Starting in the 17th century a new wave of mathematical thought developed. Algebra was f~lY developed('nd, ~ew fields invented. Some of the greatest men~e~ lived within 200 years of each other during this period. Also new light fell upon previous questions, which were unanswered.

One of the largest unsolved problems was Euc1lds parellel postulate. It was unproved by the other axioms up to the 17th century. In 1733 Girolamo Saccheri unsuccesfully tried to prove it by 'reductio ad absurdum' or indirectly. "The 6).ssian Nikolai Ivanovich in 1829 and the hungarian Johann Bolyai in 1832, unknown to each other independently discovered a non - Euclidean geometry. ,,39 They followed similar lines as Saccheri but asserted that no controdiction could be found.

> "It was during the 17th century that John Napier revealed his invention of logarythems. That Galileo Galilei founded the mathematics of dynamics. That Johannes Kepler induced his laws of planetary motion. That Gerald Desargues and Blaise Pascal formulated projective geometry. That Pierre de Fermat laid the foundations of modern number theory. And that Pascal, Fermat, and Christiaan Huygens made distinguished contributions to the theory of probibility.,,40

> "The development of analysis in the 17th century by the mathematicians Pierre de Fermat, Rene Descartes, and Isaac Newton soon left behind clawsical methods and problems, and an enormous wealth of new descoveries revealed an interaction between theoretical mathematics and all branches of physics and astronomy."41

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39 "Mathematics", Encyclopedia Americana, volume 17, page 396

40 Ibid

41 "Mathematics, History", Encyclopedia Britannica, volume-II, page 648

42 Ibid