XXIII.—*Note on Oxalate of Silver.*

By J. L. W. THUDICHUM and J. ALFRED WANKLYN.

IN Gmelin's Handbook (see Watts's Translation) the statement occurs that oxalate of silver retains most obstinately 2 per cent. of water, and the impression is conveyed that this compound cannot be obtained in a state of dryness.

Having recently had occasion to prepare some oxalate of

silver, we have examined this question, and have arrived at the conclusion that there is no particular difficulty in drying oxalate of silver.

The salt was obtained by double decomposition of nitrate of silver and oxalate of ammonia. It was well washed and dried over sulphuric acid in vacuo: and ultimately at 110° C. (We do not think that the drying at 110° C. was absolutely necessary).

I. 0.9087 grm. burnt with oxide of copper (without extra oxygen in the free state) gave 0.0085 grm. H_2O and 0.2565 grm. of CO_2 . H per cent. = 0.10; C per cent. = 7.70.

II. 1.6636 grm. was dissolved in nitric acid, and precipitated by means of hydrochloric acid, and gave 1.5675 grm. of chloride of silver. Ag per cent. = 70.92.

Oxalate of silver requires:

	Calculated.		Found.	
			I.	II.
C_2	24	7.89	7.70	—
Ag_2	216	71.05	—	70.92
O_4	64	21.06	—	—
	<hr/>	<hr/>		
	304	100.00		

From which we see that the silver falls only 0.13 per cent. below the calculated proportion, and that consequently there could not be more than 0.2 per cent. of water left in the oxalate of silver.