Rosace.

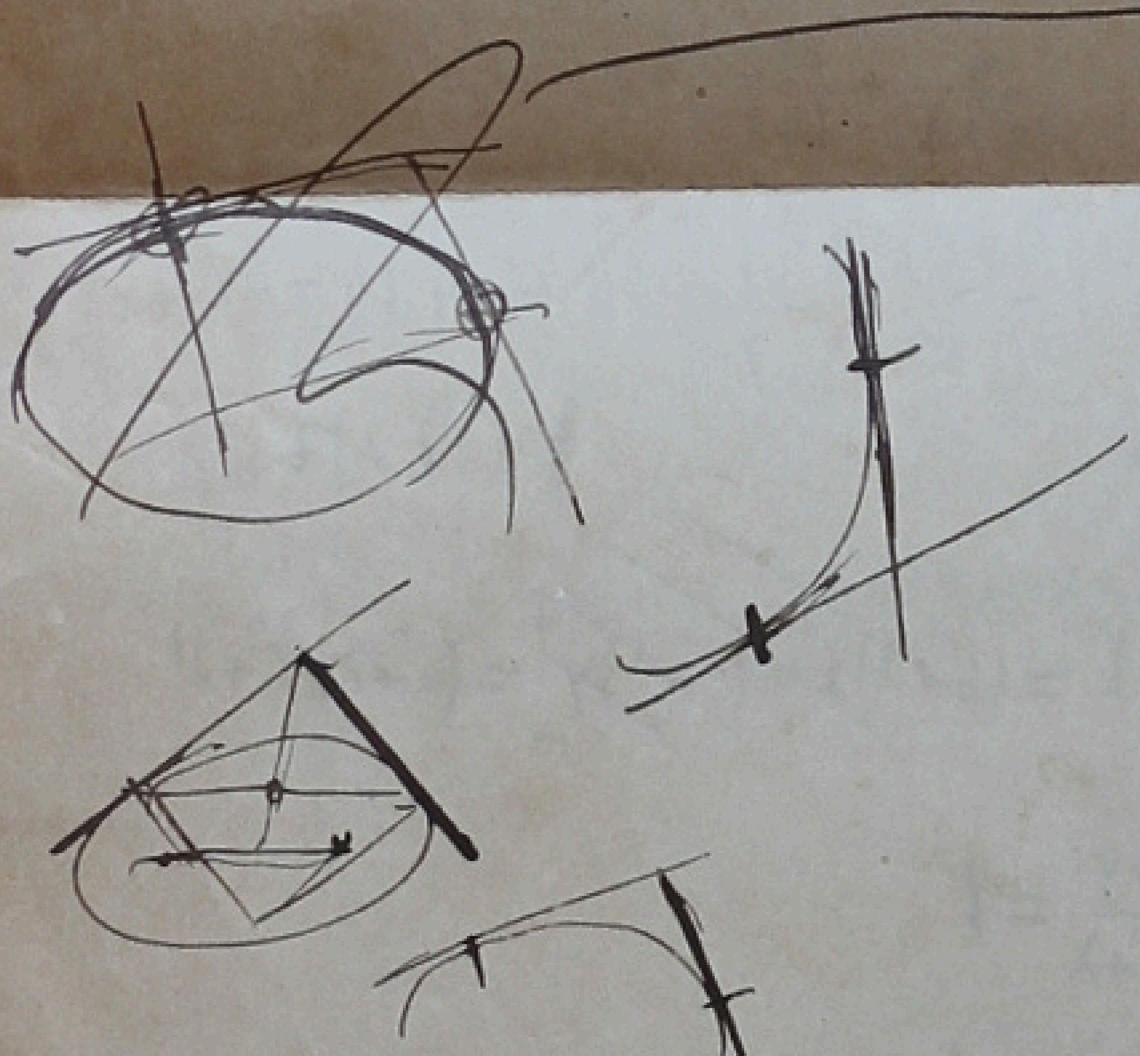
~~Je viens de trouver le ... point ... qui ... de ...~~
~~Tout on démontre de l'ancien le ... ... du théorème ... qui ...~~
Je ~~voudrais~~ ... géométrique du théorème ... en particulier ... à ...
~~me hasarder~~ à ... semble ... le théorème de Graves
~~Soit N~~ développée de ...

