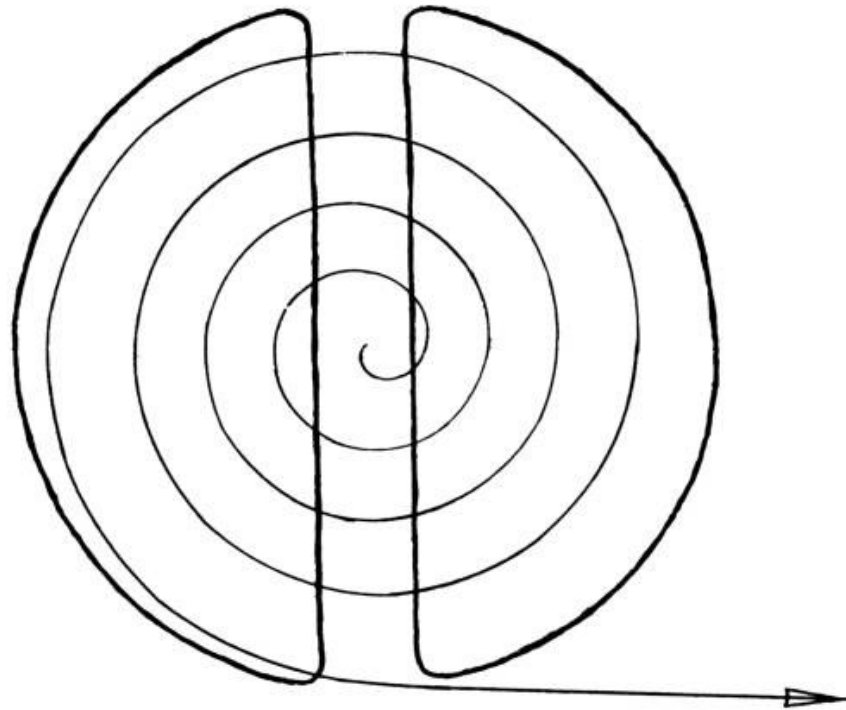


# “The Cyclotron, As Seen By”

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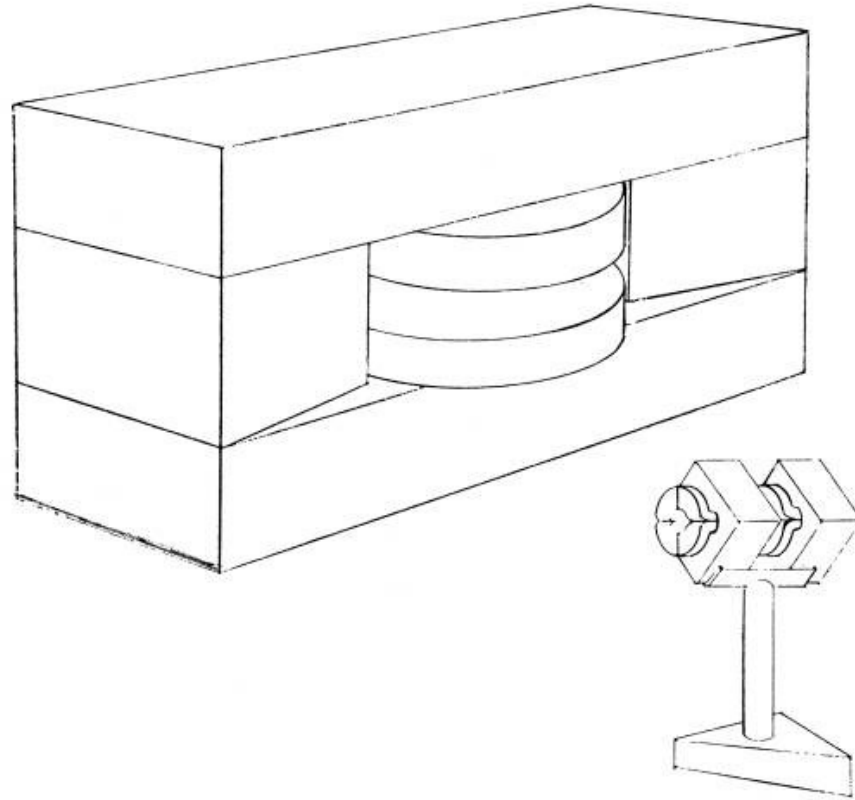


