## MOUNT WILSON OBSERVATORY

D 20 Spectrum of  $\gamma Cygni$ , showing enhanced lines Spectrum of  $\lambda Aurigae$ , showing normal lines

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- \*21 Seven stars having unusual spectra B.D.+23°123; θ Ceti; R Aquarii; B.D.+11°4673; T Tauri; Nova Aquilae; Nova Ophiuchi
- \*22 Spectrum of Omicron Ceti, taken 9, 53, 87, 130, 144, 174 and 188 days after maximum
- \*23 Typical spectra of giant stars of types F to M
- \*24 Typical spectra of dwarf stars of types F to M

## SERIES E. LABORATORY SPECTRA

- E 1 Photographs of spectrum of titanium: a, b and c, given by carbon resistance furnace, temperature approximately 2000°, and 2400° and 2600° C., respectively; d, given by the arc (lines in furnace not given by arc for the most part due to impurities)
  - 2 Photographs of spectrum of iron and vanadium: *a*, without magnetic field; *b*, with magnetic field, light vibrations perpendicular to lines of force; *c*, with magnetic field, light vibrations parallel to lines of force
  - 3 Three sets of triplets in the spark spectrum of iron
- 4 Zeeman effect for chromium (31,700 gausses)  $\lambda$  4613 to  $\lambda$  4626
  - \*5 Stark effect for chromium and hydrogen line Hγ. Three groups. Regions λλ 4098-4111-4129, λλ 5006-5028-5056, λλ 5275-5297-5329

## SERIES F. SELECTED STAR FIELDS

Slides under this heading will be made to order from such negatives of the Kapteyn Selected Areas as are available

## SERIES G. NEBULAE AND STAR CLUSTERS

PHOTOGRAPHS TAKEN WITH THE 60-INCH REFLECTOR

| *G 1            | M 42 | N.G.C. 1976 | Orion, Great Nebula (central portion), exposure 45<br>min., September 16, 1909    |
|-----------------|------|-------------|---|
| *2              | 31   | 224         | Andromeda, Great Nebula (central portion), ex-<br>posure 2 hrs., October 13, 1909 |
| *3              | 20   | 6514        | Sagittarius, Trifid Nebula, exposure 2 hrs. 26 min.,<br>June 4 and 5, 1910        |
| <del>†*</del> 4 | 51   | 5194        | Canes Venatici, Spiral Nebula, exposure 10 hrs.<br>45 min., April 7 and 8, 1910   |
| *5              | 33   | 598         | Triangulum, Spiral Nebula, exposure 8 hrs. 30 min.,<br>August 5, 6, 7, 1910       |