a ſtrait Line, whoſe Squares are equal to the ſumms or differences of the Rectangles and Squares of a Line, and its Segments and other aſſumed Lines, in all the variety and combinations thereof.

# Liber III.

*In quo Loci variarum diſpoſitionumLimites aſſignantur.*

Here is the determination of the *Loci plani* and *Solidi* that ariſe from ſeveral ways different from the former. For example, if from two given points there be drawn ſeveral pairs of ſtrait Lines, whoſe Squares together be equal to a given Square, the concourſe of each pair is in the *Locus planus* of a Circle there determined. And (the other conditions remaining) if of each pair of Strait Lines one be drawn from a given point, and the other be perpendicular to a given ſtrait Line, the concourſe is in the *Locus Solidus* of an *Ellipſis* there determined. Afterwards there are ſeveral Problems concerning Arithmetical, Geometrical, and Harmonical mean proportionals betwixt two Extreams, and divers Methods for deſcribing the Conick Sections by points. There are alſo ſubjoyned ſeveral *addenda* to all the preceding three Books.

At the end of the Book are Prints of the *Orthography* and *Gate* of a *Stately Houſe* built by the Author *Vincentio Viviani* at *Florence*, with the Inſcriptions on the front thereof in honour of the *French King Lewis XIV*, from whom he had an annual Penſion for many years: and of the *Family of the Great Duke of Tuſcany*; and of his Preceptor the Famous *Galilæo Galilæi*, with a Print of *Galileo's Buſto in Braſs*, which is ſet over the Gate.

ERRATA. P. 1581. l. 22. after *refract* r. *vitiouſly.*