Clock stop for easy, position of all powers.

NO. 50,014 $14.50 Postpaid

NOW EASILY, SAFELY MOUNT YOUR LENSES

Custom designed square cross-section retaining rings provide far greater bearing surface than the usual round variety. Made of special carbon steel, these retaining rings really hold your lenses in position. Set includes four each of 4", 5", 6", 9", and 1" O.D. x .75", .95", .935", .875", .8", .625". Complete set provides superior results previously unattainable, and fits practically all available tube sizes.

NO. 60,207 $1.25 Postpaid

FIELD OF VIEW SCROLL PROJECTED INCLINED

White metal scroll is easily attached to holder and placed behind eyepiece. Point scope at sun, move scroll to focus... and you can see sunspots

PHOTOGRAPHY WITH YOUR TELESCOPE

8 page illustrated booklet, 8-1/2 x 11, covers all phases of this subject. Covers film data, exposures, filters, prices, etc.

NO. 9058 25¢ Postpaid

ALL ABOUT TELESCOPE LENSES

36 page 8-1/2 x 11 booklet, exactly as titled. Covers projection, afocal systems, all phases of telescope work.

NO. 9036 65¢ Postpaid

TELESCOPE CAMERAS

These are cameras designed especially for taking pictures through your reflecting or refracting telescope that uses standard 1-1/4" O.D. eyepieces. Remove your eyepieces, insert the 5" long tube on the front of the camera into your eyepiece holder. This tube contains a four element lens system that magnifies the image plus extends it from the normal eyepiece plane to the film plane. It also contains a yellow filter. Shutter is a precision German made one with speeds of 1/25, 1/100, and 1/500 of sec. and bulb. Also, has release and cable with lock for time exposure.

ROLL FILM CAMERA:

Uses 127 roll film. Picture area is a circle 1-9/16" in diameter. Big advantage is the ease of using roll film. Includes ground glass for focusing before inserting roll of film.

NO. 70,182 $19.50 Ppd.

SHEET FILM CAMERA:

Uses 2-1/4" x 3-1/4" sheet film. Picture area is 2" x 2-1/4" with rounded corners. Ground glass included. Advantage is ability to focus for each picture, plus opportunity for immediate developing of any shots. Camera box size is 5" x 4" x 4-1/2".

NO. 70,166 $39.50 Postpaid

EYEPIECE ASSEMBLY - use to make 30X binocular telescope.

Here is your chance to get a fabulous piece of optical equipment! This unit consists of two eyepieces, two sets of filters, and two rhodium prisms. Interchangeable adjustment, can be used with two No. 3535 achromatic objectives, $9.50 each, from our stock to make 30X binocular telescope that gives you life-size stereoscopic vision for celestial or terrestrial observation. Such an instrument sells for $600. In a MECHANIK ILLUSTRATED article tells how to do it for a fraction of that price. We'll supply copy of article on request. The eyepieces are symmetrical type, F, L, 27mm with two cemented achromats in each eyepiece. Individual spiral focusing adjustment is provided, Dupoet scale on each eyepiece. Interchangeable adjustment is made independently of the rest of the optical system. Estimated Government cost was $450.00.

NO. 70,048 $20.00 Postpaid

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.
FOR REFRACTORS

Although most amateur astronomers prefer the reflector telescope, the refractor, too, has its devotees. The REFRACTOR initial cost is usually three to four times that of the reflector. However, once purchased or made, it is easy to use. We offer materials for making refractors which help overcome the initial high cost of a refractor.

ACROMATIC OBJECTIVES

The objective lens in the heart of a refractor telescope. We are fortunate to be able to offer color-corrected, air-spaced ones, mounted in cells. These have been field-tested by an independent source and declared "equal to objectives made anywhere today, even at two or three times the price".

These imported achromats are air-spaced. This air-spacing gives the lens four surfaces on which aberrations can be corrected instead of the usual three of a cemented achromat. Hence, you get a beautiful, color-free image, sharp, clear and free from spherical aberration and coma. They are corrected for both C & F lines secondary color aberration. They are also fully corrected for latitude adjustment. 12½" cradle securely holds 3" to 10" tubes. It comes in a beautiful baked grey finish. Available either with standard (for reflector) or with tripods in sizes for reflectors (32") and refractors (60"), Metal pedestal mount is made from heavy gauge steel tubing and is designed to eliminate wobble, torque or vibration. Pedestal is 24" high bringing center of cradle to 30", ideal viewing height. Tripods are made of skin-dried hardwood. Now, Settling Circles on all Mounts.

