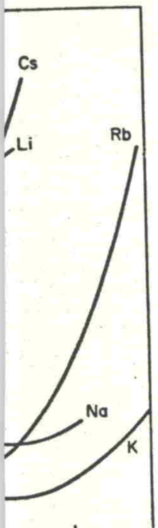
sults in the form of relative
alkali metals at room tem-
ves in this Figure is that in
edly with pressure and only
By contrast the resistivity
low pressures and then rises
t all pressures in this range.



tals at 0° C. The curves show rela-

these curves is as follows. No
and temperature range under
that the mean-square ampli-
monotonically with increasing
his pressure range. The lattice
nnot account for the minima
of the Li curve. These effects
hange in K with volume. In
ive values of K versus relative
n Fig. 24. (In order to obtain
lume has been estimated from
is clear that the main features
urves.

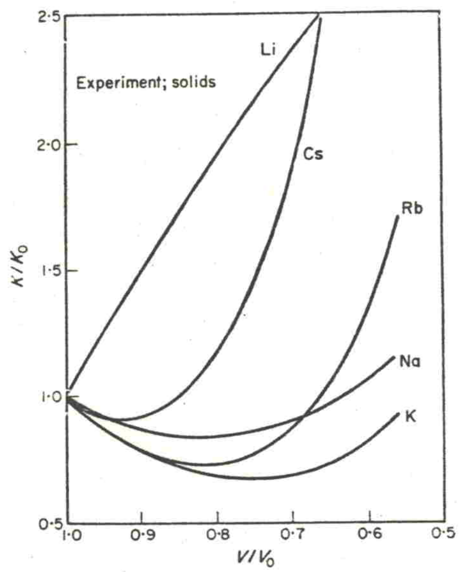


FIG. 24. K versus volume in the alkali metals deduced from the data in Fig. 23.

3. *Comparison with Liquid Metals*

The effect of pressure on the alkali metals in the liquid state has not been studied over such a wide range as for the solids. Bridgman has however made some measurements on the liquids. Of Cs he writes (Bridgman, 1949, p. 282): "Because of the location of the melting curve it was not possible to measure the resistance of the liquid metal at pressures high enough to reach the minimum [in the ϱ–P curve], but simple extrapolation indicates that without much question the liquid will show the effect as well as the solid at temperatures above perhaps 140°, and there seems no reason to think that the mechanism responsible for the minimum has any essential connection with the lattice structure."

In Li, moreover, Bridgman finds that, as in the solid, the pressure coefficient of resistivity of the liquid is *positive* (in magnitude it is about 33% greater than that of the solid). In the other metals Bridgman finds negative pressure coefficients of resistivity of magnitude similar to those found in the corresponding solids.

To sum up what we know about the volume dependence of K: we know that: (1) at atmospheric pressure the sign of $\partial \ln K/\partial \ln V$ is different in different metals; (2) for the monovalent metals the sign of