In the course of our studies on the orientation in the thiazole nucleus, we have brominated and nitrated a number of thiazole derivatives. In view of the recent publication by Prijs, Mengisen, Fallab and Erlenmeyer, we record below our findings.

2-Methylthiazole, on bromination (at 100°C.), furnishes 2-methyl-5-bromothiazole, and on nitrination (at 100°C. for 10 hours and at 120°C. for 4 hours), yields 2-methyl-5-nitrothiazole (m.p. 120-21°C.). 4-Methylthiazole could not be brominated; on nitrination it gives a nitro compound, m.p. 58-59°C. shown to be 4-methyl-5-nitrothiazole. 5-Methylthiazole on bromination yields a bromo compound which, heated with sulphanilamide, potassium carbonate and copper powder, furnishes 2-sulphanilamido-5-methylthiazole; hence the bromo compound should be 2-bromo-5-methylthiazole. On nitrination, 5-methylthiazole furnishes a nitro compound, m.p. 110°C., which, not being identical with 2-nitro-5-methylthiazole, m.p. 61°C., should be 5-methyl-4-nitrothiazole.

2-Hydroxythiazole (m.p. 69-70°C.) prepared by the action of chloroacetaldehyde on ammonium thiocarbamate, on bromination furnished 2-hydroxy-5-bromothiazole (m.p. 67°C. dec.), on nitrination 2-hydroxy-5-nitrothiazole (m.p. 146-47°C.), and on treatment with acetic anhydride, 2-hydroxy-5-acetyltiazole (m.p. 195-97°C.).

5-Acetaminothiazole on bromination, even with one molecular equivalent of bromine, yielded only the dibromo derivative, 2:4-dibromo-5-acetaminothiazole, m.p. 148-49°C., as reported by Prijs, et al.; the mono-bromo derivative could not be obtained. When 5-acetaminothiazole-2-carboxylic acid (F) was brominated, instead of the 4-bromo derivative of this acid, only 2:4-dibromo-5-acetaminothiazole could be isolated.

Nitrination of 5-acetaminothiazole furnished a product, m.p. 197-98°C., which Prijs, et al. consider to be 2:4-dinitro-5-acetaminothiazole, but we find this compound to be only the mono-nitro compound, 4-nitro-5-acetaminothiazole, not only from the analytical figures but also because 5-acetaminothiazole-2-carboxylic acid on nitrination furnished 5-acetamino-4-nitrothiazole-2-carboxylic acid, m.p. 155-56°C., which on decarboxylation yielded 5-acetamino-4-nitrothiazole, m.p. 197-98°C. identical with the product obtained above. Fuller details will be published elsewhere shortly.