LOW COST LARGE FOCAL LENGTH ACRROMATIC

Build a cost cutting refracting telescope. The long focal length of this lens (50") will give you 100 power using a 1½" focal length eyepiece. This is a 3½" diameter, low reflection, coated, air-spaced type achromat made by the company that designed the fine air-spaced achromats for electronic photography. You can't buy a lens of this quality and focal length for twice our price.

NO. 30,187 $9.50 Postpaid
Aluminum cell and retaining ring for 2½" dia. lens. Black anodized. Outer dia. of cell 2½"/8". Threads 24 threads to the inch.

NO. 40,151 $2.00 Postpaid
MOUNTED WAR SURPLUS ACHROMATIC

Mtd. in brass cell with retaining ring. Clear aperture 3½". F.L. 18mm. Used with eyepiece No. 30,104 ($3.50) and mord, proroin prism No. 50,187 ($2.50) makes excel. TXterrestrial scope.

NO. 40,429 $1.50 Postpaid

ANNOUNCEMENT: LOW PRICED ACRROMATIC OBJECTIVES

To solve the problem of low-cost lenses of good quality for a beginner's telescope we have had these achromatic lenses designed and mass produced. They are swell!

Dia. 3mm (1-1/4") F.L. 31". (Will get 8X with 1-1/2" - 124X with 1-1/4" eyepiece)

NO. 30,701 $3.50 Postpaid

Dia. 42mm (1-21/32") F.L. 41". (Will get 41X with 1" eyepiece - 82X with 1/2, and 164X with 1/4")

NO. 30,202 $5.00 Postpaid

- A. Clock Drive B. Heavy duty equal. mt. on pedestal c. Equalizer equ. C. Heavy duty equal. mt. on tripod d. Equalizer equ. mt. on tripod

FOR SMALLER TELESCOPES

The same fine Edmund electric clock-drive but mounted, ready to run. On a lighter weight equatorial mount suitable for use with a 4-1/4" or smaller reflector or 3" or smaller reflector. Mounted on the sturdy pedestal base as our heavy-duty equatorial mount, available with 40" and 60" tripod legs, or without legs. While not as rugged as the heavy-duty, you will find this unit will give you lots of pleasure from your telescope by eliminating continual adjustment. These are ideal for the amateur who wants a real clock drive, equatorial mount & sturdy pedestal base or tripod for his telescope at a minimum cost. Now, Settling Circles on all Mounts.

NO. 85,112 $45.00
Clock drive, standard equat. mount on metal pedestal.

A. C. (31 lbs.)

NO. 85,095 $53.50
Equal, mount, clock-drive on 40" tripod (20 lbs.)

NO. 85,096 $53.00
Equal, mount, clock-drive on 60" legs (24 lbs.)

NO. 85,097 $74.00
Equal, mount, clock-drive on 40" tripod legs (24 lbs.)

EQUATORIAL MOUNT WITHOUT CLOCK DRIVE

NO. 85,109 $24.00
Standard equatorial mount on metal pedestal base (22 lbs.)

NO. 85,009 $24.00
Equal, mount on 40" tripod legs (16 lbs.)

NO. 85,015 $22.50
Equal, mount on 60" tripod legs (30 lbs.)

NOTE: mounts, drives, etc. are TRANSPORTATION CHARGES COLLECT from Barrington, New Jersey.
TELESCOPE FINDERS - Continued

7 POWER

7 POWER

TELESCOPE FINDER

Achromatic objective, Ramadan eyepiece, glass cross-
ticle. Length 8", O.D. 1-1/2". Slide focus eyepiece with
ast screw.

