NICHOLAS RUSSELL, Like engend'ring like: heredity and animal breeding in early modern England, Cambridge University Press, 1986, 8vo, pp. ix, 271, £27.50.

Productivity is a difficult thing to evaluate in any walk of life or national context, but there is nevertheless some kind of agreed consensus among historians that the agrarian revolution in the British Isles turned upon a dramatic increase in production and an efflorescence of ways and means by which to make the most out of the countryside. How great this increase was, its precise timing, or the nature of the technical and economic forces which persuaded it to appear are, however, still matters of great controversy, even rumbling through the pages of our most recent authoritative source, The agrarian history of England and Wales (C.U.P., 1981-). So it is good to see among the wealth of available statistics a new book with a new angle which explores an area of farming history previously sadly neglected, and brings together information on the breeding of animals that few people would have the patience to seek out for themselves. Nicholas Russell has approached the agrarian revolution from underneath, as it were, and attempts to document the actual alterations wrought by farmers and others in their commercial animals with a view to better breeding results, increased numbers of offspring, fatter fatstock, and so forth. Horses, cows, and sheep were big business here, and these are the three kinds of stock that Russell deals with in an extended way. He then turns the story to address the question, did any significant change in the economic performance of these domestic animals occur during the years 1600-1800 and by what means did the changes take place? His overall supposition is that the animal "breeders", such as they were, were not proceeding along lines laid down by then-current theories of inheritance but rather that they followed traditional ideas and techniques that only occasionally impinged on the world of high science, and which, very broadly speaking, were not always guided by the notion of "selection". Farmers are seen as pursuing subsistence breeding-they activated a process that Russell calls a negative breeding strategy, in which the worst stock is used for reproducing the breed while the best (of a bad bunch, perhaps) was sold or otherwise used to realize the maximum profit. Alternatively, selective mating was introduced as a procedure to offset deterioration, not-as we understand it-as a device to effect improvements. Only with Robert Bakewell, where this book ends, did breeders take up the idea of an efficient conversion of fodder into meat, and thence into cash, by exercising rigid selection in the modern, Darwinian sense. A nice aside here is the list of names that Bakewell gave to his rams: Bosom, Shoulders, Carcass, and Hock must have been blithely unaware of their place in the scheme of things, but their owner evidently knew exactly what he was after. All in all, this is a good, unassuming reconstruction of a notoriously difficult area of practical history.

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BETTINA WAHRIG-SCHMIDT, Der junge Wilhelm Griesinger im Spannungsfeld zwischen Philosophie und Physiologie, Tübingen, Gunter Narr, 1986, 8vo, pp. 231, DM.48.00 (paper-back).

There is little agreement on Griesinger's intellectual legacy. His obituaries show that opinion was already divided at the time of his untimely death from a perforated appendix in 1868. Westphal (his successor at Berlin) hailed him as a great reformer; K. F. Flemming, the asylum psychiatrist, considered him as an empty theoretician. In fact, Griesinger's work provides something for everyone. He borrowed freely and hence his writings are complex and often contradictory; they exhibit the mechanical tidiness of Herbart, the enthusiasm of Broussais, and the anti-romanticism of Roser and Wunderlich.

The fact that Griesinger's name is often quoted tends to give the impression that Griesingerian scholarship is a thriving industry. This is not so. Apart from a handful of good essays and the classical 1944 monograph by Joachim Bodamer, there has, until recently, been no adequate intellectual biography. This neglect, one is happy to say, has been partially corrected by Dr Wahrig-Schmidt. In about 230 pages of tidy prose she covers the early period of Griesinger's life.

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