dioxane was siphoned into the Hershberg dropping funnel under argon. Addition of the diester solution was completed in 36 hours at a somewhat reduced rate of stirring. Stirring was continued for 10 hours at reflux temperature (100°C.) with no observable change in the color of the reaction mixture. The reaction mixture was cooled to about 50°C. (the ambient temperature produced by stirring) and stirred for an additional 48 hours, during which time the reaction mixture changed to a dark yellow color. The reaction mixture was finally cooled in an ice bath, and 20 g. (0.54 mole) of glacial acetic acid was added drop-wise with continued stirring. When it was certain that the sodium had been completely destroyed, the reaction mixture was carefully poured into 1 l. of ice and water, and the product was extracted with several portions of ether. Some solid, polymeric material separated at this time and was removed by filtration. The ether filtrate was washed several times with water and dilute sodium bicarbonate solution and dried over anhydrous magnesium sulfate. Removal of the solvent afforded 7.3 g. of a residue which gave a positive Fehling's test at room temperature, indicating the possible presence of acyloin product. The sodium bicarbonate solution was acidified and extracted with several portions of ether. The dried ethereal extract gave 1.3 g. of acidic material upon