BLACk anodized finish alumi-
num tube. Weight 6 lb. Price includes telescope only.
NO. 50,080 $9.95 Postpaid

FINDER RING MOUNTS

Cast aluminum black crinkle finish. L.D. of holder 2".
3 locking wing screws on each ring for adjusting. Holes
in bases with screws and nuts for mounting to any tele-
scope. Ring mounts fit on any tube in picture above.
(Pour ring mounts NO. 50,073, $3.95 per pair; postpaid
are the correct size for mounting this scope.
NO. 50,249 $11.50 Postpaid

NEW EDMUND 6X FINDER TELESCOPE

A low cost quality finder complete with adjus-
table mount. Telescope is white enameled alumi-
num, has spiral focusing, achromatic objective with
high speeds. A Ramadan eyepiece (thread focusing),
wire crosslines. Mount is cast aluminum crinkle finish and will
fit any size tele-
scope. Clear aperture of 3 in. Length approximately 9". Weight less than 6 oz.
NO. 50,121 $8.00 Postpaid

DE-LUXE FINDER TELESCOPE

Here is a de-luxe finder that is very easy looking.
The telescope part in our regular 5.5X Moonwatch Satellite scope with crosshairs added.
Flashlight battery. Case has wing nut and clamp for fasten-
ing to tripod leg. Complete with 23" cord, each end of
which is a sliding perforated light made of cardboard.
NO. 50,101 50 Postpaid

FINDER SCOPE MOUNT

This mount makes it easy to align your
finder telescope with your main tele-
scope either refractor or reflector types. Black crinkle finish on cast aluminum. Will hold finder scopes up to 1-3/8" O.D.
4 adjusting screws and 3 mounting screws included.
NO. 50,128 $2.85 Postpaid

TWIN RING FINDER MOUNT

Unit is all in one piece for easy mounting
on tubes of any size. Each ring has an inside dia-
of 2-7/8". Overall length 6-1/2".
High, 3 adjusting screws on each
ring to align your finder scope with your tele-
scope. Includes 3 of our cast aluminum black
wrinkle finish.
NO. 70,079 $9.95 Postpaid

EYEGLARDS

WAR SURPLUS RUBBER EYEGARD

Taken from various war surplus instruments, these are
excellent for microscopes, riflescope, telescopes and
other instruments to cut out stray light and protect
your eyes. Hole diameters given are the approximate
size of eyeguards these will fit over. In most cases they
will stretch a little more.
A) From A10 sextant, has metal mounting rings that
can be removed. Hole dia. 9/16", NO. 109 $1.00 Postpaid
B) Hole dia. 15/16", height 1-1/8", NO. 93 30 Ctpd
C) Fits our Erle eyeguards, #106, Hole dia. 1-7/8",
height 1", NO. 60,054 75¢ Postpaid
D) From elbow telescope. Hole dia. 1-1/2",
height 2-1/4", NO. 60,099 50 Postpaid
E) Hole dia. 1-9/16", height 1-3/4", NO. 40,258 50 Postpaid
F) From rangefinder, Hole dia. 13/16", height 1-1/2",
NO. 60,101 50 Postpaid
Similar to B), C) From M-38 gunsights and other instru-
ments. Hole dia. 1-1/8", height 1-4/8", NO. 60,100 45¢ Postpaid
Similar to E), fits our wide angle Kelner eyeguards
#60,144 exactly. No mounting rings, Hole dia. 1-1/2",
NO. 60,212 75¢ Postpaid
Similar to E), Hole dia. 1-1/4", height 1-5/8",
NO. 95 35¢ Postpaid

TELESCOPE LIGHTING SYSTEM

Help Preserve Your Night Vision
Just what you need for use on your
neurovista viewing set. fits any
type of eyeguards. May be disassembled and reassembled any number of times.
NO. 70,200 $14.95 Postpaid

TELESCOPE FINDERS

7 POWER

Achromatic objective, Ramadan eyepiece, glass cross-
ticle. Length 8", O.D. 1-1/2". Slide focus eyepiece with
ast screw.

Black anodized finish alumi-
num tube. Weight 6 lb. Price includes telescope only.
NO. 50,080 $9.95 Postpaid

FINDER RING MOUNTS

Cast aluminum black crinkle finish. L.D. of holder 2".
3 locking wing screws on each ring for adjusting. Holes
in bases with screws and nuts for mounting to any tele-
scope. Ring mounts fit on any tube in picture above.
(Pour ring mounts NO. 50,073, $3.95 per pair; postpaid
are the correct size for mounting this scope.
NO. 50,249 $11.50 Postpaid

DE-LUXE FINDER TELESCOPE

Here is a de-luxe finder that is very easy looking.
The telescope part in our regular 5.5X Moonwatch Satellite scope with crosshairs added.
Flashlight battery. Case has wing nut and clamp for fasten-
ing to tripod leg. Complete with 23" cord, each end of
which is a sliding perforated light made of cardboard.
NO. 50,101 50 Postpaid