*... the inventor*

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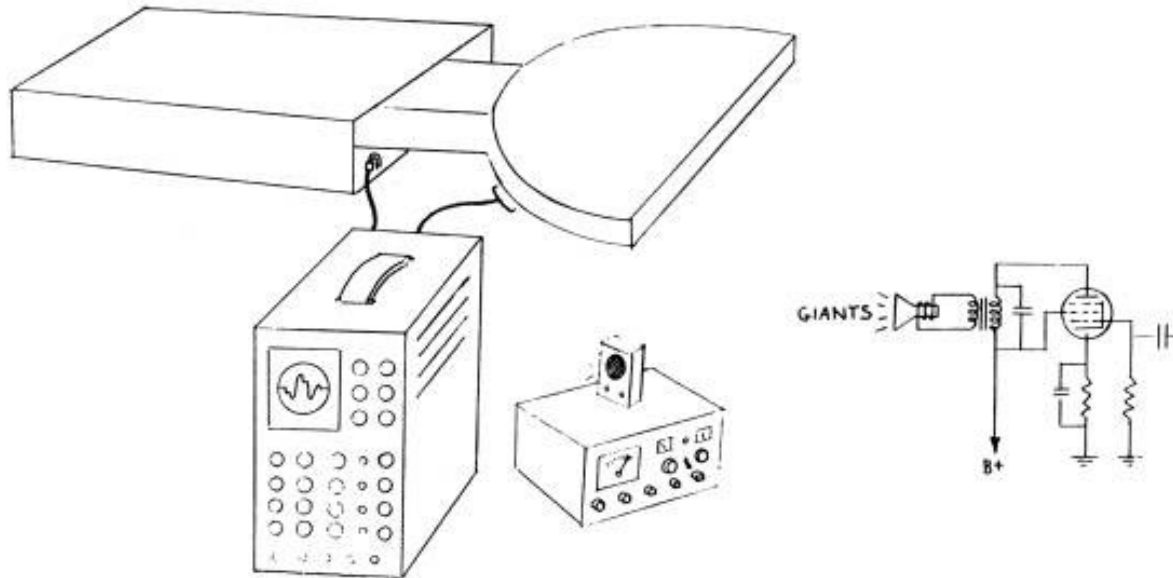


*... the mechanical engineer*

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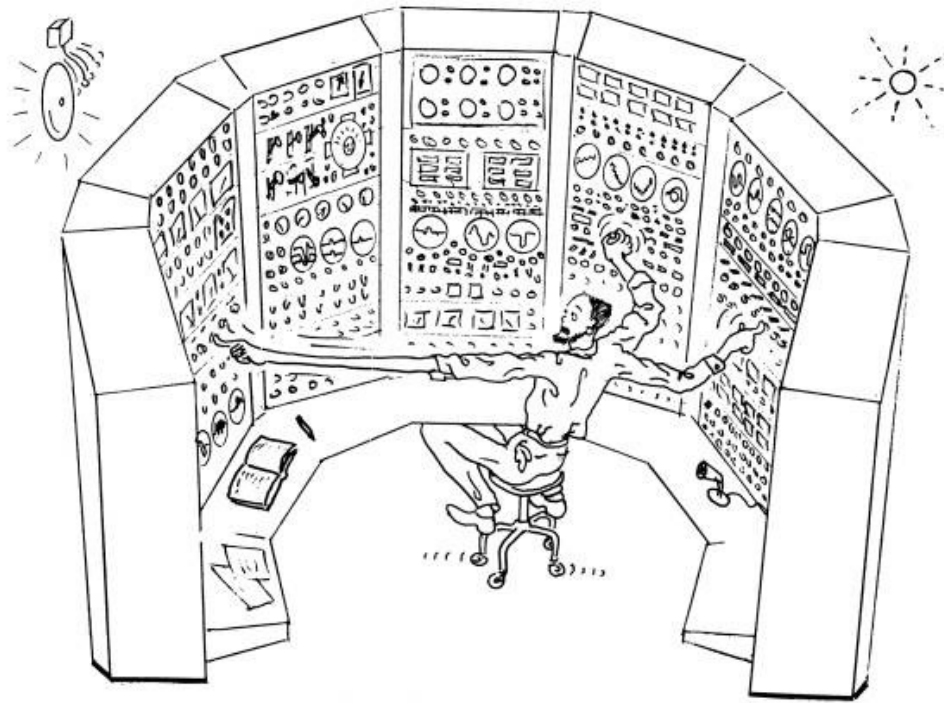
*... the electrical engineer*

