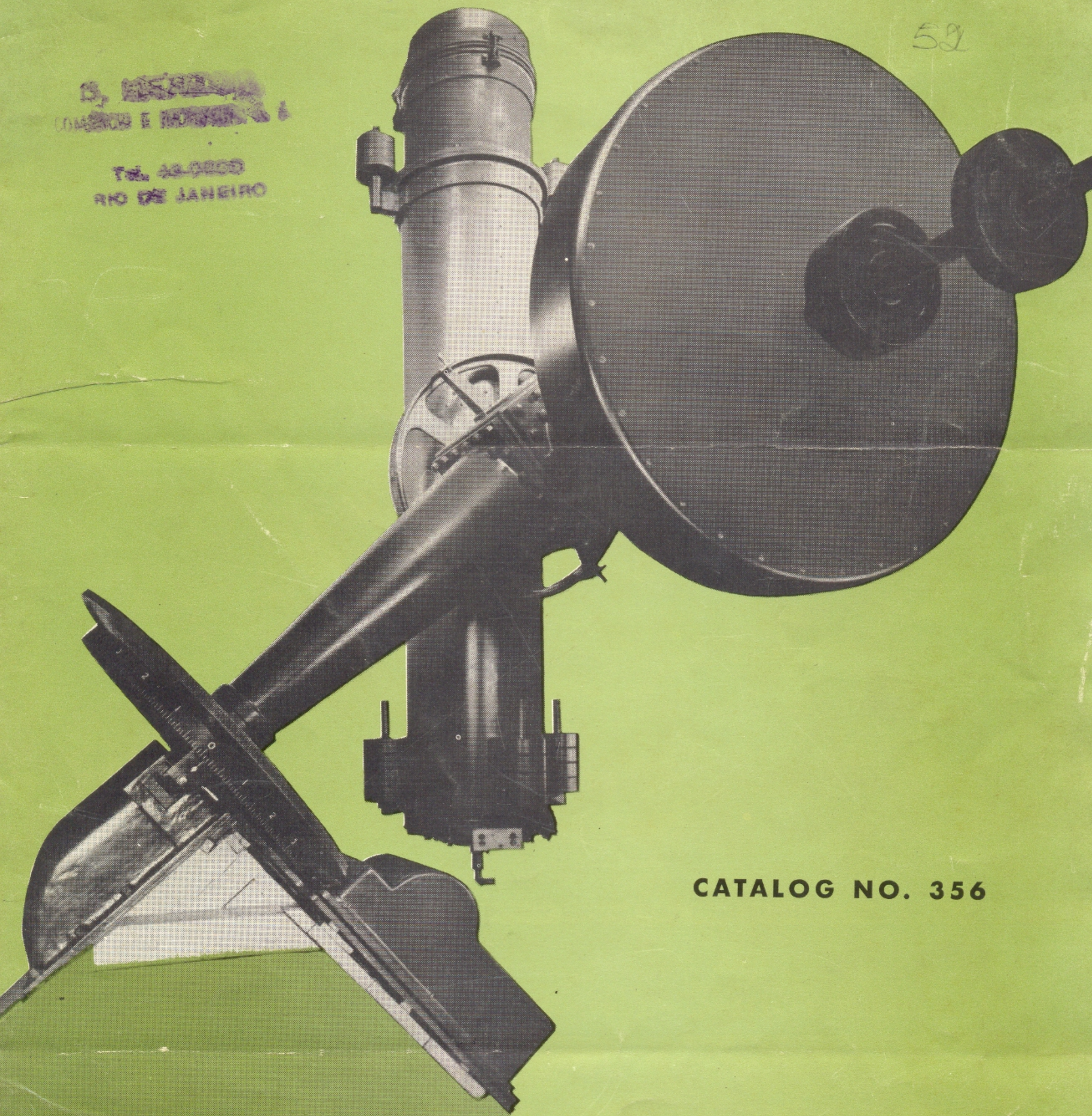
Astronomical Instruments



CATALOG NO. 356

J. W. FECKER, INC.

6592 Hamilton Avenue • Pittsburgh 6, Pa.

For over half a century the names of Fecker, McDowell and Brashear have graced the history of astronomical instruments in America. A large part of the astronomical instruments produced in that period were the products of our company headed successively by these three men. Of the tremendous variety of telescopes and accessory instruments manufactured by us, only a representative few are pictured here to indicate generally what is available. Very few accessory instruments are shown although virtually all items can be had and will be quoted on direct inquiry. All Fecker telescopes regardless of size or whether intended for professional or non-professional use are designed and manufactured to the same exacting standards.

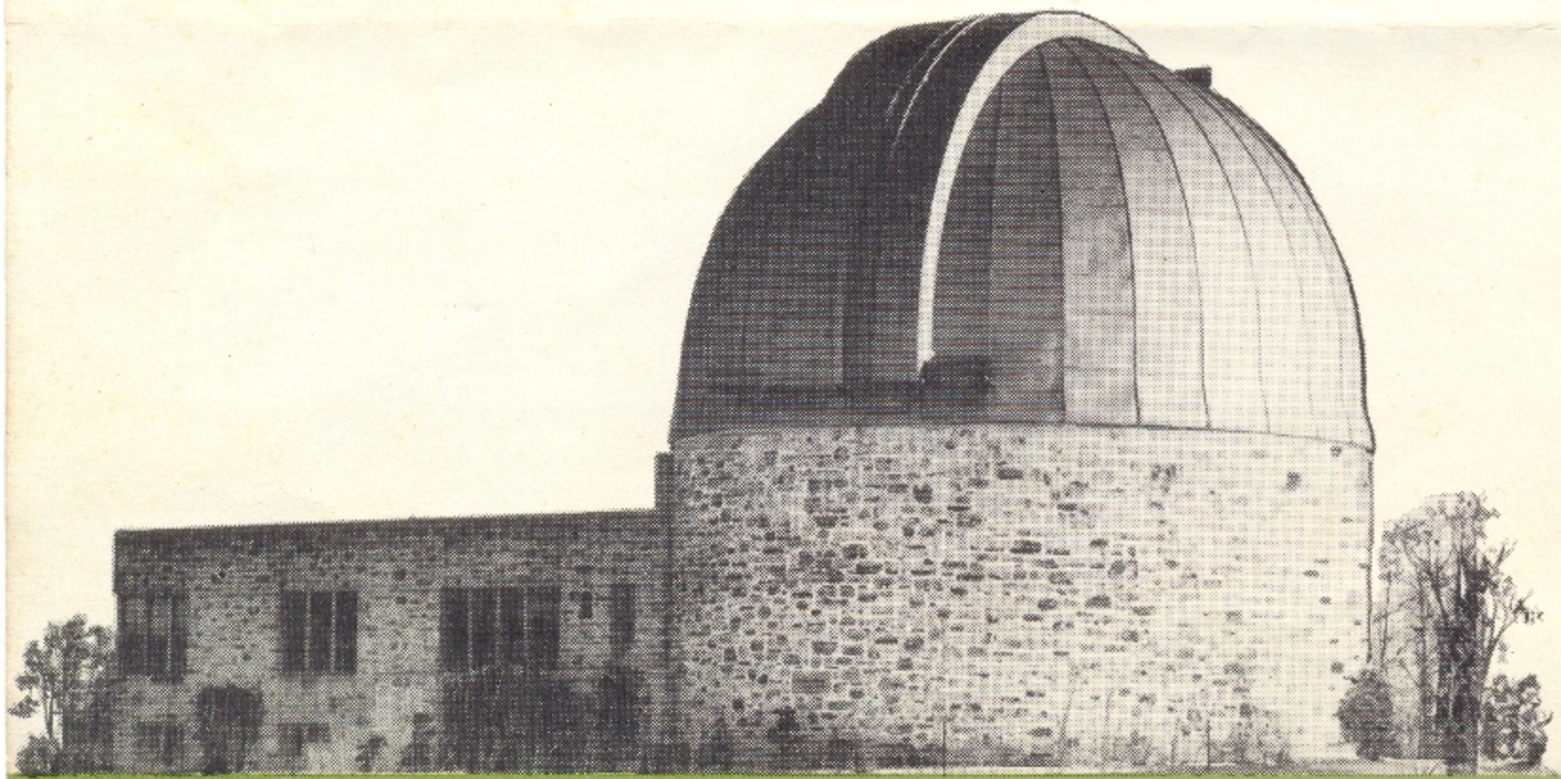
Materials are always the finest available; workmanship represents the best in the instrument maker's art.

