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This work concerns to a problem on monitoring of nonlinear waves on water surface where a water surface wave field is existing. As for solitary wave as a nonlinear wave, there has been developed after formulation and reduction under some given specific condition of a uniform bathymetry. It is well known that this solitary wave can be reduced after a formulation as layleigh noted (which is found in "Hydrodynamics" written by Lamb inn 1879). This can be found in the Lamb's version of 1932. Lamb noted about height of solitary wave is expresssed by a hyperbolic function of water depth with a uniform bathymetry on a horizontal flat. The author has had to work for reproducing this kind of solitary wave in a water basin where a periodical water surface wave field can be generated even the water in the basin is a viscous fluid. What is the point in this work, is that a solitary wave can be reproduced even in a viscous water of an existing water wave field when several conditions are exactly established. That is, the interested water basin has a very gentle sloping of the bed. The water surface wave field is formed to crossing a couple of boundary with slit. The first slit acts to induce a Fresnel-like diffraction of the wave train. The second slit acts to relese wave energy behind the second barrier parallel to the first first barrier. A coupleof solid boundary arranged normal to the second boundary to locateing a symmetric position on both sidess of the slit. At each of the corners formed in front of the second barrier, the incident wave acts to grow its wave height as if it is following to Green's law for a linear simple harmonic wave. These waves on both sides of the corners are established by the incident wave and the refracted wave and start to form a coupled translational motion along the second boundary between the two corners to form a couple of solitary wave train just in front of the second boundary. The couple of solitary wave train has been identified them to be the theoretically supported solitary wave by Nakamura (1975) referring to McCowan's model (1894).