FINDER SCOPE MOUNT

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finder telescope with your main tele-
scope either refractor or reflector types. Black crinkle finish on cast aluminum. Will hold finder scopes up to 1-3/8" O.D.
4 adjusting screws and 3 mounting screws included.
NO. 50,128 $2.85 Postpaid

TWIN RING FINDER MOUNT

Unit is all in one piece for easy mounting
on tubes of any size. Each ring has an inside dia-
of 2-7/8". Overall length 6-1/2".
High, 3 adjusting screws on each
ring to align your finder scope with your tele-
scope. Includes 3 of our cast aluminum black
wrinkle finish.
NO. 70,079 $9.95 Postpaid
FLOCK PAPER TUBE LINING
A special paper with a black velvet-like surface which absorbs light and prevents unwanted reflections and glare that spoils the image. Surface has tiny black fibrous pieces glued to it. This provides millions of light traps thus making this material far superior to any metal or plastic tube lining. Comes in sheets 27" x 36".

NO. 60,068 per sheet $1.00 Postpaid
FLAT BLACK ENAMEL
An excellent flat black, ideal for cutting down reflection, glare. One pint. NO. 60,191 $1.50 Postpaid

EXPLORE THE MAKEUP OF THE STARS
WITH OUR STAR SPECTROSCOPE
If you ever become dissatisfied with your astronomical work, consider star spectroscopy. The spectrum derived from the star's light can be used to determine the star's temperature, its chemical composition, speed of rotation and to explore the makeup of the stars with our star spectroscope. The Edmund Star Spectroscope provides the means of your introduction to this fascinating subject.

The Star Spectroscope is designed for visual spectroscopy. It has three cylindrical lenses, one each for first, second and third magnitude stars. It consists of a train of five prisms of crown and flint glass plus lenses. It fits our standard Bynegue telescope eyepieces, but can easily be adapted to other types.

NO. 50,023 $42.50 Postpaid

SUN FILTERS
These filters help protect the eyes from normal visible rays, invisible infrared, and ultraviolet. Thickness 300. Percent of light transmission visible, 99.9%, ultraviolet none, infrared 0.0199%. No. Size Price
2726 1 1/4" $1.00
2727 3/4" x 3" 2.00
2728 7/8" x 3" (round) 1.25
2729 1-1/2" x 3" (round) 1.50

EDMUND SAVES YOU TIME!
Your order is shipped 24 hours after receipt.

ADJUSTABLE TRIPOD LEG BRACE
Protect your telescope, camera or other instrument. This metal brace fastens to almost any tripod. Keeps tripod leg from spreading and causing a telescopical effect, to fail. Each slotted metal arm is 9-3/4" long. 5/8" wide 6 screws are included. Baked on black enamel and wing nut included for quick locking in any position. Can be used on metal tripod legs by drilling legs and using self tapping screws.

NO. 50,232 $2.00 Fpd

BOOKLET: "OBSEVING THE SUN" only 15c
This four page folder gives all details on using sun filters of all types or reflecting and reflecting telescopes. Fully illustrated. Hints and diagrams on Herschel wedges, unsilvered penta prisms, sun projection, filters, etc.

NO. 90,056 15c Postpaid

UMOUNTED HERSCHEL WEDGE
Size 40mm x 80mm, wedge angle is 10 degrees. These critical surfaces are flat to 1/4 wave. Not mounted.

NO. 30,265 $3.50 Postpaid

SUMMERSUN
These filters help protect the eyes from normal visible rays, invisible infrared, and ultraviolet. Thickness 300. Percent of light transmission visible, 99.9%, ultraviolet none, infrared 0.0199%. No. Size Price
2726 1 1/4" $1.00
2727 3/4" x 3" 2.00
2728 7/8" x 3" (round) 1.25
2729 1-1/2" x 3" (round) 1.50

NEW IMPROVED MODEL

NEW! SOLAR AND LUNAR ECLIPSES
6 types of solar and lunar eclipses can be simulated with this attachment.

FREE: 24-page directory book included. Contains valuable information, provides easy identification of stars, constellations.

NEW! SATURN AND SATURN PROJECTORS
Trace the paths of Saturn and Spinthix across the sky!

