The dissociation constant of hydrazoic acid. *C. A. West. Jour. Chem. Soc.* 77, 705 (1900). — The value of k from the conductivity measurements is 0.0000198 in decinormal solutions and 0.0000186 for the inversion of cane-sugar. Hydrazoic acid is therefore a trifle more dissociated than acetic acid at this dilution.

W. D. B.

Relations between electrolytic conductivity and internal friction in salt solutions. *P. Massoulier. Comptes rendus*, 130, 773 (1900). — When glycerine is added to $M/15$ CuSO_4 at 15° , the change in electrical resistance is very closely proportional to the change in viscosity; but this is no longer the case when glycerine is added to $M/40$ CuSO_4 at 0° .

W. D. B.

On the toxicity of the compounds of the alkaline earths with reference to the higher vegetables. *H. Coupin. Comptes rendus*, 130, 791 (1900). — Barium salts are apt to be poisonous both to animals and plants. Strontium and calcium salts are relatively non-toxic to animals, but are, as a rule, poisonous to plants.

W. D. B.

Dielectricity and Optics

The dielectric constant and dispersion of ice for electromagnetic radiations. *C. Gutton. Comptes rendus*, 130, 1119 (1900). — On varying the length of the waves from 14 cm to 2088 cm, the index of refraction n changes from 1.76 to 1.50, and the dielectric constant n^2 from 3.10 to 2.25.

W. D. B.

The refractive and magnetic rotatory powers of some benzenoid hydrocarbons. *W. H. Perkin. Jour. Chem. Soc.* 77, 267 (1900). — The magnetic rotations and refractive powers of the following hydrocarbons have been determined: benzene, toluene, ethyl benzene, propyl benzene, isopropyl benzene, isobutyl benzene, cymene, *o*-xylene, *m*-xylene, *p*-xylene, pseudocymene, mesitylene, tetraethylbenzene. The preparations were unusually pure. Experiments on the magnetic rotation of mixtures showed that a marked falling-off from the calculated value occurs only in the aliphatic series, and not universally even there. The author has improved the usual method of reading the scale and vernier of a spectrometer by introducing a long narrow telescope, so arranged that its eye-piece is situated just below that of the observing telescope.

W. D. B.

Note on the refraction and magnetic rotation of hexamethylene chlorohexamethylene and dichlorohexamethylene. *S. Young and E. C. Fortey. Jour. Chem. Soc.* 77, 372 (1900). — New determinations with a pure specimen of hexamethylene, the magnetic rotation being now 5.664 at 15° and the molecular refraction 45.824 for H_a .

W. D. B.

The absorption spectra of ammonia, methylamine, hydroxylamine, aldoxime, and acetoxime. *W. N. Hartley and J. J. Dobbie. Jour. Chem. Soc.* 77, 318 (1900). — The absorption band in purified commercial ammonia is shown to be due to traces of pyridine. The spectra of methylamine, hydroxylamine, aldoxime and acetoxime were also studied.

W. D. B.

Spectrographic studies in tautomerism. *W. N. Hartley and J. J. Dobbie. Jour. Chem. Soc.* 77, 498 (1900). — The authors have determined and measured