T reagent, was dissolved in 4 ml. of acetone. An excess of chromium trioxide (400 mg., 4.0 mmoles) dissolved in a solution of 1.5 ml. of concentrated sulfuric acid in 4 ml. of acetone was added, and the mixture was stirred overnight at room temperature. The acetone was removed at reduced pressure, and the aqueous mixture was transferred to a separatory funnel using 5 ml. of water to rinse the reaction flask. The aqueous solution was extracted with several portions of ether, and the combined ethereal extracts were washed with a small amount of water and dried over anhydrous magnesium sulfate. Removal of the ether gave 202 mg. of the crude cis-dipropionic acid 52 (95 per cent yield). The crude solid was dissolved in 6 ml. of hot water, treated with decolorizing carbon, and filtered. The acid was redissolved, then 0.7 ml. of glacial acetic acid was added, and the solution was cooled slowly. Another recrystallization from water-acetic acid afforded 96 mg. of cis-1,3-cyclopentane-dipropionic acid (52), m.p. 98-100°C. The mixture melting point of this acid with an authentic sample of 52 (m.p. 98-100°C.) was undepressed, and the infrared spectra of the two samples were identical.

Reagent of the cis-acyloin 73 and the cis-diketone 75 with Fehling's reagent. - Acyloin fraction A (300 mg.) was stirred with an excess (30 ml.) of Fehling's reagent