NOTES.

The Action of Chloramine-T on Disulphides containing the S–S Linking. By J. R. Alexander and H. McCombie.

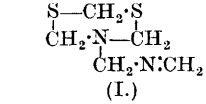
The sulphide molecule ruptures at the S-S linking and each half reacts as a mercaptan (compare Phillips and Kenyon, J., 1930, 1225).

When shaken with cold chloramine-T aq., $\beta\beta'$-dichlorodiethyl disulphide yields *β-chloroethyl*-p-*toluenesulphonimidosulphine*-p-*toluenesulphonylimine*, small needles, m. p. 154°, from MeOH (Found: C, 44·3; H, 4·5; Cl, 8·1. $C_{16}H_{19}O_4N_2S_3$ requires C, 44·2; H, 4·4; Cl, 8·1%), diethyl disulphide yields ethyl-*p*-toluenesulphonimidosulphine-*p*-toluenesulphonylimine, needles, m. p. 187—188° (Phillips and Kenyon, *loc. cit.*), and diphenyl disulphide yields phenyl-*p*-toluenesulphonimidosulphine-*p*-toluenesulphonylimine, prisms, m. p. 149—151° (sodium salt, m. p. 225°) (Phillips and Kenyon, *loc. cit.*).—University Chemical Laboratories, Cambridge. [*Received, April 26th*, 1932.]

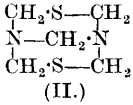
The Ammonium Sulphide–Formalin Precipitate. By Catherine G. Le Fèvre and R. J. W. Le Fèvre.

M. Delépine has informed us that many years ago (*Ann. Chim. Phys.*, 1898, **15**, 469) he described the substance $(CH_2)_5N_2S_2$, m. p. 198°, and the compound

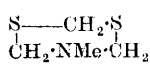
$(CH_2)_9N_2S_6$, m. p. 176°, formed from it by solution in AcOH, recently prepared by us (this vol., p. 1142).



(I.)



(II.)



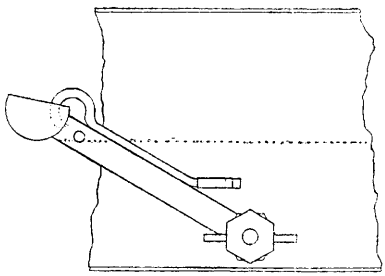
(III.)

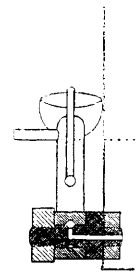
His formula (I) for the former substance is less probable than ours (II) for the following reasons. Since we find that methylthioformaldine (III) (Wohl, *Ber.*, 1886, **19**, 2345) is oxidised by alkaline $KMnO_4$ aq. or conc. HNO_3 to methanedisulphonic acid (Ba salt described by Muthmann, *Ber.*, 1898, **31**, 1880), a substance having formula (I) would be expected also to yield this acid under similar conditions. Actually, the two oxidising agents produce H_2SO_4 corresponding to 33%, and 36·9 and 35·9% (Macleod and Le Fèvre, J., 1931, 474), respectively of S (Calc. for $C_5H_{10}N_2S_2$: S, 39·5%): a trace of organic matter of high m. p., probably trimethylenetrisulphone, remains unattacked.—University College, London. [*Received, June 2nd*, 1932.]

A Constant-level Regulator for Water-baths. By T. B. Vinycomb and A. I. Vogel.

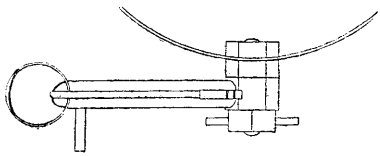
The usual form of constant-level device fitted to water-baths, etc., has the disadvantage that accurate adjustment of the water level is difficult because the overflow tube is inside another metal tube and attached to it by means

Side elevation.





SWIVEL-JOINT CONSTANT LEVEL REGULATOR



Plan.

of rubber. The present device, constructed by Mr. F. W. Shears, to whom our thanks are due, is entirely of metal and is easily constructed. It is shown in section in the figure. Adjustment of the water level is simply effected by means of the thumb screw on the swivel joint.—Woolwich Polytechnic, London, S.E.18. [*Received, May 31st*, 1932.]