We are happy that through the years our company has earned and maintained an unusually fine reputation for excellence in design and manufacture beyond the ordinary.

COMPLETE OBSERVATORIES

Domes—Elevating Floors

Observatory domes, elevating floors and complete observatories are available from Fecker. The two illustrations here show a welded dome and the conventional structural steel dome which can be sheathed with copper or aluminum.

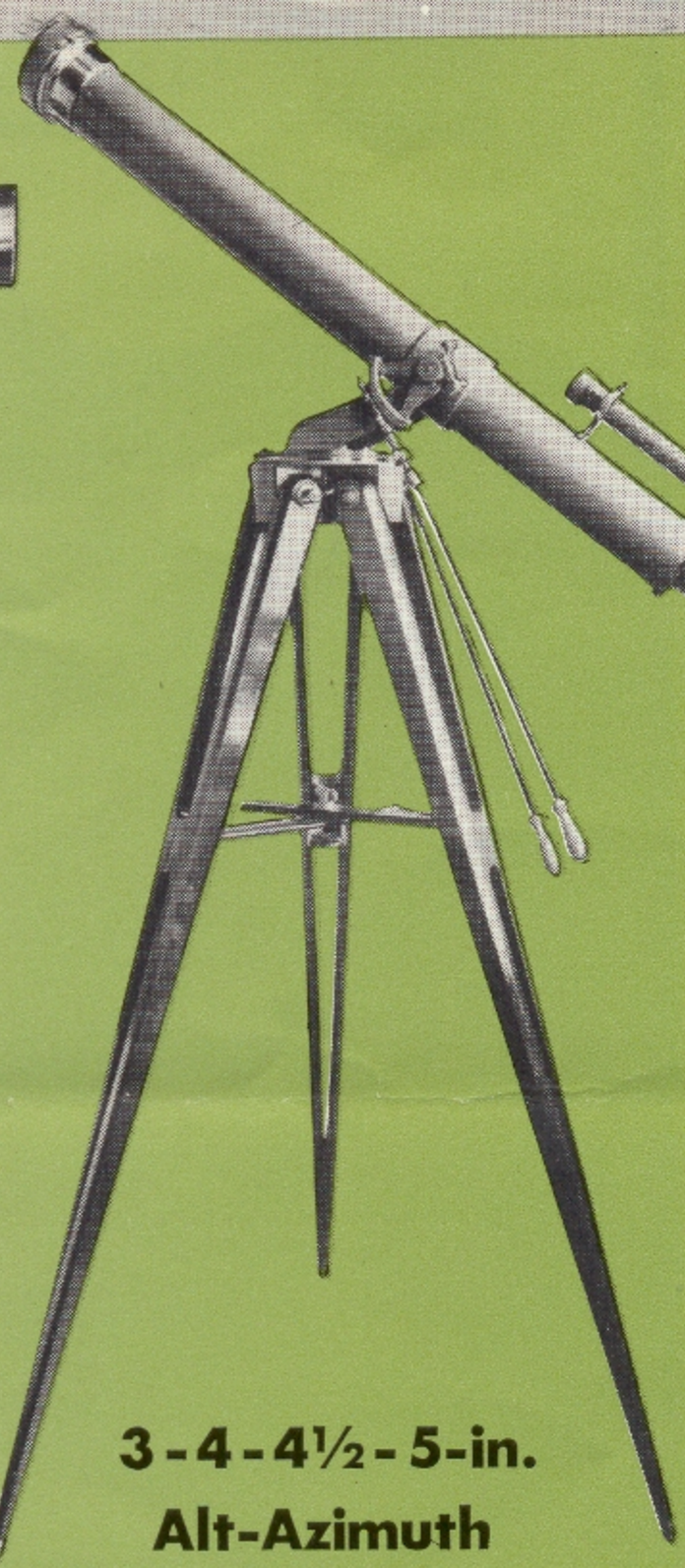


Electric drives for dome and shutter are standard for large domes, optional for smaller ones.

Popular Refractors

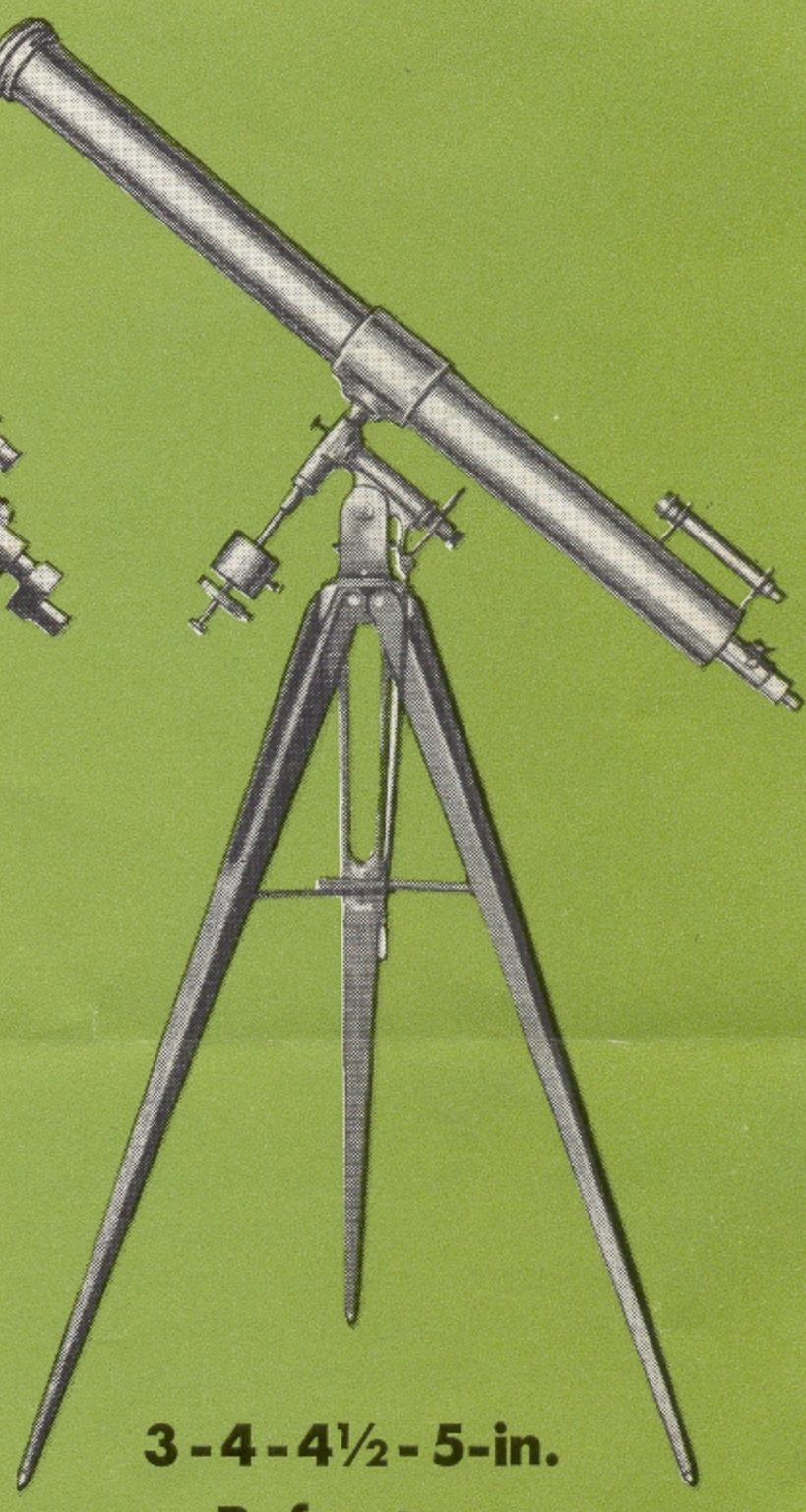
3 - 4 - 4½ - 5-in. Alt-Azimuth Refractor

