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The soluble specific substance of a strain of Friedländer bacillus.

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By a method similar to those previously used in the case of the pneumococcus1 there has been isolated from a strain of Friedländer bacillus designated as the "E" strain a polysaccharide with specific properties. It differs from the Friedländer carbohydrate obtained by Toenniessen² in giving no color with iodine, and from the material reported by Mueller, Smith, and Litarczek³ in being nitrogen-free. $[\alpha]$ is $+100^{\circ}$, the substance, if it be a single substance, is a moderately strong acid, and on hydrolysis it yields 72 per cent of reducing sugars, among which glucose was identified as the osazone and by conversion into potassium acid saccharate. In its present state of purity this specific substance resembles qualitatively that of the Type II pneumococcus; and although there are distinct differences, it actually precipitates Type II anti-pneumococcus serum at as high a dilution as 1:2,000,000, in addition to reacting similarly with its homologous serum.

¹ J. Exp. Med., 1923, xxxviii, 73; 1924, xl, 301.

² Cent. Bakt. I Orig., 1921, lxxxv, 225.

³ These Proceedings, 1925, xxii, 373.