Je viens de trouver que, si N est le point de rencontre des normales à une courbe plane, aux points P et Q, et si ce point se déplace sur la courbe de manière que NP–NQ reste constante, le lieu de N a un centre ... de ..., avec ... P et Q. Je vois ... foyers sont les centres de courbure de la ... de ce théorème. 2° ~~...~~ ...

... : 1° ~~...~~ ... géométrique de ce théorème ... l'application du théorème qui du théorème de Graves (... — — —) ... ~~aux développements~~ à une développée ~~...~~ d'ellipse

Rosace

17 agosto, 1900.



17 Ago

I am very glad ~~that I~~ — but I am sorry, very sorry, non poter continuare (not to be able to continue?) to write ~~you~~ in English, because ~~I~~ I fear ~~some careless mistake~~

$1 - \frac{1}{2}$

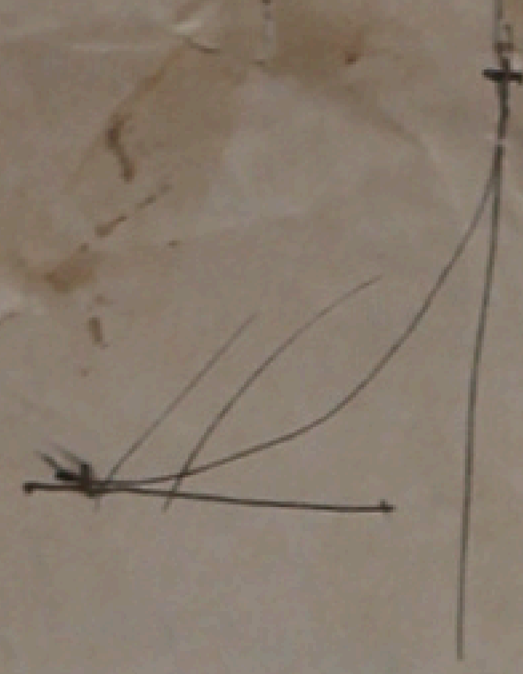
$$p' = \cancel{(1+\sigma')\sin\theta} - 1 + \frac{y}{\rho} - \cancel{(1+\sigma')\cos\theta} + \frac{x}{\rho}\cot\theta + \frac{y}{\sin^2\theta}\left[\frac{1+\sigma'}{\rho_1} - \frac{1}{\rho}\right]$$

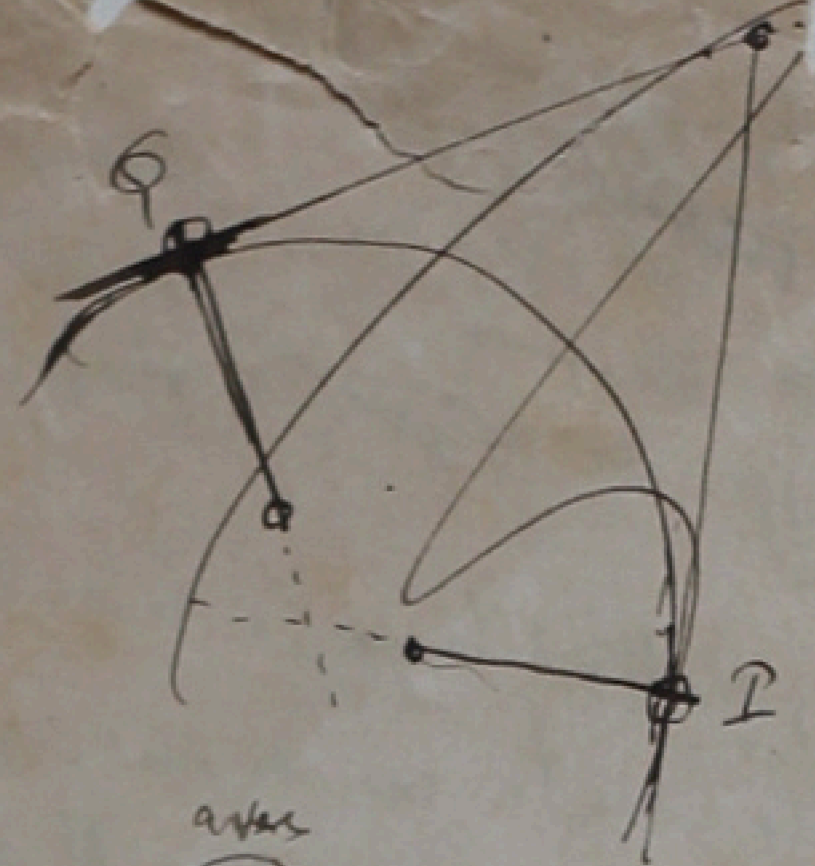
$$p' = -1 - \cancel{\frac{y\cot\theta}{\rho}} + \cancel{\frac{x}{\rho}\cot\theta} + \frac{1+\sigma'}{\rho_1 \sin\theta}\, q + \cot\theta\, \frac{p}{\rho}$$