This plain alt-azimuth refractor is as carefully made as the largest instrument offered. Optics are of our best quality as are the materials and workmanship.



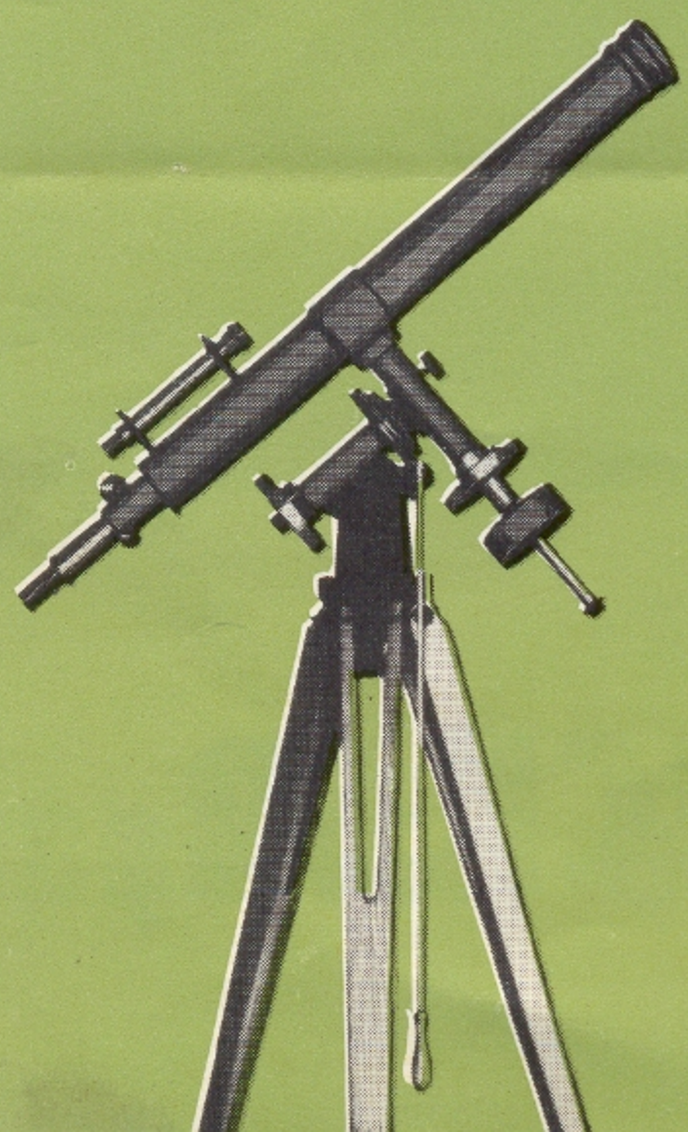
3 - 4 - 4½ - 5-in. Alt-Azimuth Refractor

The above instrument offers slow motions in both altitude and azimuth by means of precision cut bronze worm gears and stainless steel worms. Clamps are provided for both coordinates.



3 - 4 - 4½ - 5-in. Refractor

This portable equatorial refractor has clamps in both coordinates and slow motion in right ascension. The rack and pinion focusing draw tube is carefully fitted to insure smooth easy operation.

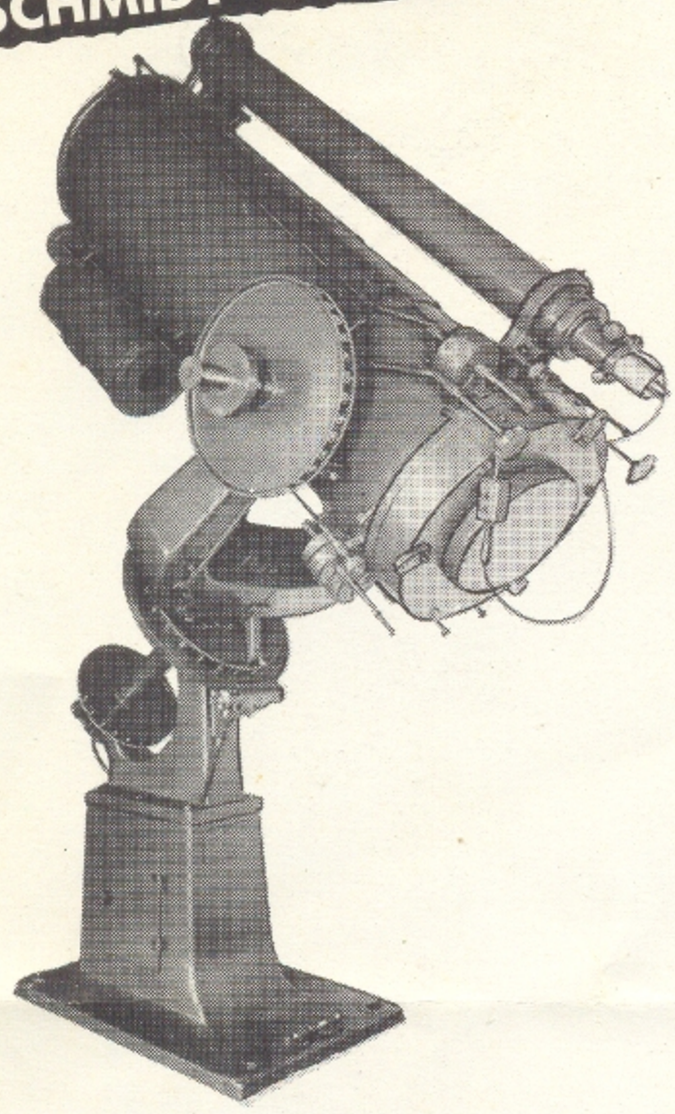


3 - 4 - 4½ - 5-inch Refractor

This is the most complete of the fully portable equatorial refractors. Slow motions, clamps and setting circles are provided for both coordinates. As in all Fecker telescopes, the optics are of finest professional quality.

