again to its minimum during eight hours of the latter period, however it scarcely changes at all, and very inconsiderably for a whole day.

(9) *α* Herculis, R. A. 256° 57′, Decl. +14° 34′; an extremely red double star, the variation of whose light is in every respect very irregular. Frequently, its light scarcely changes for months together; at other times, in the maximum, it is nearly five gradations brighter than in the minimum; consequently, the period also is still very uncertain. The discoverer of the star's variation had assumed it to be sixty-three days. I at first set it down at ninety-five, until a careful reduction of all my observations, made during seven years, at length gave me the period assigned in the text. Heis believes that he can represent all the observations by assuming a period of 184·9 days, with two maxima and two minima.

(10) Coronæ R., R. A. 235° 36′, Decl. +28° 37′. This star is variable only at times; the period set down has been calculated by Koch from his own observations, which unfortunately have been lost.

(11) Scuti R., R. A. 279° 52′, Decl. —5° 51′. The variations of brightness of this star are at times confined within a very few gradations, whereas at others it diminishes from the fifth to the ninth magnitude. It has been too little observed to determine when any fixed rule prevails in these deviations. The duration of the period is also subject to considerable fluctuations.

(12) Virginis R., R. A. 187° 43′, Decl. +7° 49′. It maintains its period and its maximum brightness with tolerable regularity; some deviations, however, do occur, which appear to me too considerable to be ascribed merely to errors of observation.

(13) Aquarii R., R. A. 354° 11′, Decl. —16° 6′.

(14) Serpentis R., R. A. 235° 57′, Decl. +15° 36′.

(15) Serpentis S., R. A. 228° 40′, Decl. +14° 52′.

(16) Cancri R., R. A. 122° 6′, Decl. +12° 9′.

Of these four stars, which have been but very slightly observed, little more can be said than what is given in the table.

(17) *α* Cassiopeiæ, R. A. 8° 0′, Decl. +55° 43′. This star is very difficult to observe. The difference between its maximum and minimum only amounts to a few gradations, and is, moreover, as variable as the duration of the period. This circumstance explains the varying statements on this head. That which I have given, which satisfactorily represents the observations from 1782 to 1849, appears to me the most probable one.

(18) *α* Orionis, R. A. 86° 46′, Decl. +7° 22′. The variation in the light of this star likewise amounts to only four gradations from the minimum to the maximum. For 91½ days it increases in brightness, while its diminution extends over 104½, and is imperceptible from the twentieth to the seventieth day after the maximum. Occasionally its variability is scarcely noticeable. It is a very red star.

(19) *α* Hydræ, R. A. 140° 3′, Decl. —8° 1′. Of all the variable stars, this is the most difficult to observe, and its period is still altogether uncertain. Sir John Herschel sets it down at from twenty-nine to thirty days.

(20) *ε* Aurigæ, R. A. 72° 48′, Decl. +43° 36′. The alternation of light in this star is either extremely irregular, or else, in a period of several years, there are several maxima and minima—a question which can not be decided for many years.

(21) *ζ* Geminorum, R. A. 103° 48′, Decl. +20° 47′. This star has hitherto exhibited a perfectly regular course in the variations of its light