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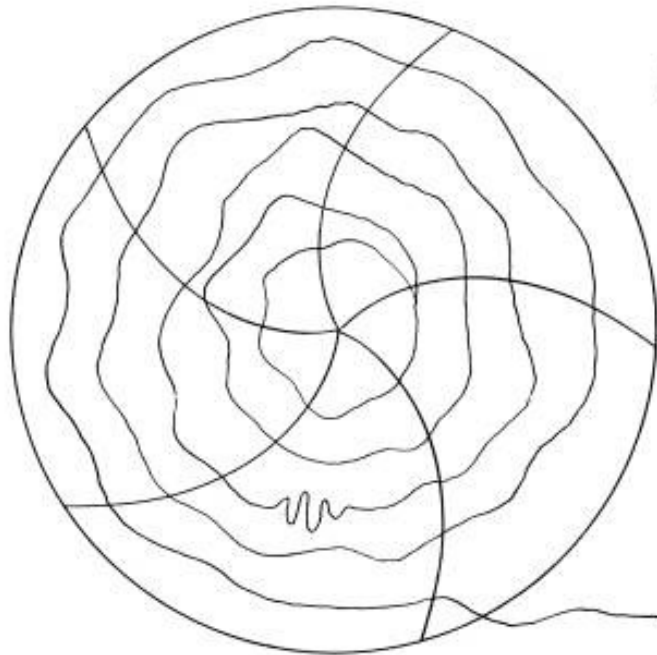


*... the operator*

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$$r = r_0 \left[ 1 + \left( \frac{f r \omega}{c} \right) \cos(3\theta + \delta_0 + \delta_1 r) + \right. \\ \left. \left( \frac{f r \omega}{c} \right)^2 \cos(5\theta + \delta_2 - \delta_3 r^2) + \right. \\ \left. \left( \frac{f r \omega}{c} \right)^3 \cos(7\theta + \delta_4 - \delta_5 r^3) + \right. \\ \left. \dots \right] \times \left\{ \frac{e^{1/5} r^2 \ln Z}{1 + \left( \frac{a}{4} \right)^{1/4}} \right\}$$

$$\frac{d\theta}{dt} = \left[ \sin(\omega t - k\phi) - \sin k\phi - \frac{3}{5} f f_1 f_2 f_3 f'_3 \right] \frac{e V_0}{2\pi r \omega}$$

