Resolution of Bi*cyclo*-(2 : 2 : 2)-octane-2 : 5-dione-1 : 4-dicarboxylic Acid.

THE synthesis of bi*cyclo*-(2 : 2 : 2)-octane-2 : 5-dione-1 : 4-dicarboxylic acid, starting from succinosuccinic ester has been reported by one of us,[1] and it was thought that a resolution of the acid would, in addition to its intrinsic interest, offer an additional proof as to the correctness of its constitution. For this purpose the acid was combined with

brucine (2 molecules) when a salt separated. Specific rotation of the brucine salt after five recrystallisations $[\alpha]_D^{26°·5}$ — 70·87 (C = 2·25 in pyridine). The acid liberated from the salt had $[\alpha]_D^{25°}$ = + 23°·85 (l = 1; C = 2·13 in water). The mother liquor (of the brucine salt) yielded on three successive evaporations and filtrations the pure salt of the l-acid which when liberated free had $[\alpha]_D^{28°·5}$ = — 23·24 (l = 1; C = 0·90 in water). In the same thermometer the inactive, d and l forms melted at 268°, 271° and 271°, respectively.

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