I. *Hiſtoria Plantarum, ſpecies hactenus editas aliaſque inſuper multas noviter inventas & deſcriptas complectens, &c. Autore* Joanne Rajo e Societate Regia. *Tomus primus.* Londini, 1686. Fol. *Apud* Henricum Faithorne *R. S. Typographum ; ad Inſigne Roſæ in Cœmeterio D.* Pauli.

II. *Philoſophiæ Naturalis Principia Mathematica, Autore* Iſ. Newton, Trin. Coll. Cantab. *Soc. Matheſeos Profeſſore* Lucaſiano *& Societatis Regalis Sodali.* Londini. 4*to. Proſtat apud plures Bibliopolas*

An Account of a Comet ſeen at Lipſick, Sept. 1686. *taken from the* Lipſick Acta Eruditorum *for the Month of* November *laſt.*

THat Comets are ſo frequently ſeen of late above what has been formerly obſerved, happens rather from the diligence and number of thoſe that now apply themſelves to the ſtudy of the Cœleſtial Motions, than from any caſual concourſe of thoſe Bodies. That this is ſo, may be concluded from the five Comets, that in leſs than ſix years time have been ſeen to traverſe the Heavens, of which yet only the two firſt (*viz.* thoſe of 1681 and 1682) by reaſon of their long tailes were generally regarded. That that appeared in *July* and *Auguſt* 1683. was not, as I can hear, any where obſerved in *France.* That that appeared in *June* 1684 was no where elſe taken notice of but at *Rome:* and now this of *September* 1686. we have no other account of, than this from *Lipſick.* The truth is, that where Comets are deſtitute of a tayle and appear only like an obſcure hazie Star, as thoſe of 1683 and 1684 did, they that firſt diſcover them had need be well acquainted

quainted with the Conſtellations (which few People are,) and muſt look over the Heavens deſignedly with great attention, notwithſtanding all which 'tis poſſible for ſuch obſcure Stars to paſs by unſeen.

This Comet was obſerved at *Lipſick* by the diligent and accurate Mr. *Kirck*; in whoſe Ephemerides for this year there is likewiſe a brief account thereof; He ſaw it only twice, *viz.* on the 8*th.* and 9*th.* of *September ſt. vet.* 1686. and obſerved it as follows.

Sept. 8. 4*h mane* about day-break, he found the Comet in the Conſtellation of *Leo*, to the right hand of the *Lucida in Lumbis* ♌ (*as is conceived*, for the Latin Copy is defective in this place) and reſembling that Star in colour and magnitude, with a thin and ſhort taile extended upright. Over the Comet in the ſame verticall was the Star θ ♌ of *Bayer*, or 21 *Tychoni*, diſtant therefrom by the Micrometer, exactly a degree; and a Line drawn from the *lucida in lumbis* ♌ to the Comet paſſed much about half a degree to the right hand of the ſaid θ *Leonis*. The diſtance of the Comet from *Regulus* taken by a *Radius* was about 17 *gr.* The next Morning, *Sept.* 9. the Comet appeared again obſcurer and more difficult to obſerve than before, by reaſon of the day-light: however, at 3*h* 58 *m* the diſtance thereof from θ ♌ was found by the Micrometer 2°. 23½ *m.* and at 4*h* 40 *m.* again 2 *gr.* 2°¾ *m.* To verifie the Times, the Altitude of the *Lucida in Lumbis* ♌ was Obſerved 11 *gr.* 10 *min.* at 4*h.* 08*m. mane.* A right Line drawn by the Comet and the ſaid θ *Leonis* towards β *Leonis*, or the the *Lucida Colli*, left that Star a little to the right hand. The following days being Cloudy no more could be Obſerved.

This Comet was ſeen by a Country-man, who firſt gave notice therof, from the 6*t* to the 12*th* of *September*; the reſult of whoſe Obſervations is, that the Comet was direct in motion, that it moved about 1½ degree *per diem*, and that it ſeemed rather to decreaſe in Latitude. On the 7*th*

of

of *Septemb.* it was about 24 *min.* diſtant from θ *Leonis*, but its bearing therefrom is not ſet down. From other parts it is ſaid to have been ſeen from the firſt of *September*, but nothing obſerved.

N. B. That this Star θ *Leonis* was then in 9 *gr.* 2 *min.* of ♍ with North Latitude 9 *gr.* 41½ *min.* Whence at the time of the firſt Obſervation it may be concluded that the Comet was in 9 *gr.* 55 of ♍ with North Latitude 9° 15 *min* And at the ſecond Obſervation the Longitude of the Comet will be found about 11 *gr.* 20 *min.* in ♍, with much the ſame North Latitude as before.

Theſe Obſervations being ſo few, do ſcarce ſuffice to conclude any thing concerning the preceding or conſequent motions of this Comet, which being near the Sun and ſtill approaching him was ſoon loſt in his Beams. It may however ſerve one day, when the Theory of Comets ſhall attain its perfection, to confirm an *Hypotheſis*, and help to aſcertain the number of theſe Heterogeneous Planets, whoſe frequency makes in more than probable that they have their periodical returns, tho hitherto unknown. And that the Prophecy of *Seneca* [*Erit qui demonſtret aliquando in quibus Cometæ partibus errent; cur tam ſeducti a reliquis, quot qualeſque ſint,*] is not wholly to be deſpaired of, will ſoon appear, from the accurate Theory of the Comet of 1680/81, to be found in the incomparable Treatiſe of M. *Iſaac Newton*, an account whereof is given at the end of this *Tranſaction*

Part