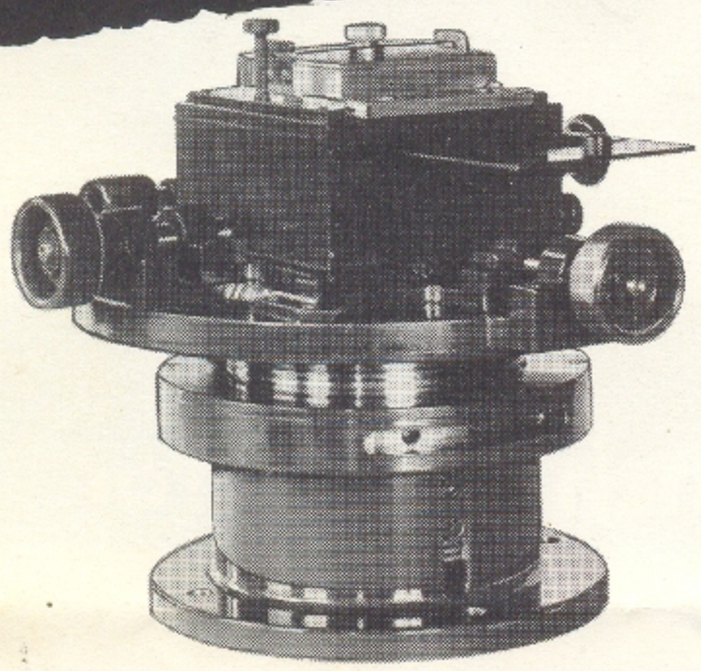
All Fecker portable telescopes are furnished with finder, a set of four positive eyepieces, lens caps, and a sturdy polished hardwood tripod. In all respects these instruments conform to our standards for professional research instruments. Materials are of the best quality obtainable and workmanship throughout is of the highest order.

16-INCH SCHMIDT CAMERA



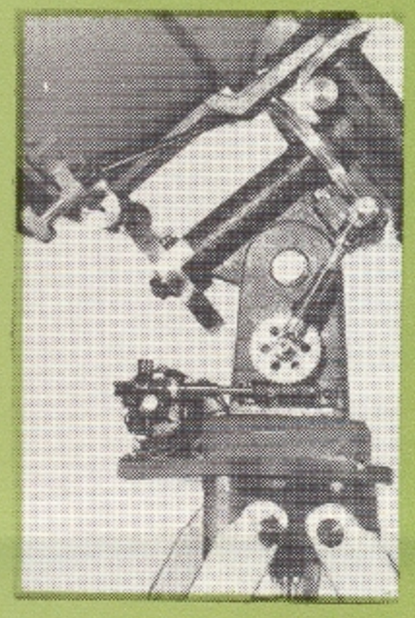
The Schmidt-type telescope illustrated has a 16-inch aperture correcting plate and a 20-inch primary mirror. Mounted on the tube is a 3-inch Ross-Fecker camera. Schmidt-type telescopes are available up to 60 inches aperture

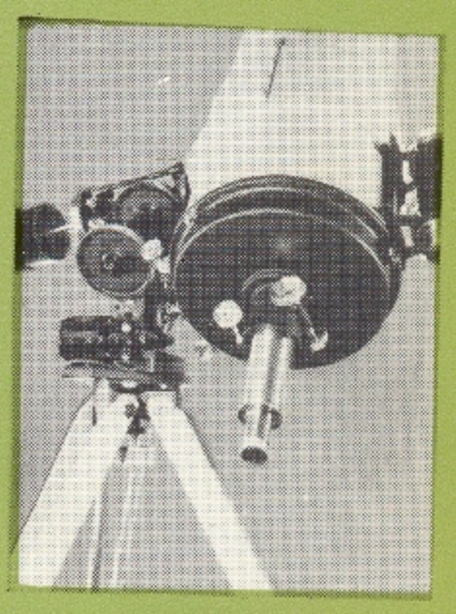
DOUBLE-SLIDE PLATE CAMERA



Plateholders are but one of the many accessory instruments available. Double slide plateholders of the type shown are available in plate sizes 2"x 2", 2¼"x 3¼", 4"x5" and 8"x10".
They are equipped with a positioning circle and micrometer screw motions in both lateral coordinates. Guiding eyepieces are provided for "off-plate" guiding.

12-INCH PORTABLE Cassegrain REFLECTOR

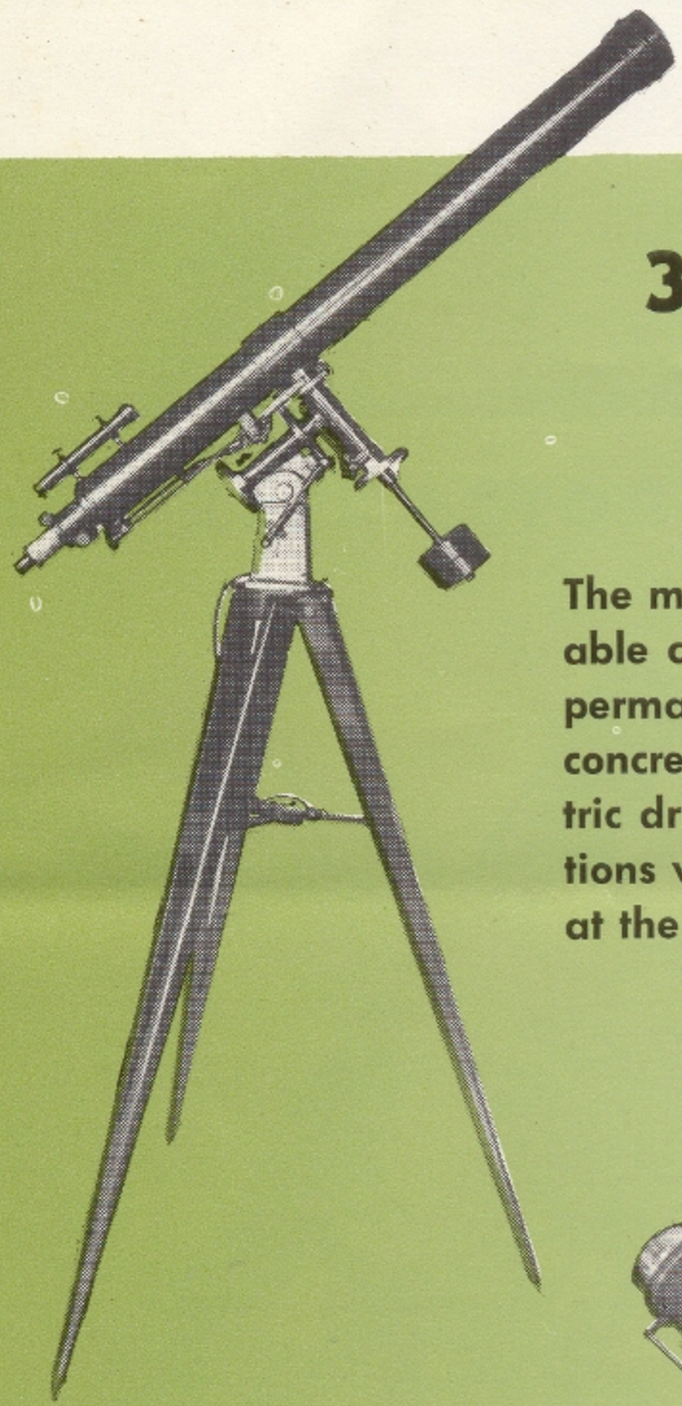




Shown here tripod mounted, this excellent telescope can also be pier mounted on a cast iron or concrete pier. It has a synchronous electric drive with clamps, slow motions and setting circles. The close-ups show the draw tube arrangement and also, an alternate type of drive.