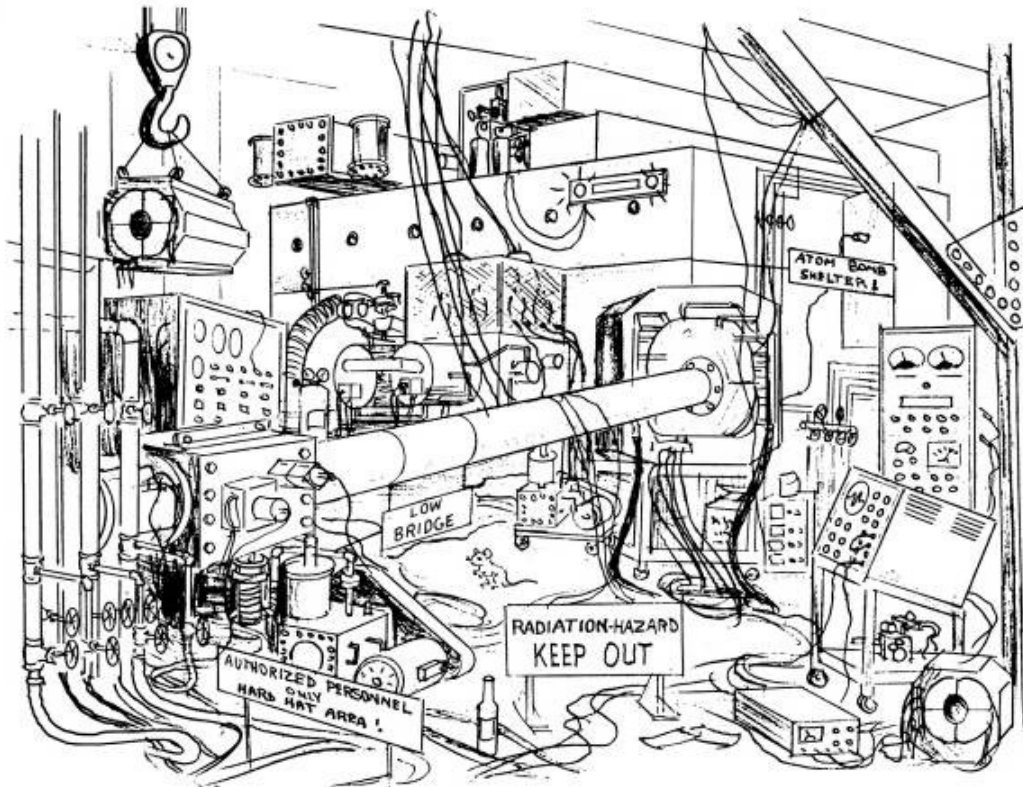
*... the theoretical physicist*

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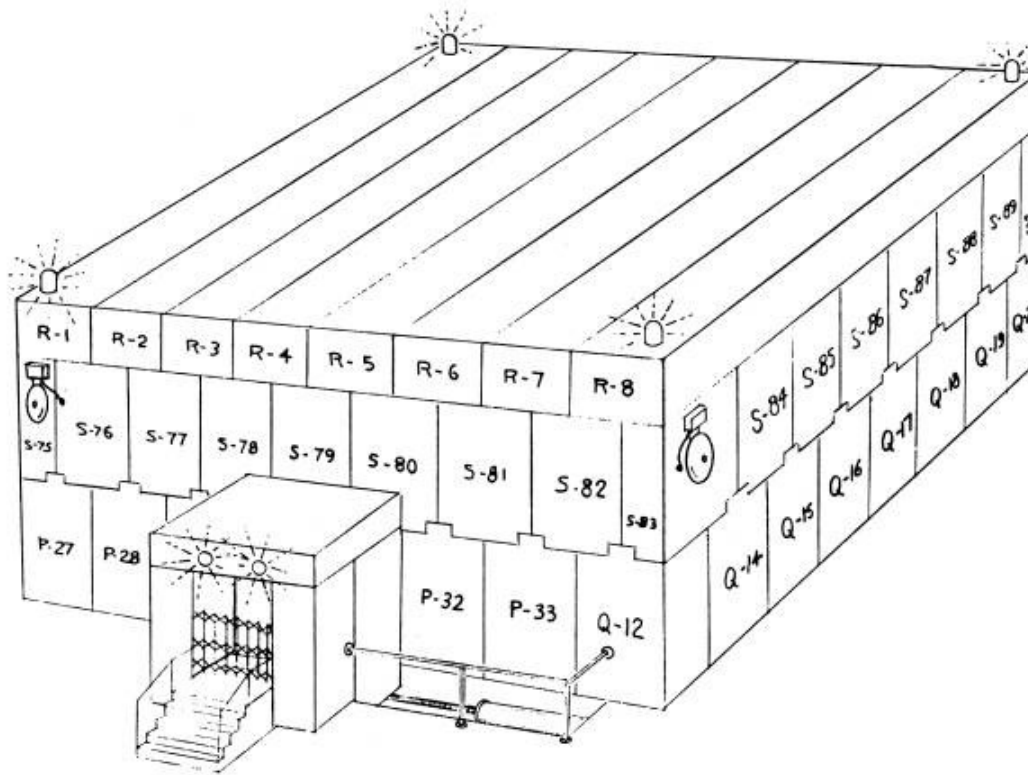
*... the visitor*