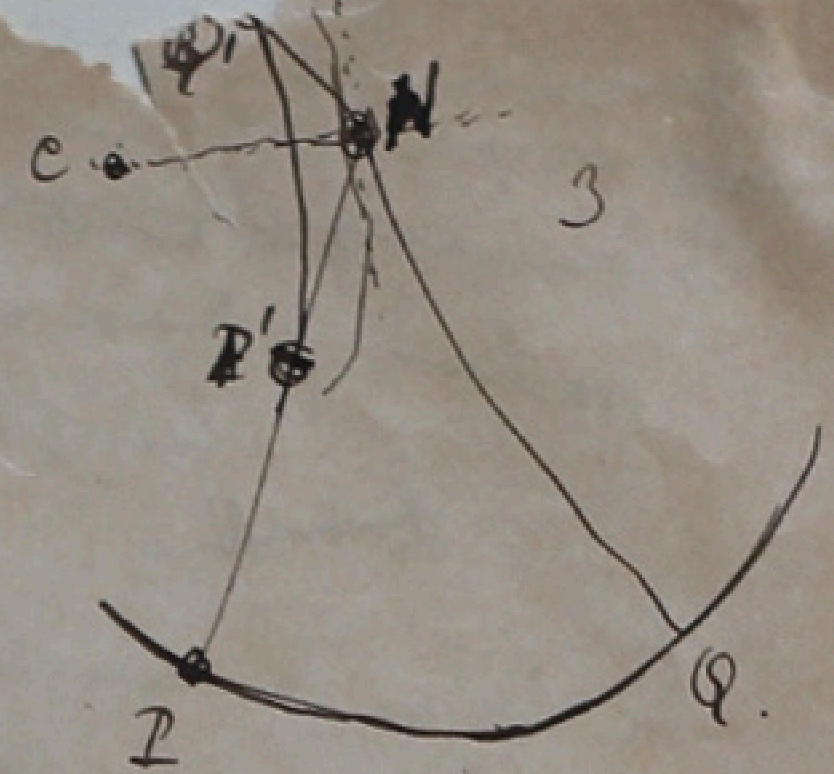
$$\begin{cases} p' = -1 + \dfrac{p}{\rho}\cot\theta + \dfrac{q}{\rho_1}\dfrac{1+\sigma'}{\sin\theta} \\ q' = (1+\sigma')\left(1 - \dfrac{q}{\rho_1}\cot\theta\right) - \dfrac{p}{\rho\sin\theta} \end{cases}$$

$$q' = \frac{1}{\sin\theta}\left[(1+\sigma')\sin\theta - \frac{x}{\rho}\right] - \frac{y\cos\theta}{\sin^2\theta}\left[\frac{1+\sigma'}{\rho_1} - \frac{1}{\rho}\right]$$

$$q' = 1+\sigma' - \frac{p}{\rho\sin\theta} - \frac{1+\sigma'}{\rho_1}\, q\cot\theta$$