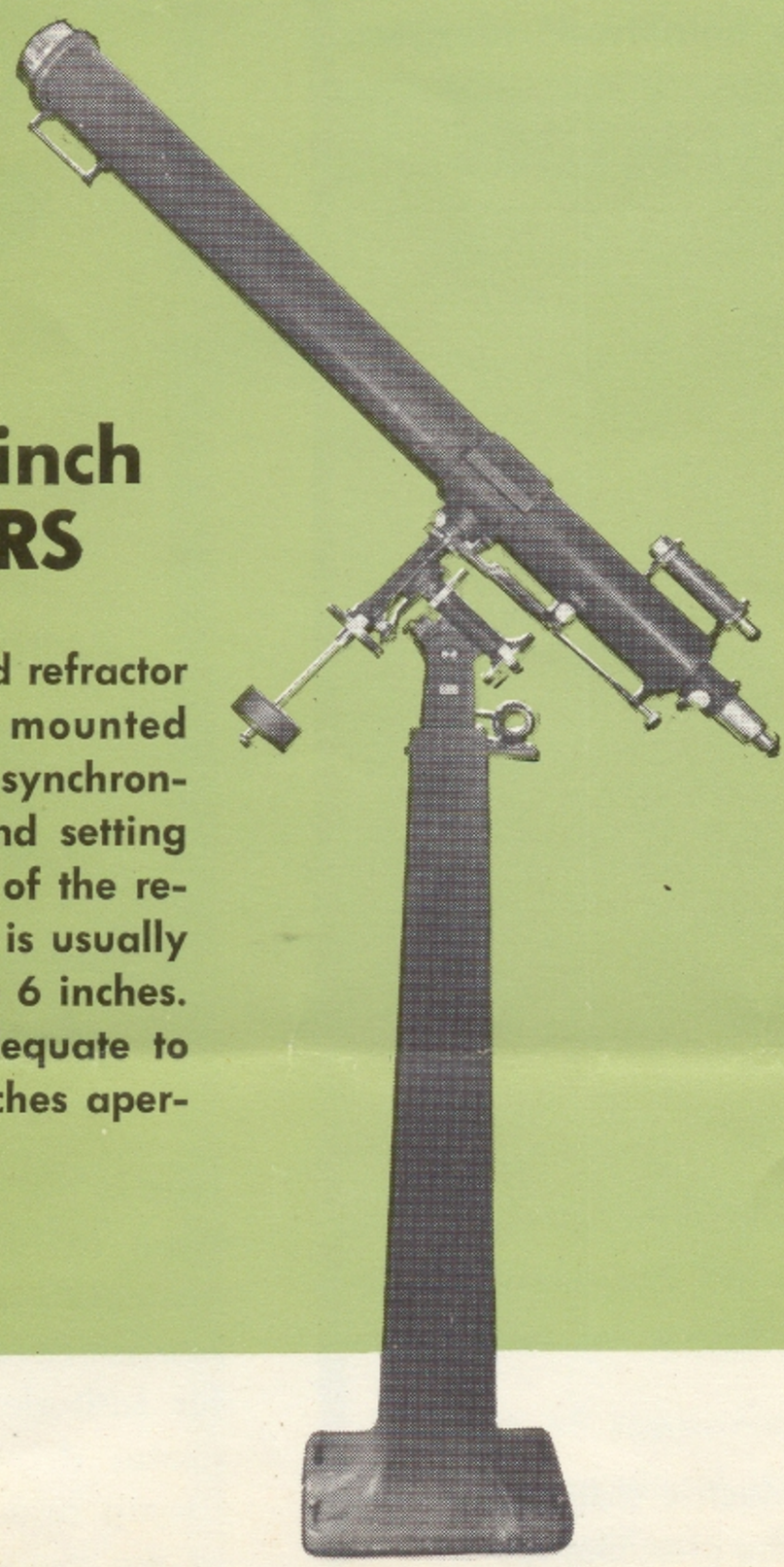
J. W. FECKER, INC.

INTERMEDIATE REFRACTORS



3" - 4" - 4½" - 5" PORTABLE REFRACTORS

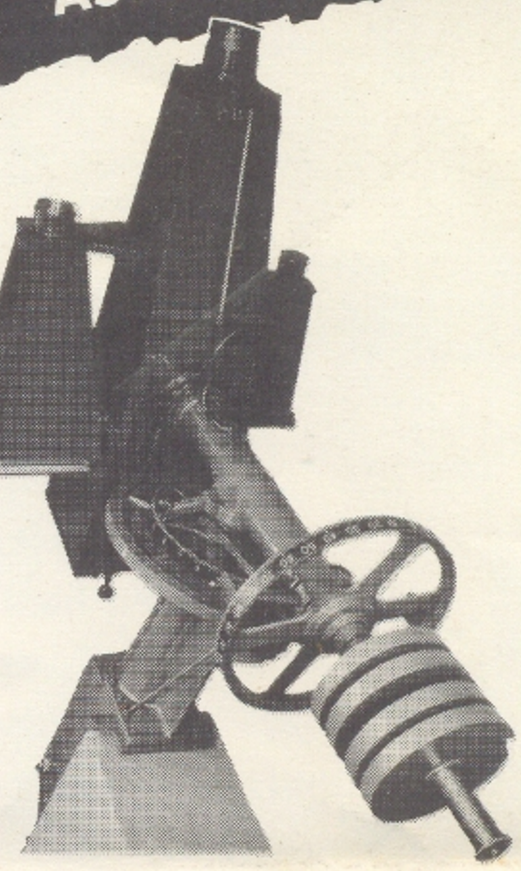
The most complete refractor in the portable class, this instrument may also be permanently mounted on a cast iron or concrete pier. It has a synchronous electric drive, setting circles, and slow motions with controls conveniently located at the eye end.



4 - 5 and 6-inch REFRACTORS

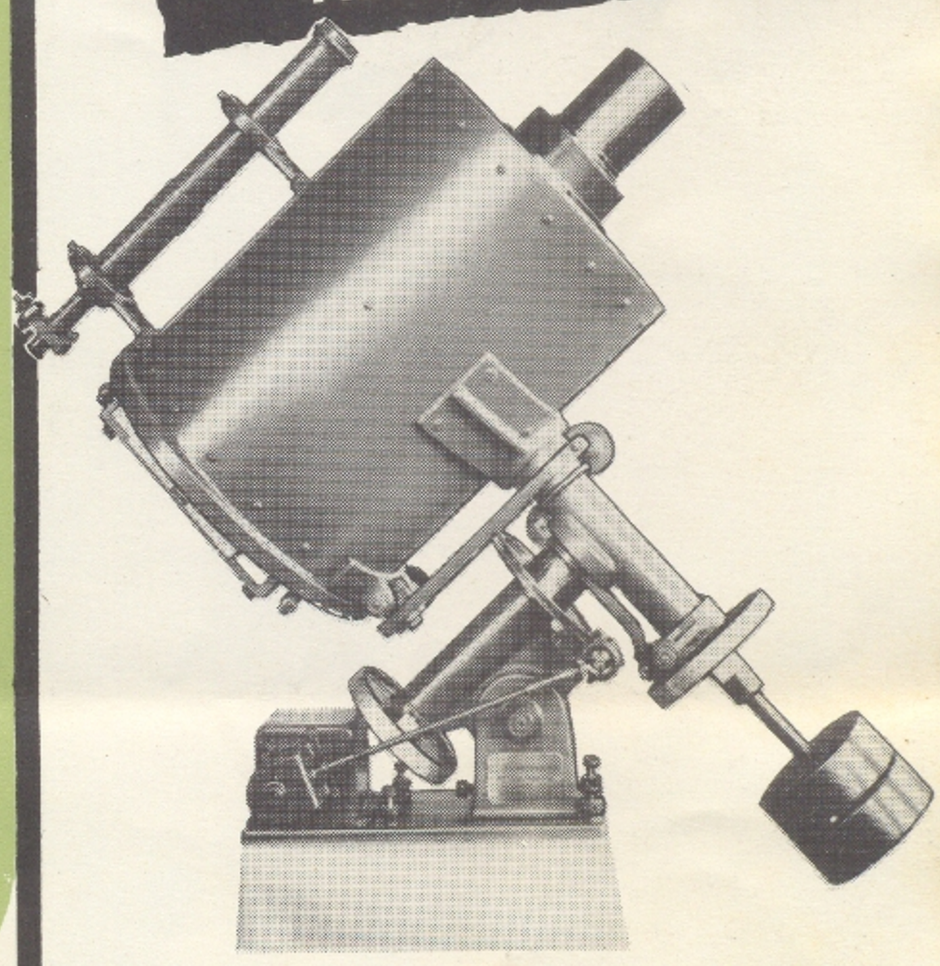
Illustrated is a pier mounted refractor telescope with the motor mounted outside of the pier. It has a synchronous drive, slow motions and setting circles. This is the smallest of the research type telescopes and is usually limited to apertures of 4 to 6 inches. This same mounting is adequate to carry reflectors up to 12 inches aperture.