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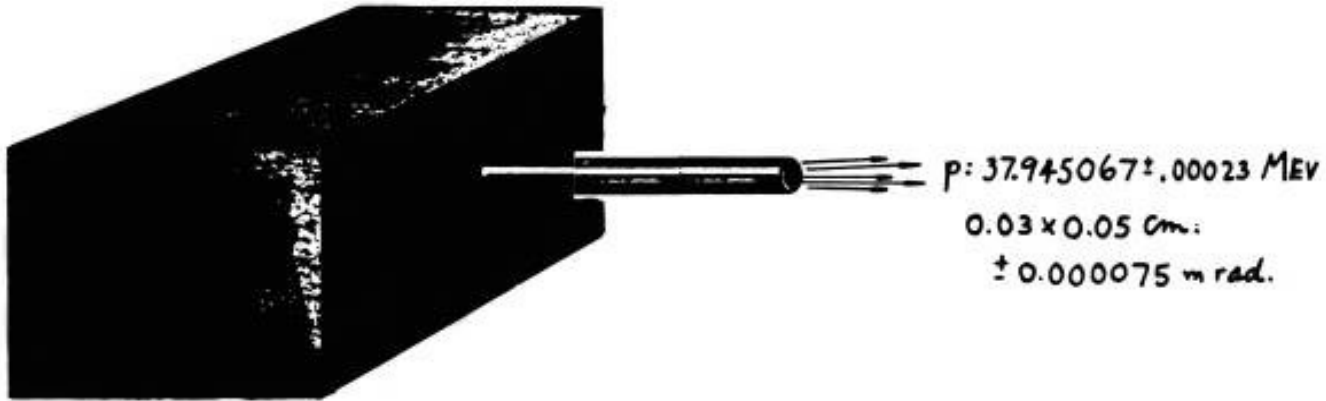
*... the health physicist*

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*... the experimental physicist*

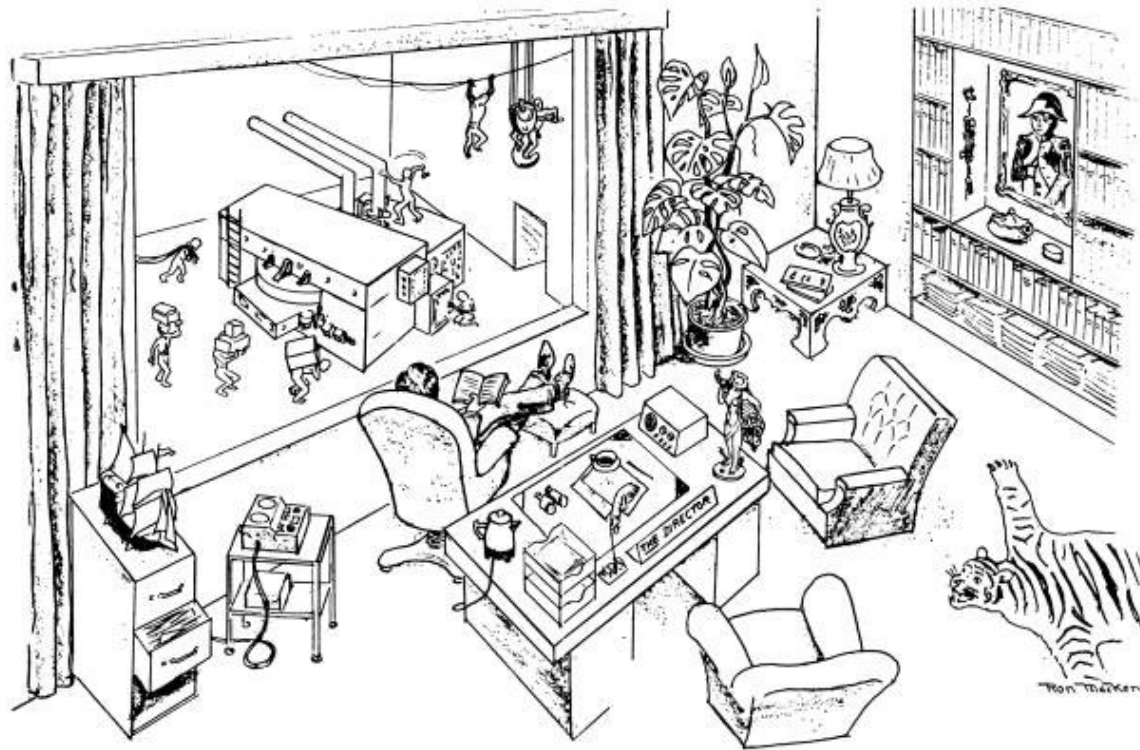
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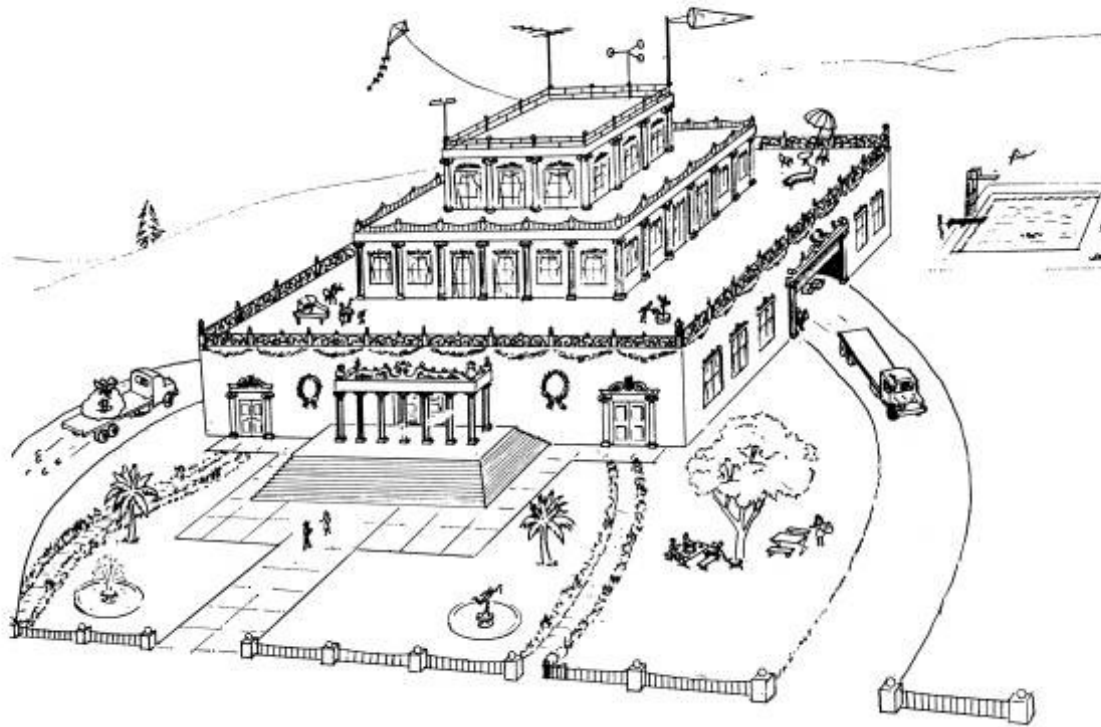
*... the laboratory director*