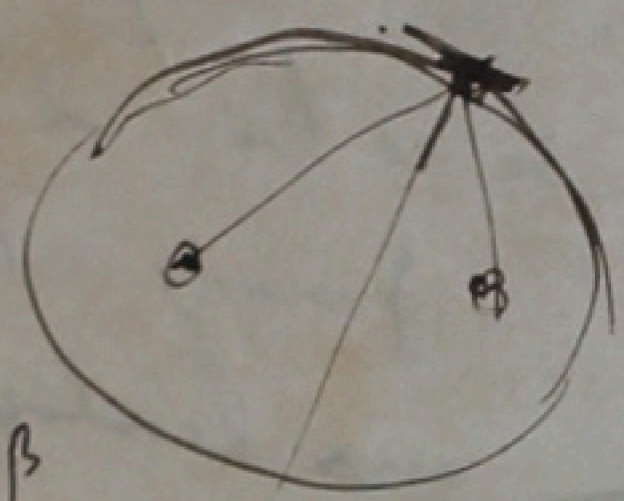


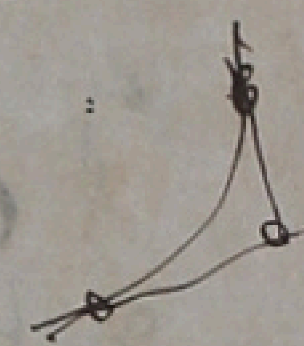


~~$QN - QN = a$~~

$IN - QN = \text{constant}$

~~$QN - IN = a$~~

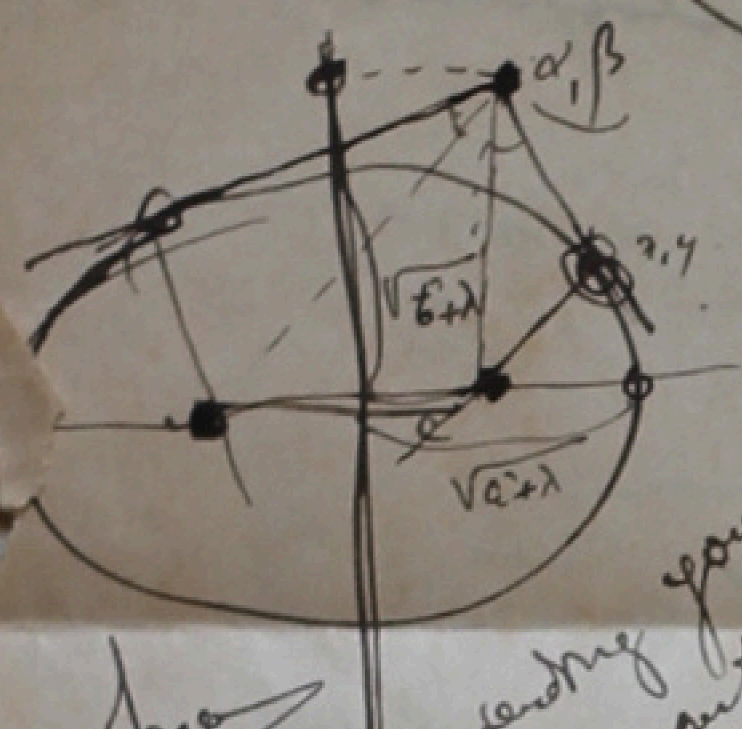




$IN = II' + I'N$

$QN = QQ' + Q'N$

$IN - QN = I'N + Q'N - \text{arc}\; I'Q'$



$a^2 - b^2 = c^2$

$(a^2+\lambda) - (b^2+\lambda) = c^2$

$$\frac{x^2}{a^2+\lambda} + \frac{y^2}{b^2+\lambda} = 1$$

$$\frac{x}{a^2+\lambda} + \frac{yy'}{b^2+\lambda} = 0$$

$$y' = -\frac{b^2+\lambda}{a^2+\lambda}\cdot\frac{x}{y}$$

I will take pleasure in sending you to-morrow the article in reprint

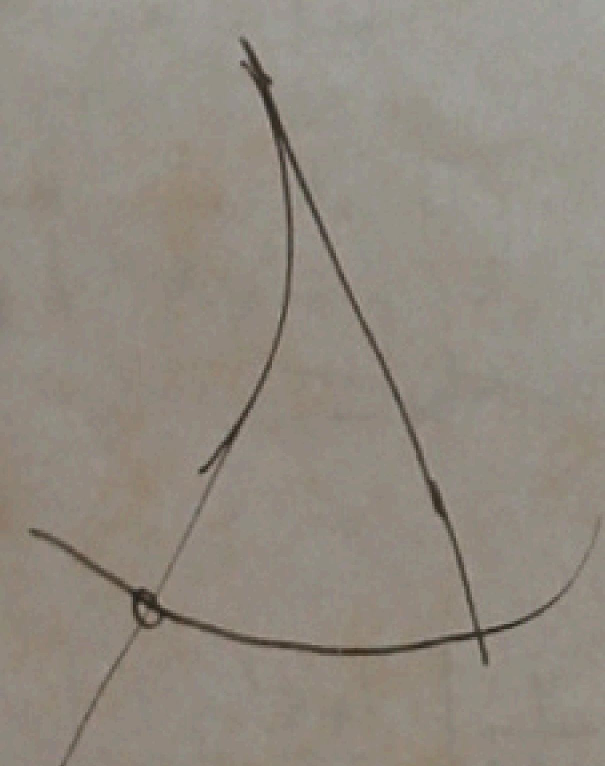
$$Y - y + (X - x)\frac{(b^2+\lambda)x}{(a^2+\lambda)y} = 0$$

$$(b^2+\lambda)xX + (a^2+\lambda)yY = \cancel{(b^2+\lambda)x^2 + (a^2+\lambda)y^2} = (a^2+\lambda)(b^2+\lambda)$$

$-\alpha y(y^2 - \beta y) + c^2(-\alpha y + \alpha\beta)$

$y = \beta$

