Here it should be noted that CODEGONE[7] shows, in complete disagreement with this work, mercury to follow closely the van der Waals liquids (see *loc. cit.*,[7] p. 50 his Fig. 1); he shows $(Hg)_{liq.}$ (identified as ┌○) to have at $T_{red.} \simeq 0{\cdot}36$ a $\eta_{red.} \simeq 27$. Our Table 1a and Fig. 1 show that $\eta_{red.} = 2{\cdot}05$ at $T_{red.} = 0{\cdot}36$, i.e., is 13x smaller than CODEGONE's value. Similarly, in his Fig. 4 (*loc. cit.*, p. 50) he shows $\nu_{red.}$ of liquid mercury to equal 10 at $T_{red.} \simeq 0{\cdot}40$, not far from the curve of van der Waals liquids,

TABLE 5b.—REDUCED KINEMATIC VISCOSITY OF WATER, $\nu^{red.}_{liq.}$, AND SATURATED STEAM, $\nu^{red.}_{sat.\,vap.}$.

t (°C)	$T_{red.}$	$\nu^{red.}_{liq.}$	$\nu^{red.}_{sat.\,vap.}$
−9·30	$0{\cdot}407_7$	20·110	
0 = m.p.	$0{\cdot}422_1$	14·110	
20	$0{\cdot}453_0$	7·904	
40	$0{\cdot}483_8$	5·183	
60	$0{\cdot}514_7$	3·747	
80	$0{\cdot}545_6$	2·883	
100	0·5765	2·325	
150	0·6538	1·5906	46·378
200	0·7310	1·2598	17·402
250	0·8083	$1{\cdot}078_7$	$7{\cdot}850_4$
300	0·8855	$1{\cdot}007_9$	$3{\cdot}929_1$
320	$0{\cdot}916_4$	$1{\cdot}007_9$	$2{\cdot}984_3$
340	$0{\cdot}947_3$	1·0000	2·2520
360	$0{\cdot}978_2$	1·0000	1·6380
370	0·9937	1·0000	1·2913
374·15 = c.p.	1·000	1·0000	1·0000

TABLE 6.—ABSOLUTE VALUES OF CRITICAL VISCOSITIES AND CRITICAL TEMPERATURES

	Hg	Na	K	Ar	H_2O
$T_{crit.}$ °C	1460°	2530°	2180°	−122·46°	374·15°
°K	1733°	2800°	2450°	150·69°	647·31°
$\eta_{crit.}$ (mP)	4·25	0·69	0·52	0·40	0·413
$\nu_{crit.}$ (mS)	0·841	3·94	3·06	0·753	1·270

whereas in our Fig. 2, $\nu_{red.} = 0{\cdot}58$ @ $T_{red.} = 0{\cdot}40$, i.e., has a 17× smaller value!

More drastic are the differences in *reduced kinematic viscosities* as can be seen in Fig. 2; the $\nu_{red.}$ of *all three metallic liquids* decrease *below* the critical viscosity for most of the liquid range and only rise above the critical viscosity in the vicinity of the melting points. In contrast, the liquid argon curves *dips* for only a few degrees below the critical temperature and then rises abruptly like the curve for liquid water.

A few words regarding *fluidity*, ϕ, may be in order; it is defined as $\phi = 1/\eta$ (and measured in reciprocal poises or rhes) and reduced fluidity, $\phi_{red.}, = 1/\eta_{red.}$. A plot of $\phi_{red.}$ v. $T_{red.}$ on a logarithmic plot is a *mirror image* reflected by a plane through the $\eta_{crit.}$ line of the curve of $\eta_{red.}$ v. $T_{red.}$ (since $\log \phi = -\log \eta$) and does *not disclose* any new relationships not disclosed in Fig. 1.

The *saturated vapours* of metals, as Fig. 2 shows, have $\nu_{red.}$, very close to the ν_{red}