NEW! Constellation PROJECTOR WITH SET OF 12 SLIDES
Projects mythical constellation figures over stars projected from the Planetarium.

NO. 70,040 $19.95 Postpaid

UNIVERSAL PLANETARIUM SHOWS SUN-EARTH-MOON RELATIONSHIPS
Here is a little, compact instrument designed to teach many space-age facts, demonstrate day and night, seasons, length of day and phases of the Moon. A 6-inch diameter sun, the earth and moon are supported on a handsomely finished wooden base, while a gear and chain drive orients the earth. Size: height 12", width 8", length 18". Comes complete with illustrated handbook. NO. 70,415 $29.95 Postpaid

ORRERY (SOLAR SYSTEM REPRESENTATION)
Shows correct position of planets by months. Sun represented by 2-1/2" yellow ball, planets by vari-colored 3/16" balls. All can be rotated freely around sun. Distance from Sun to Pisto is 16". Base 6" sq. Directions included.

NO. 70,374 $15.95 Postpaid

NEW! PLANETARIUM AMATEUR ASTRONOMER'S SET
These 12" & 10" telescopes, with their respective mountings, are designed for the amateur astronomer. Excellent for the small observatory. All components are precision made and assembled. The 12" refractor is equipped with a finder telescope. The 10" is a dobsonian, a mount that is easy to use and highly portable. Both telescopes include a 2x barlow lens, a set of eyepieces, and a carrying case.

NO. 60,166 $140.00 Postpaid

_Battery Operated Portable Jr. Planetarium_ Accessory spheres can be used on this model also. The ideal planetarium for beginners and budget-conscious families. Volume priced to satisfy the new mass interest in the "geography of space"! Completely portable. Operates anywhere, on regular dry-cell batteries, with bright or medium light intensity. Projects over 60 constellations on the ceiling and walls of any darkened room. Can be adjusted for any close-up Northern Hemisphere location, any month of the year. Complete with flashlight pointer (batteries included). Includes giant 17-1/2" x 20-1/2" instruction sheet with colorful constellation charts that can be hung on the wall. Will beautify any room.

NO. 70,165 $9.95 Postpaid

INFLATABLE CELESTIAL GLOBE
Useful for the student beginning to study the stars, and the newly interested amateur. 13" heavy-gauge vinyl globe shows major constellations, with stars to 4th magnitude.

NO. 60,166 $140.00 Postpaid
GIANT SIZE FULL COLOR ASTRONOMICAL POSTCARDS

- Ideal for mailing to your amateur friends.
- Equally suitable for framing as room decorations.

You'll thrill when you see these new astronomical postcards by Edmund. They consist of dramatic full color renderings of Mars, Jupiter, Saturn, a sun spot and a solar prominence, all done by astronomically trained artist Hugh Stevenson. They are a giant postcard size, 5-1/2" x 7", ideal for mailing to your amateur friends, or equally suitable for framing as decorations for your home.

NO. 40,398 set of all five 50¢ Postpaid
NO. 40,407 SET OF 5 35mm (2"x2") ASTRO-COLOR SLIDES $1.50 Postpaid

STAR TIME CALCULATOR

This handy slide rule automatically makes the conversion from star or sidereal time to standard time. Saves the amateur astronomer the time and trouble of calculations. Size: 10-1/5 x 3-5/8" of plastic coated cardboard.
NO. 40,399 $1.50 Postpaid

STARS THAT GLOW IN THE DARK

amateur astronomer or space enthusiast can transform his den or bedroom into a realistic night sky. Schools too, can set up a real news story showing constellations, planets, in a dark room for day-time lectures or explanations of earth and space science. Equally attractive as a means of making your child's room a fairyland, where their canopy of stars will make them welcome rather than fight "lights out". Make ideal holiday decorations, too. Set consists of 125 luminous star decals made of safe, non-radioactive phosphorous. Stars glow after exposure to strong light.
NO. 9298 $1.00 Postpaid

EDMUND RECOMMENDED

MAP OF THE MOON

Edmund Scientific Co. strongly recommends this moon map. Every amateur will find this 35 x 46" photographic reproduction of the full moon a very helpful aid. It is in black and white and has listed lunar formation clearly marked. In addition, it gives a complete index to their locations and much valuable information on the moon.
NO. 9297 95¢ Postpaid