$$\begin{cases} \dfrac{\alpha x}{a^2+\lambda} + \dfrac{\beta y}{b^2+\lambda} = 1 \\[2mm] \dfrac{x^2}{a^2+\lambda} + \dfrac{y^2}{b^2+\lambda} = 1 \end{cases}$$



$$\frac{\alpha x - x^2}{a^2+\lambda} + \frac{\beta y - y^2}{b^2+\lambda} = 0$$

$$\frac{b^2+\lambda}{a^2+\lambda} = \frac{\beta y - y^2}{x^2 - \alpha x}$$

$$\frac{a^2+\lambda}{\cancel{c^2}} = \frac{(x^2 - \alpha x)c^2}{x^2+y^2-\alpha x-\beta y}$$

$$b^2+\lambda = \frac{(\beta y - y^2)c^2}{\ldots}$$

$$\frac{\alpha \cancel{x}}{(x^2-\alpha x)\cancel{x}} + \frac{\beta \cancel{y}}{(\beta y - y^2)\cancel{y}} = \frac{c^2}{x^2+y^2-\alpha x-\beta y} \quad \Big|\; \lambda$$

$$\frac{\alpha(\beta - y) + \beta(x - \alpha)}{(x-\alpha)(\beta-y)} = \frac{c^2}{x^2+y^2-\alpha x-\beta y}$$

$x - \alpha$

$y - \beta$

$$(\beta x - \alpha y)(x^2+y^2-\alpha x-\beta y) + c^2[xy - \alpha y - \beta x + \alpha\beta] = 0$$

$$\cancel{x^2(x^2-\alpha x) = c^2(\ldots)} \qquad [\beta(x+\alpha) - \alpha(y+\beta)][(x+\alpha)^2+(y+\beta)^2-\alpha(x+\alpha)-\beta(y+\beta)] + c^2xy = 0$$