between 1 and 2. Thus, c for argon is equal to 1.16 /11/, for helium 1.554 /12/, and for nitrogen 1.775 /11/. At c = 1 the melting temperature should rise linearly with pressure. As c increases the melting curves T - P deviate more and more from a straight line in the direction of the pressure axis. Simon /13/ attempted to apply equation (1) to the melting of alkaline metals, making use of the data of Bridgman /1/. It turned out that for these metals the quantity c is from 3.8 to 4.8. Moreover, all attempts to compute the magnitude of c on the basis of various equations of state of liquids and solid bodies (cf. /14-16/) led to $1 < c < 1.5$. Apparently, Simon's equation may only be considered empirical for the case of the melting of metals.

Figure 3. The dependence of the melting temperature of copper on pressure. The points represent the results of individual tests

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A computation indicates that in the case of the melting of lead and tin /4/ the values of c are approximately equal to 2.5 and 4.0 respectively; it must be noted, however, that the quantities α and c are extremely sensitive to the smallest variations in the melting curve, and therefore the accuracy of determining these quantities from melting curves is not very great. The melting curve for tallium also bends toward the pressure axis /5/. In the case of of copper and aluminum, and also cadmium and zinc /5/, the dependence of the melting temperature on pressure is expressed by a straight line within the accuracy of the measurements.

It may be hoped that further accumulation of experimental data on the melting of metals under pressure will make it possible to give a theoretical explanation of the observed regularities and relate them to the structural characterisitics of the metals.