richten, I soon found that a very close approach to the planet Ju-piter must have occurred about the 20th of May, 1842: the comet at this time would be hardly further distant from Jupiter than the mean distance of his fourth satellite. The action of the planet would be more than ten times greater than that of the Sun; and it is very possible that a complete change might be produced in the elements of the comet's orbit. This encounter took place rather to the south of the plane of the ecliptic, in about  $283\frac{1}{2}^{\circ}$  heliocentric longitude."

## 5. PETERS'S COMET (26th June, 1846).

On the 26th of June, Dr. C. H. F. Peters, of the Observatory of Capodimonte, found a very small comet in the constellation *Scorpius*, near 595 Mayer, and about one degree to the south of the nebula H. vi. 19, or 535 of *Smyth's Cycle*. The new object was quite as pale as the nebula, and somewhat rounder. The motion was perceptible at the end of an hour, when Dr. Peters commenced his observations with the Equatorial of Reichenbach. These were continued on following nights till stopped by moonlight. The following are the results corrected for refraction:—

1846.	Naples Sid. Time.	RA.	Dec.	No. of Obs.
June 26	h m s 17 24 4.0	226 51 31.4	-2i 38' 42"4	3
27	16 19 3.0	227 18 53.9	20 57 19.9	7
28	17 2 18.0	227 49 20.2	20 14 19.8	4
29	16 48 45·6	228 19 3.8	19 33 4.3	, 6
30	17 53 10.3	228 48 48.3	18 50 36.0	5
July 1	18 24 25.7	229 19 15'9	18 10 37.4	5
11	16 57 24.8	<b>234</b> 5 53°5	15 31 31.1	2
12	17 19 34.1	234 33 39.8	12 2 18.7	4
13	17 18 29.1	235 2 16.3	11 34 45.7	4
14	17 6 56.8	235 29 45.7	11 8 19.7	4
15	17 39 10.2	235 59 18.8	10 40 10.3	3
16	17 19 26.3	236 26 47°1	10 16 1 <b>.</b> 4	5
17	17 31 47.6	236 55 9.8	9 50 33.2	4
18	17 43 22.4	237 26 5.3	9 27 23.5	4
19	17 41 14.2	237 52 22.4	9 3 53.1	4
21	17 51 58.3	238 47 28.0	-8 19 12.3	3

It was seen on the 23d July, but it was too faint to be observed.

Upon these observations Dr. Peters has calculated the following elements, taking into account all small corrections (*Parall. Aberr. Nutat.*)