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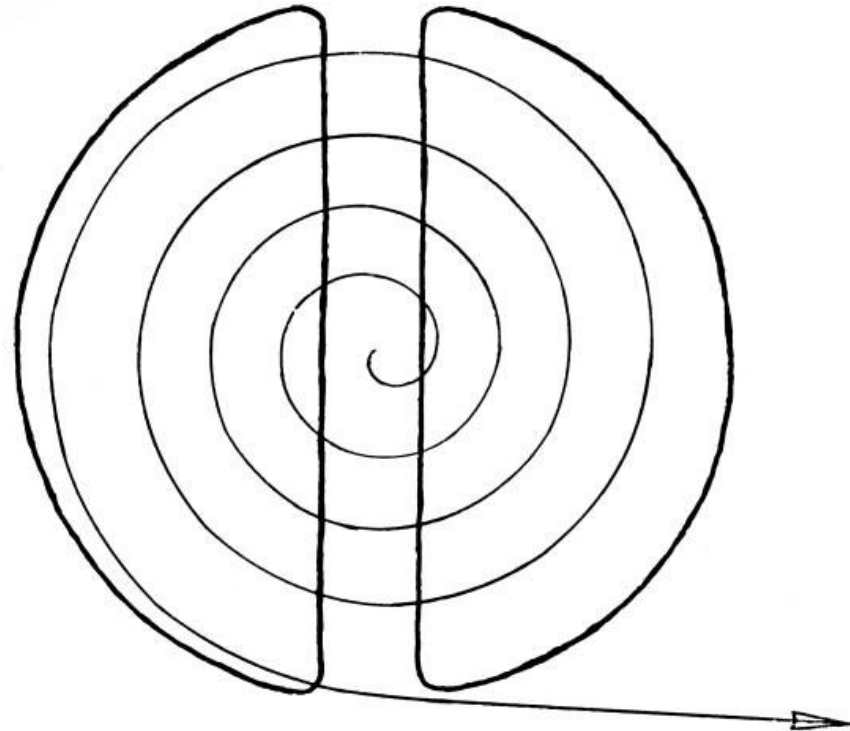
*... the governmental funding agency*

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*... the student*

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Special thanks to Peter Seidl (LBNL) for providing electronic versions of cartoons