TRIPLE ASTROGRAPH



This triple astrograph carries three Ross-Fecker lenses. In this type of mounting the polar axis housing rests directly on the concrete pier the top of which is shaped to the latitude angle.

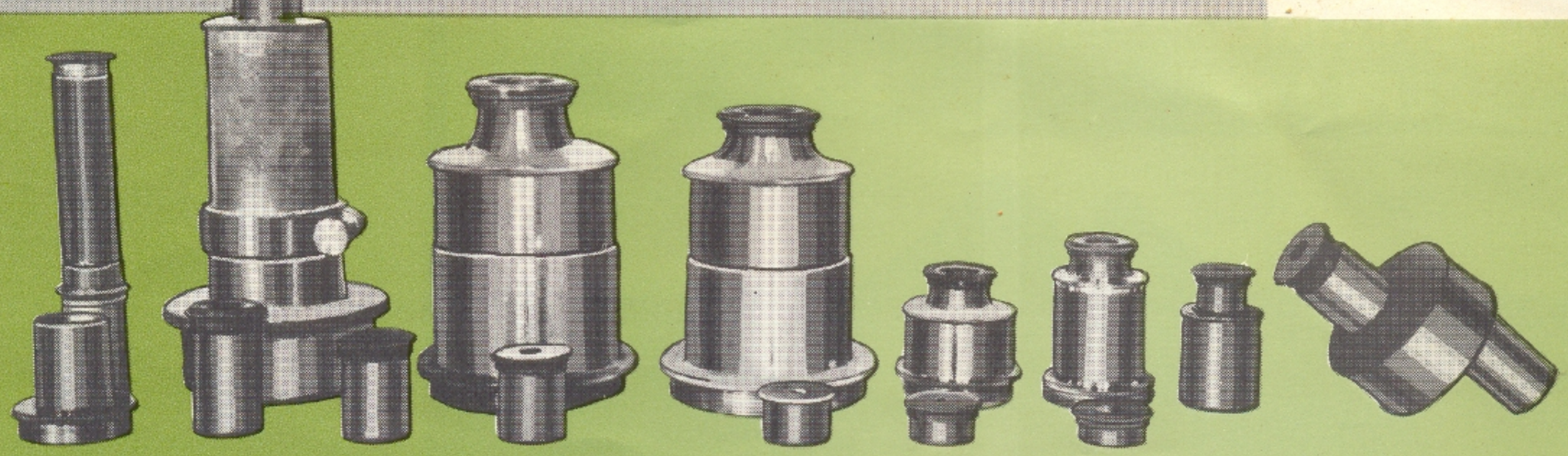
3-in. Ross-Fecker ASTROGRAPH



Shown here is a 3-inch, f7 Ross-Fecker camera with equatorial mount, synchronous electric drive, setting circles and slow motions in both coordinates. Ross-Fecker astrographs with a variety of mountings are available to 10 inches aperture.

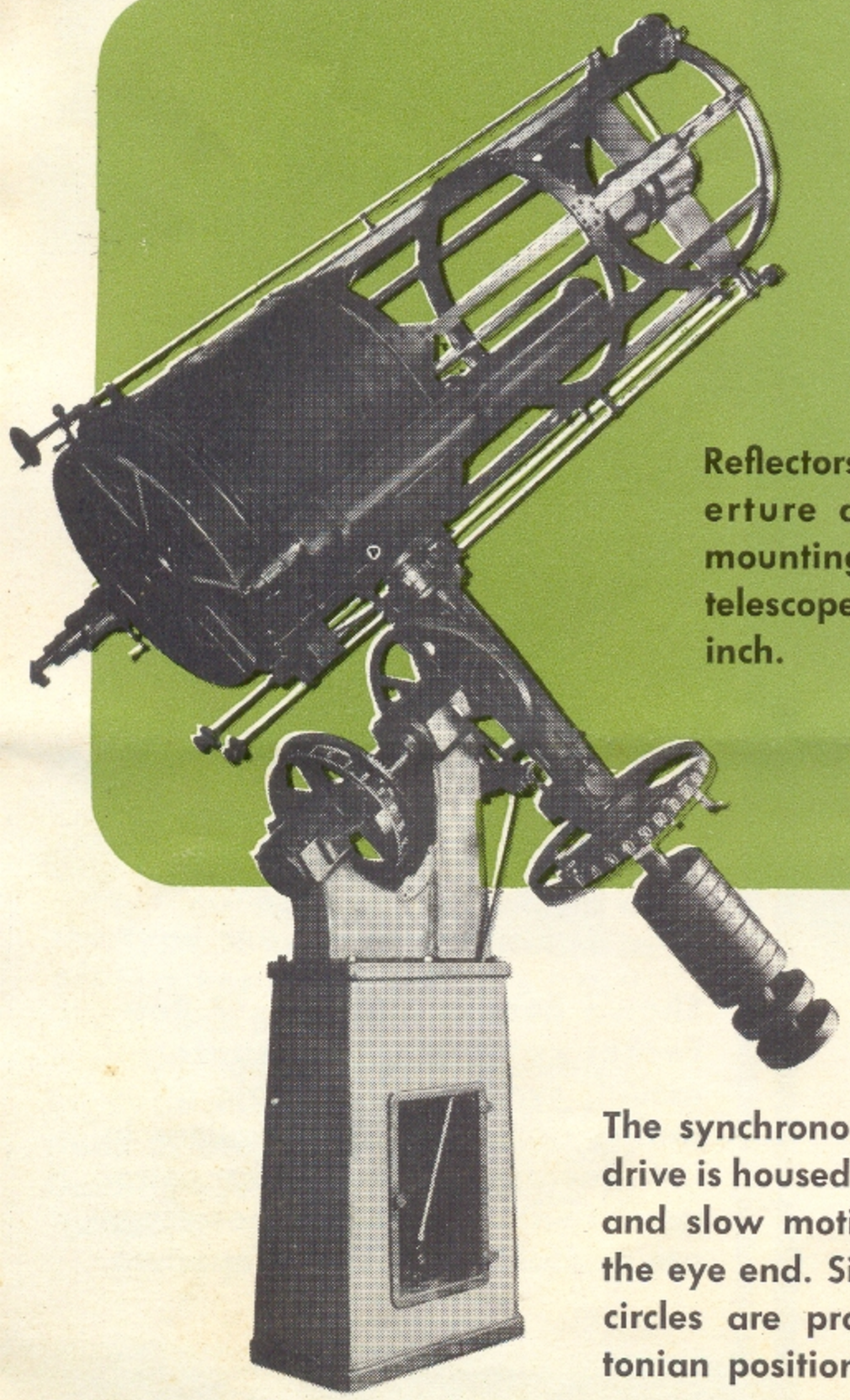
PITTSBURGH 6, PENNA.

