It is well known that to interpret the change in Fermi surface of metals with pressure, the main difficulty occurs while determining E_f at different pressures. Any theoretical model of band structure allows to calculate the electron energy at point Kq in the symmetrical direction of the Brillouim band much more accurately and thousands times quicker than that of E_f. Therefore the shift measurement with a high accuracy under pressure of the oscillating picture permits, within the limits of a theoretical model, to determine dependence $E_f = E_f(p)$ which provides an unambiguous interpretation of experiments on pressure influence upon Fermi surface of metals. Nonlinearities in dependence $\varrho = \varrho(p)$ may signal the presence of phase transisions.

The samples being covered with a coat of SiO with the thickness of I500 ÷ 2000 Å resulted in the shift of oscillations up to 2o meV which can be connected with a change of the boundary potential[I,3].

Unfortunately we have not observed the predicted in Ref.[I] oscillation corresponding to Kq(2/3, 2/3, 2/3). It is very probable that this fact may be explained by the increase of standing wave damping for the energies much lower than the Fermi level.

For many junctions complicated oscillations (Fig.I) have been observed which can be interpreted as interference of oscillation I"(U) from the film where it is textured in various crystallographic directions. By curves like those in Fig.I band energy values of Pb films at three points of the Brillouin band (in respect to the Fermi level) are determined as follows:

E(I/2, I/2, I/2)=800 ÷ 820 meV,
E(I, I, 0)=540 ÷ 580 meV,
E(I, 0, 0)=880 ÷ 920 meV.

The pressure up to 6 kbar being applied resulted in the shift of the interference pictures (Fig.2).

For a number of samples there was found the influence upon the observed picture of oscillations of the 60-70 kOe magnetic field parallel to the film plane (Fig.3). This effect