COLORFUL, EDUCATIONAL FULL COLOR SPACE AGE MURAL

Ideal decoration for a child's room, playroom, classroom, or hobbyist's den. Shows rockets, space ships, all authentic designs in full color against a deep sky background. It measures 25-1/5 x 37-1/8" and is educator approved.
NO. 9313 $1.50 Postpaid

BOOKS - BOOKLETS

LEARN ABOUT

Observing the Planets Comparing the Planets

Observing the Sun

Splitting Sky Objects Astronomical Photography

with your Telescope

Telescope Arithmetic

Sky Sweeping

Davies Limit

NO. 9055

32 pages 8½"x11" only 60¢ Postpaid

At last!

the book every amateur has been seeking

"HOW TO USE YOUR TELESCOPE"

A down-to-earth introduction to astronomical telescopes and the stars - ideal for the beginner and full of useful information for any amateur. In clear, simple language, profusely illustrated, non-technical. You'll refer to this booklet often and will rate it a "must!".

SIMPLY WRITTEN

CLEARLY ILLUSTRATED

IDEAL FOR A BEGINNER

A "MUST!" IF YOU OWN OR PLAN TO BUY A TELESCOPE

FEATURES

MOON MAP, SKY SHOW, DIAGRAMS, SELECTED SKY OBJECTS, ETC.

IT TELLS YOU THINGS YOU SHOULD KNOW ABOUT ASTRONOMICAL TELESCOPES-

Selecting your Telescope

Power

Light Gathering

Field of View

Telescope Performance - What to Expect

How to Use your Telescope

What Eyepiece is Best

Equatorial Mounts - How to Use Collimation and Adjustments

Barlow Lenses and Power Boosters

NO. 9045 15¢ Postpaid

TELESCOPE FINDERS

This four-page folder gives complete directions on how to make various types of finder telescopes to attach to your regular astronomical telescope. Shows how to use our outstanding optics and glasses to make high-quality finders at low cost. NO. 9051 15¢ Postpaid

Learn Astronomy The "Fun" Way

53 STAR & PLANET FLASH CARDS

Making learning fun and easy. Just look at the picture, then turn the card for identification - full details given on the back. Set includes 29 constellation cards, 10 on the solar system, 10 star cards, and 4 of other celestial objects.
NO. 60,210 $1.00 Postpaid

PHOTOGRAPHY WITH YOUR TELESCOPE

New 8-page illustrated booklet tells you how to take pictures through your telescope. Specific set ups for a 6" reflector, 3" reflector, 3" refractor. Everything you need to know, such as film data, Exposure, Filters, "F" values, resolution, image sizes, etc.
NO. 9058 25¢ Postpaid

MAKE IT YOURSELF STAR CHART

Here is an accurate star and planet chart reproduced on a sheet of 11 x 17" paper, that can be cut out and made into a working star chart.
NO. 9061 25 Charts $1.00 - 100 Charts $4.00

EDMUND SCIENTIFIC CO., BARRINGTON, N.J.
NEW! ATTRACTIVE ASTRO-MURALS

These dramatic 37" x 37" murals are exact reproductions of famous sky phenomena in black and white. The wealth of detail shown is amazing. Prints are on fine paper. They are done by the Culloty process which has no screen to spoil photo effect. They are ideal decorations for home, school or institutions. Astro murals are enforced by many leading professional astronomers.

Size: 37½" x 37½".

Available in quantities. Write for details.

NO. 9227 500 Postpaid

FASCINATING! EDUCATIONAL!

STAR, SATELLITE & PLANET PATH FINDER

A "roadmap" of the heavens! This rotating chart shows over 500 stars in the heavens and their relationships to each at any selected day and hour. Excellent aid for locating satellites. Newspapers publish the expected path through the sky in relation to certain stars and degrees above the horizon. Use chart to locate these stars. Degree angle scale is printed on front of chart. Reverse side contains astronomical facts.

NO. 9227 500 Postpaid

Free with Your Chart

A valuable illustrated booklet showing how to use star paths chart. Easily understood, simplified drawings of celestial sphere - key points on meridian, time correction tables - how to find planets, etc.

Size: 4½" x 5½". 16 pages.

