### XIV.—*On Crystallised Olivine from Slag.*

BY DR. CHARLES O. TRECHMANN.

I HAVE recently measured one of the crystals of the slag described by by Mr. A. E. Arnold, in vol. III, p. 114 of the Magazine.

Observed forms :—

Brooke and Miller. Mineralogy, 1852.	Naumann. Elemente de Min.
$a = 100$	$T = \infty P \breve{\infty}$
$n = 120$	$n = \infty P$
$k = 101$	$k = 2P \breve{\infty}$

Angles (normals)	Measured Trechmann.	Fayalite Miller.	Olivine
a : n	658 9'	65° 12'	65° 1
n : n'	49° 42'	49° 36'	49° 58'
k : k'	98° 32'	98° 22'	99° 7'
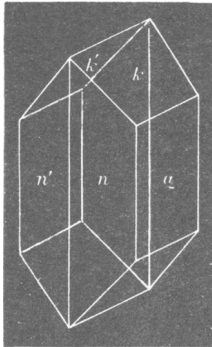
The angles are therefore almost identical with those derived by Miller *(Trans. Phil. Soc., Cambridge, III; Brooke and Miller, Mineralogy,* 1852, *p.* 319) from crystals found in refinery cinder, and the slags of copper furnaces, &c,—having the composition of Fayalite, *viz.*—2 FeO, SiO_2.

Making allowance for imperfection of the particular crystal measured, they seem to be intermediate between those of olivine and fayalite