

TABLE 2.

Material	$a, [1]$ $10^7 \text{cm}^2/\text{kg}$	$b, [1]$ 10^{11} cm^4/kg^2	$E_0, [3]$ 10^{-6} kg/cm^2	$G_0 [3]$ 10^{-5} kg/cm^2	$K_0 10^{-8}$ kg/cm^2	$\frac{1}{G_0} \frac{dG[6]}{dp}$ $10^6 \text{cm}^2/\text{kg}$	$\frac{1}{K_0} \frac{dK}{dp}$ $10^6 \text{cm}^2/\text{kg}$
Aluminium	13.40	3.44	0.72	2.67	0.74	7.61	3.74
Copper	7.16	1.04	1.30	4.77	1.39	2.71	2.18
Steel	5.83	0.80	2.13	8.26	1.70	2.36	2.11

is shown in Table 1. As will be seen from this table, in the range of pressures up to 4,000 kg/cm² the experimental data agree satisfactorily with the results obtained according to equation (2). The lack of agreement of the data for copper is evidently due to the fact that the modulus of normal elasticity of copper depends very extensively on the conditions of heat treatment of the specimens, that we were not able to reproduce accurately in our experiment owing to the absence of the necessary information in the literature [3-6].

Translated by R. Hardbottle

REFERENCES

1. P. Bridgman, *Recent work in the field of high pressures*. Foreign Literature Publishing, (1948).
2. P. Bridgman, *Proc. Am. Acad. Arts Sci.*, 63, No. 10: 401, (1929).
3. F. Birch, *J. Appl. Phys.*, 8: 129, (1937).
4. D. Lazarus, *Phys. Rev.*, 76, No. 4: 545, (1949).
5. D. Hughes and J. Kennel, *J. Appl. Phys.*, 26, No. 11: (1955).
6. F. Birch, *J. Appl. Phys.*, 9: 279, (1938).
7. A. Smith, *Phil. Mag.*, 44, No. 352: 453, (1953).