The Space Age and INTERPLANETARY EXPLORATION

These attractive maps will please any young or old, who is interested in outer space. They make ideal wall decorations and contain much valuable information on the moon, planets and stars. For your $1.25, you get not one, but three giant maps: THE SOLAR SYSTEM, a giant colorprint map, 50½” x 38”, showing solar statistics and including detailed moon map and twelve telephoto pictures of Moon, Sun, planets, WORLD STAR CHART is a 50½" x 38" and locates stars for any time of year for any position on Earth. The third map, MAP OF THE SOLAR SYSTEM, is 35" x 48", shows planets, sun and others.

NO. 9245 (Set of 3) $1.25 Ppd.

BEST OF THE NEWEST BOOKS ON ASTRONOMY

AMATEUR ASTRONOMERS HANDBOOK

Sidgwick

This book is primarily a reference book. Chapters on light trap, telescope function, resolution, types of objective glass, circular, eyepieces, collimation, atmosphere and seeing, photography, time-clock, and other subjects.

NO. 9233 $10.00 Postpaid

DISCOVER THE STARS

Johnson - Adler

A paper bound volume, 130 pages, Beginner’s guide to astronomy, Radio astronomy, navigation, solar energy, simple mirrors, own instruments, Photographs, diagrams and graphs, 146 pages.

NO. 9235 $1.00 Postpaid

NORTON’S STAR ATLAS

This reference handbook contains 9,000 stars, nebulae and a valuable addition to your telescope "know-how." Cloth bound, 211 pages.

NO. 9234 $4.00 Postpaid

ASTRONOMY MADE SIMPLE

Here is an excellent, inexpensive paper bound book on astronomy, 8 x 10-3/4, w/12 pg. Explains the universe, all about stars, navigation, telescopes and their uses, solar system. Includes over 250 illustrations, glossary of astronomical terms, and a section on how to build your own telescope. It is an ideal beginning self-study and reference book. Very complete and informative.

NO. 9229 $1.45 Postpaid

GOLDEN BOOK OF ASTRONOMY

All the wonders of the skies, the vast distances, the galaxies, the mysteries of the planets and our own Earth, of the moon and the story of how man may launch himself into space, are told in this big 96 pg. 10-1/4 x 13-3/4 book. Each page contains large colorful pictures, and the book is so written that a child or young beginner amateur astronomer will find it fascinating.

NO. 9244 $3.95 Postpaid

DICTIONARY OF ASTRONOMY AND ASTRONAUTICS

Concise definitions of over 2,200 terms and concepts related to astronomy and astronautics - a wide gamut of terms ranging from those as old as man to those as new as the Space Age, on the threshold of which we now stand. Dr. Spitz is Coordinator of Visual Satellite Observations for the Smithsonian Astrophysical Observatory, Cambridge, Mass. Mr. Gaylor is contributing editor to Encyclopedia Britannica.

NO. 9238 $6.00 Postpaid

OUTER SPACE PHOTOGRAPHY FOR THE AMATEUR

By Henry E. Paul. A book designed specifically to encourage interest in the hobby of space-age photography and a guide to telescopes and photo equipment to use. 124 page, 5 x 8 inches hard bound.

NO. 9312 $2.50 Postpaid

PORTAIT OF THE UNIVERSE BOOK OF STAR PHOTOS

All the astronomical phenomena actually "rat" for their portraits before the camera-telescopes of Mt. Wilson, Palomar, Lick, and Yerkes Observatories. 6" x 6", Handy spiral binding. Covers planets, solar phenomena, star clusters, etc. 33 black and white photographs, 66 pages.

NO. 9296 $1.95 Postpaid

1001 QUESTIONS ANSWERED ABOUT ASTRONOMY

Here are key questions about the universe around us - planets, satellites, meteoras, comets, stars and constellations, galaxies, their origins, motions, distances, colors, methods and instruments used to study them, and every other concept and fact about the universe, including biographies of the great astronomers of all times. 420 pages, 5-1/4 x 8" paperbound.

NO. 9318 $2.45 Postpaid

LAMARQUE ENCYCLOPEDIA OF ASTRONOMY

506 pages. We recommend this book. Covers the entire field of Astronomy. Very handsomely illustrated, easily read and understood. Truly a book for the laymen. It is a giant sized volume (8-1/4 x 11-1/2) prepared by experts in astronomy, astrophysics, rocketology, spectroscopy, astro-photography, space chemistry and nuclear physics. It covers solar system, earth, planets, moon, comets, meteors.

NO. 9284 $15.00 Ppd.