FECKER EYEPIECES



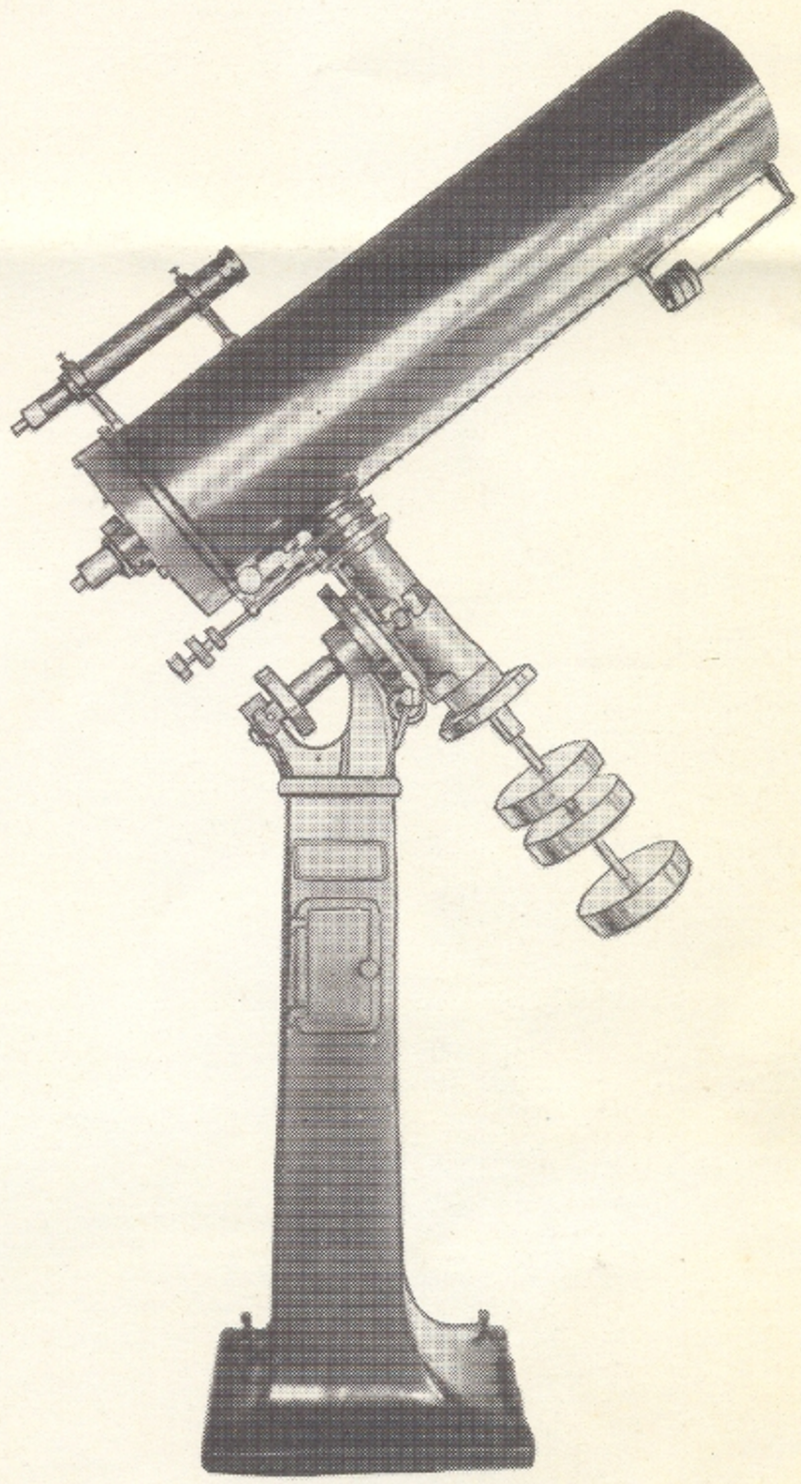
The variety of eyepieces available far exceeds those illustrated here. In addition to Hastings and orthoscopic eyepieces, numerous special types are offered, also, turret eyepiece adapters and solar and zenith eyepiece adapters. All eyepieces are made for a standard 1¼-inch adapter unless otherwise specified.

CROSS-AXIS EQUATORIAL REFLECTORS



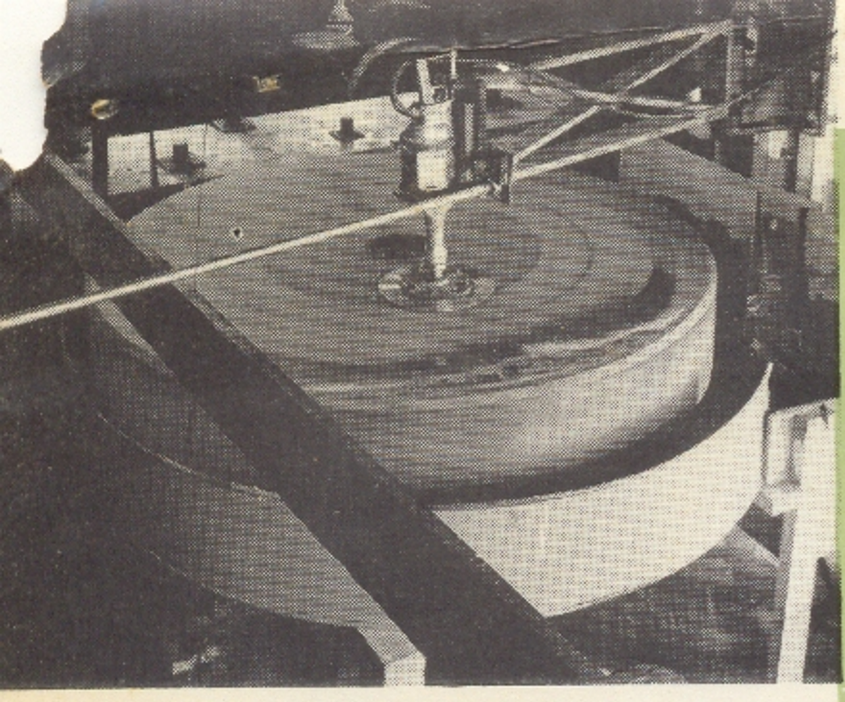
Reflectors to 40 inches aperture are offered with mountings of this type. The telescope illustrated is a 30-inch.

The synchronous electric sidereal drive is housed in the pier; clamps and slow motion controls are at the eye end. Sidereal and setting circles are provided. The Newtonian position is optional.



