

fail to exert a tremendous impact on European economies. On the other hand, productivity per worker was lowest in America and highest in France. In all three countries, it is noticeable that production increased much more rapidly in the first half of the century than in the second and that sharp fluctuations separated each five-year period.

In the fourth article Dr Helling examines British agricultural production, and compares her results with those for France and Germany. Britain showed greater success in increasing her production of arable crops in the first half of the century but fell back more dramatically than the others in the second half. However, stock production in the U.K. increased through-

out the century, faster than in France, though not as fast as in Germany. Measured against the increase of population and the size of the labour force in farming, agricultural production in Great Britain, alone of all three countries, failed to match the rate of population increase. Production did not overtake population growth until 1841-5, kept pace with it till 1856-60, but fell increasingly behind from 1861 to the end of the century. By 1896 production had risen 2.4 times but the population had risen 3.2 times. Nevertheless, productivity per worker increased almost without interruption from 1841 onwards and at a much faster rate than in other countries from the 70's onwards.

A Note on the Origins of the 'Broiler' Industry

By W. H. CHALONER

IN view of the continuing controversy about the raising of chickens in broiler houses, it is interesting to note that this 'industry' is not a particularly recent development. As far back as 1903 Chapman and Hall published, as vol. VI of 'The Woman's Library', a book entitled *The Lighter Branches of Agriculture* by Edith Bradley, warden of Lady Warwick College, Studley Castle, Warwickshire, and Bertha La Motte, with an introduction by the Countess of Warwick. After noting that the impetus to introduce "new appliances of every description both elaborate and simple . . . likely to revolutionize the poultry industry" had come from the U.S.A., and particularly from the Anglo-American Poultry Company and the Cyphers Incubator Company, the authors went on (pp. 199-200) to describe the Cyphers Duck and Broiler Plant at Wayland, near Buffalo, N.Y. They had to explain that 'broilers' was the American name for "young birds from five to six weeks old, which are 'picked up',

plucked, and trussed, split open and broiled like a mackerel. They are very delicious if nicely cooked and served hot, as they possess much more flavour than the mature chicken." From the catalogue of the Cyphers Incubator Company they quoted a description of the Wayland plant: "It consists of a 300-foot brooding house of the latest pattern, heated by hot water and regulated by a Cyphers electric regulator . . . during the past four years thousands of pounds of green ducks, broilers, and roasters have been produced and sold." From the photographs accompanying the text (pp. 201, 203) it would appear that a certain amount of 'free range' was provided. The authors commented: "Of course this is all carried on, on a truly American or 'mammoth' scale, which is quite beyond the scope of ordinary people, as an immense capital is necessarily required." It would be interesting to know when the first British broiler plant was established.