or, if the sine functions be eliminated by means of (11),

$$\alpha_1 : \alpha_2 : \alpha_3 = \lambda_1(p_2p_3)^4 : \lambda_2(p_3p_1)^4 : \lambda_3(p_1p_2)^4. \qquad (53)$$

While (52) does not enable us to construct the point of least attraction, it furnishes a solution of the converse problem: to determine the ratios of the masses of three points so as to make the sum of their attractions on a point P within their triangle a minimum.

If, in (50), we put $n = 2$ and $\alpha_1 + \alpha_2 = 1$, and hence $p_1 + p_2 = 1$, this equation can be regarded as that of a curve whose ordinate s represents the sum of the attractions exerted by the points e_1 and e_2 on the foot of the ordinate. This curve approaches asymptotically the perpendiculars erected on the vector $(e_1 - e_2)$ at e_1 and e_2; and the point of minimum attraction corresponds to its lowest point. Similarly, in the case $n = 3$, the sum of the attractions exerted by the vertices of the triangle on any point within this triangle can be represented by the ordinate of a surface, erected at this point at right angles to the plane of the triangle. This suggestion may here suffice.

22. *Concluding remark.*—Further results concerning generalizations of the problem of the minimum sum of distances are reserved for a future communication.

WAS THE BINOMIAL THEOREM ENGRAVEN ON NEWTON'S MONUMENT?

BY PROFESSOR FLORIAN CAJORI.

Moritz Cantor, in a recently published part of his admirable work, *Vorlesungen über Geschichte der Mathematik*, speaks of the "Binomialreihe, welcher man 1727 bei Newtons Tode . . . eine solche Wichtigkeit beilegte, dass man sie aus allen anderen Leistungen des Vestorbenen auswählte, um als Inschrift auf seinen Grabstein in der Westminsterabtei eingemeisselt zu werden" (vol. III, p. 65). In my own brief *History of Mathematics*, p. 218, I say that it is *not* true that the binomial theorem is engraved on Newton's monument.

The above passage in Cantor's work leads us to re-examine the subject The first step naturally is to question the monument, but we do so in vain. Says Dr. Granville, the present Dean of Westminster, in a letter to the writer: "In front of the half-recumbent figure of Sir Isaac Newton are two winged youths holding a small scroll in which are still, according to Neale, some mathematical figures. . . . I fear that the figures on the small marble scroll are *quite obliterated*. A mathemat-