Abstract

I have contrived an Apparatus producing a great deal of compressed air. (See Fig.1, Fig.2) The mass of Float is much larger than the mass of Weight, so the Float usually floats on the sea and the Weight is always in the air. As the sea surface gets up-and-down, the Wheel reciprocates and the Pumps compress air. The compressed air is pressed into the same Air Receiver from a pair of Piston-pumps.

By the way, it is desired that the Float keeps up big vibration in order to produce the compressed air efficiency. For this purpose, the value of $\omega_2^2 - \omega^2$ (See 3.1 formulas (1), (8)) between 0.2 and 0.25 is satisfactory. Then I design a right Apparatus and simulate the movement of the Float in the case of wave height 1 (m) and wave period 7 (sec.). This example is shown in Chapter 4. (See Fig.4, Table 1)

On the other hand, the pressure of the compressed air is related to the radius of cylinders in the piston-pumps. In chapter 5.1 discuss how the movement of the Float produces 8000m$^3$ compressed air of 2 atm (radius 0.2m) or 8 atm (radius 0.08m). These are shown by Figures, a Graph and Tables. (See Fig.5, 6, 7 & Table 1, 2)