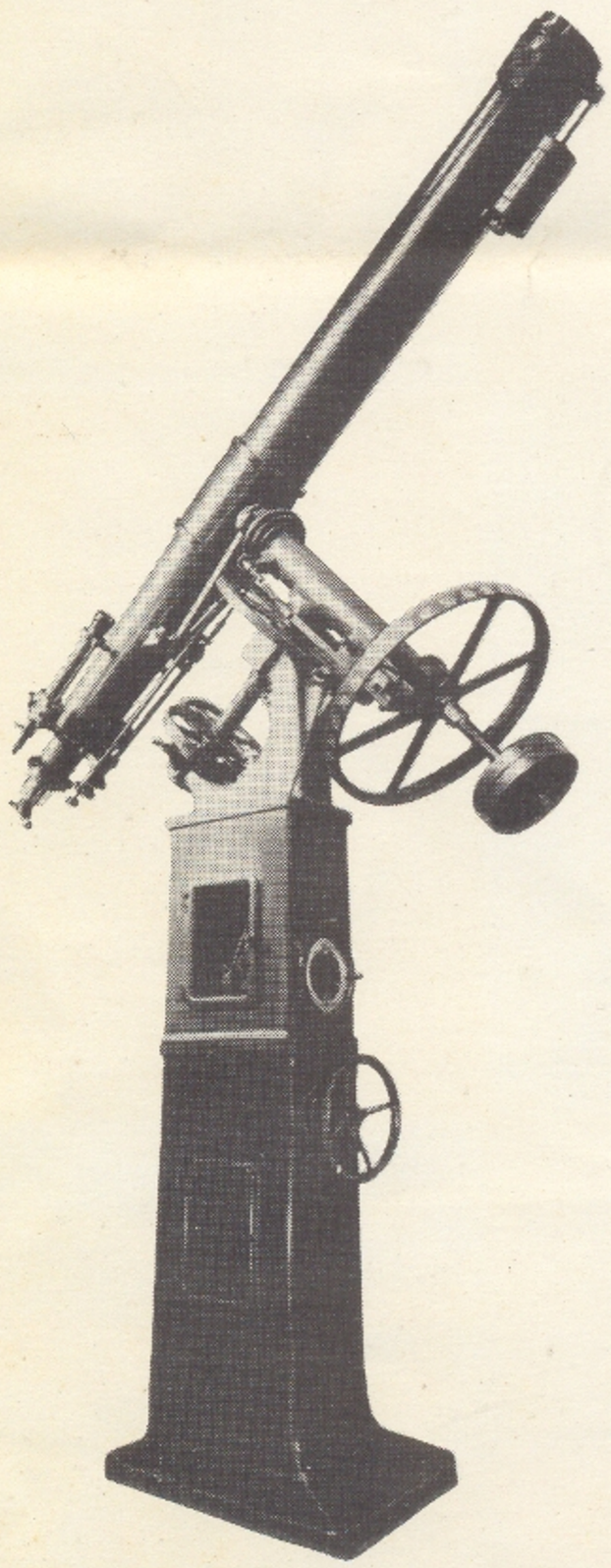
15-in. Cassegrain REFLECTOR

This is our standard small research type reflector. It is equatorially mounted on a cast iron pier with headstock either fixed or adjustable for latitude angle. The synchronous motor drive is housed in the pier. Clamp and slow motion controls are at the eye end. This telescope is supplied with a 2-inch finder and a set of four eyepieces. A Newtonian position may be added.



Rough grinding 60" Mirror

10" REFRACTOR

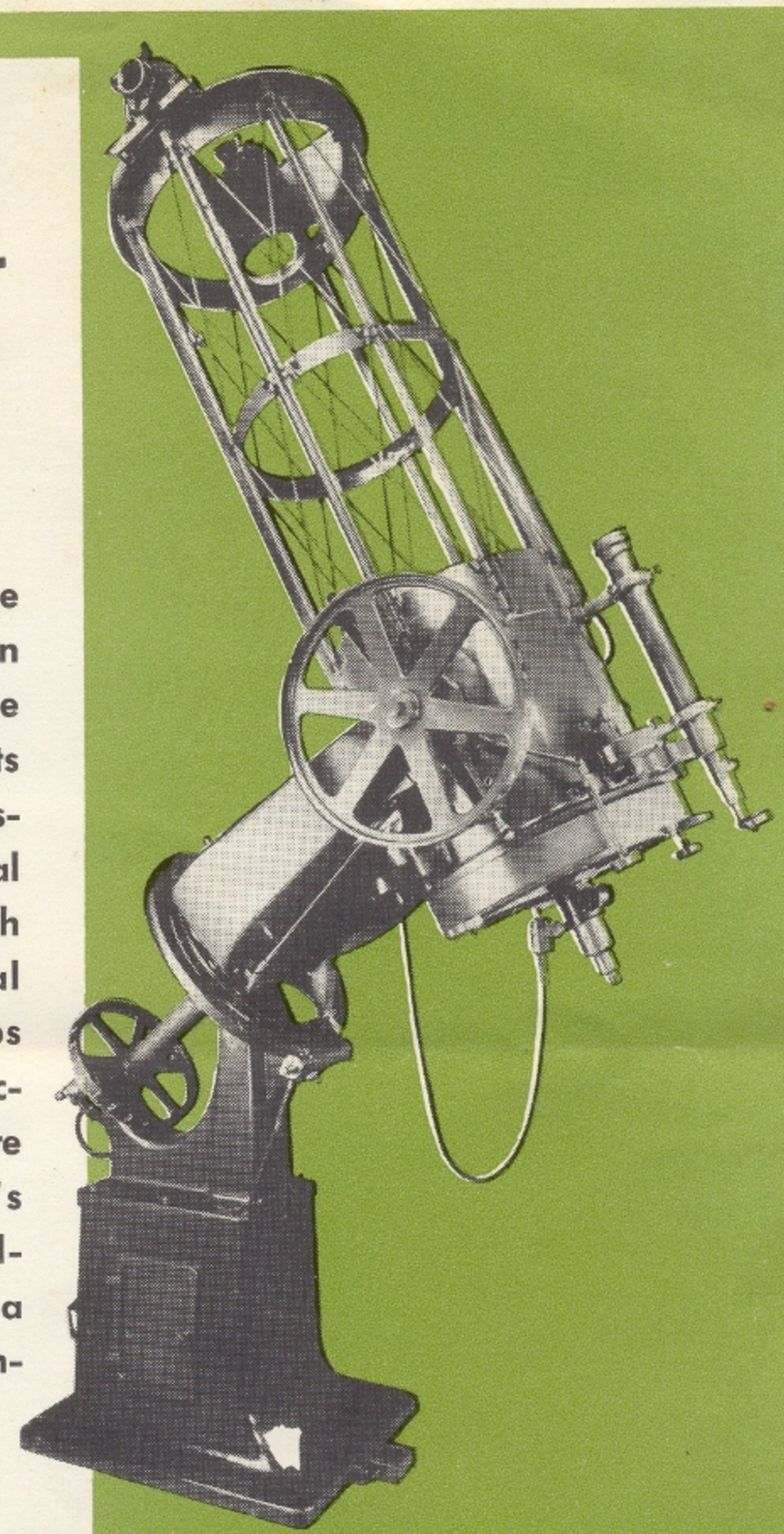


Illustrated here is our standard professional research refractor —cross-axis mounted on a two-piece pier which houses the synchronous electric drive. Sidereal and hour circles read to five minutes.

The sidereal clock and declination fast motion hand wheel showing in the photograph are optional. Refractors with this same type of mounting are available with apertures from eight to forty inches.

CASSEGRAIN-NEWTONIAN REFLECTOR

Fork mounted reflectors of the type shown are available in apertures to 40 inches. The fixed latitude headstock rests on a cast iron pedestal housing the synchronous sidereal drive. Setting circles in both coordinates and a sidereal circle are provided. Clamps and slow motions are electrically operated. Controls are located on the observer's portable switch box. Available as a Cassegrain or a Cassegrain Newtonian combination.



12-inch ASTROGRAPH

This astrographic refractor features a two-pier mounting. The synchronous sidereal drive is mounted on the south pier. Clamps and slow motion may be arranged for electrical or manual operation.

This type of mounting is adaptable for visual refractors and is excellent for large aperture reflectors.