

[0012]

Namely, the formula indicated in [Math.9] can be expressed as follows ;

[Math.11]

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$$E = \sum_{K=1}^t m_K v_K \quad (1 \leq K \leq t)$$
$$= \sum_{K=1}^t m_1 v_1 \left(1 - t_K / t \right)^2$$

This formula is the multiplication of initial mass m_1 , initial velocity v_1 and $(1 - t_K / t)^2$, namely, the square of the ratio of $t - t_K$; (time the substance has
10 passed) subtracted from (total time the substance passes) to t . This indicates that the right side of an equation in [Math.9] substituted by [Math.7] and [Math.8] , namely, the product-sum of mass and velocity in their value of gradual diminution at each moment of time equals the product of the initial mass and velocity, yet free from diminution, and the factor of time which
15 relates to the remaining time at time x . What it means is that this formula indicates the total sum of the remaining energy retained in the substance at the time of x , namely, the potential energy from time 1 to t . (cf. [Fig.5]) Further, the reason why the time-factor is squared is because the time-factor is expressed in two-dimension, or as a plane. This is the plane which possesses
20 the nature of time. As in [0009], by multiplying the velocity expressed in one-dimensional line, steric space with distance appears. In addition, inside the space, it is all at mass m . In other words, this space also is the track of energy.

[0013]

25 However, there's yet no element of the impact of gravity g integrated in the formula attained in [0012] [Math.11] . The formula above in [0011]