

Letters to the Editor

MECHANIZED FARMING

SIR,—In the article by Mr W. Harwood Long on 'Mechanization in English Farming' (AHR XI, p. 15) the statement is made that "English farming is probably the most highly mechanized in the world." In support of this generalization the author cites the fact that more than £10 capital investment per acre is required on most present-day English farms. The £10 figure closely approximates to the capital investment per acre in machinery and equipment on the average farm in the Mid-western region of the United States, on farms producing cereal grains, maize, swine, dairy and beef cattle, oil seeds, and root crops.

Yet a comparison of investment on a per-acre basis is misleading, in my opinion. Figures on the investment per farm worker would, I think, point to greater mechanization in the United States. The author enumerates details concerning a 200-acre Yorkshire farm operated by tenants and hired labourers. A farm of twice that size, in the neighbourhood of 400 acres, would, in the black soil region of the United States, be regarded as a family-sized farm, operated, and most likely also owned, by the farmer and his family, consisting most commonly of his son. The two men, with machinery and equipment valued at £4,000, can handle 400 acres of arable land. Thus the investment per worker, excluding land and buildings, is £2,000, or considerably higher than in most industrial enterprises. The value of the land and buildings, conservatively estimated, is £50,000. Some farms where the farmer and his immediate family manage the farm and also do most of the work, have investments in land and buildings as high as £70,000, and up to £25,000 additionally invested in machinery and equipment.

Unfortunately, the author fails to indicate the investment per worker on English farms, but I would guess it to be substantially less. I might add that comparisons of this kind are perilous because of the great variety in type of farming operation and other factors which

complicate the problem of comparison. The high capital investment per acre in England perhaps indicates more intensive land utilization than in the United States where large-scale powered equipment enables the individual farmer to farm a larger acreage.

Yours sincerely,

FRED W. KOHLMAYER
Editor, *Agricultural History*

Mr Harwood Long writes:

By drawing attention to an *obiter dictum* in my article Professor Kohlmeyer highlights one of the best-known distinctions between British and American attitudes towards farming, namely the relative importance of land and manpower as resources in production. The following figures, although they are confined to tractors, also show this:

Tractors	Arable acres per tractor	Arable acres per person in agriculture	Tractors per person
U.K.	45	15	0.33
U.S.A.	96	62	0.65

Each country will pay most attention to the resource which is in shortest supply. Therefore, writing in the REVIEW of the British Agricultural History Society I emphasized the relationship of equipment to land rather than manpower, and gave Professor Kohlmeyer the opportunity to point out that the emphasis is different in his country.

In saying that "more than £10 an acre" was invested in machinery, I did not say how much more. Some recent Yorkshire 'type of farming' figures indicate investment ranging from £12 to £27 per acre.

SETTLEMENT IN EARLY BRITAIN

SIR,—In his recent paper, 'The Pattern of Settlement in Roman Britain' (AHR XI, 1963, pp. 1-14), Dr Applebaum elevates my views on settlement in early Britain into a doctrine and, no doubt because of pressure of space, presents them with a rigidity I would be reluctant to adopt. This may have the un-

fortunate effect of prematurely clouding new horizons; so a clarification on my part may not be inappropriate.

In essence, what I set out to do was to project backwards some elements of the territorial organization and settlement pattern recorded in North Wales in the thirteenth century "for the formulation, if only as a working hypothesis, of a general theory on the evolution of settlement in Britain." Among the important elements I deemed to be of early origin were settlement in small hamlets occupied by the bond majority of the population, the frequent, but by no means exclusive, siting of these hamlets in the lowlands, and the organization of these hamlets into groups (*maenors* or *maenols*) best described as discrete estates. In North Wales the headquarters of such groups (*maerdrefs*) were frequently located near important prehistoric or proto-historic sites. For this and other reasons I postulated the existence of a similar discrete organization in prehistoric times and suggested that this was the means whereby the labour resources of wide areas could be mobilized for various purposes, including the construction of hill-forts. Since clan settlements (*gwelyau*) appear to have emerged in Wales only after A.D. 1100 and therefore were younger features than the hamlets, I wished to imply that the latter, rather than any so-called 'tribal' settlements, provided the uniform basis of settlement throughout Britain. This however does not mean that all bond settlements in early Wales were hamlets. Indeed, in two of the papers cited by Dr Applebaum, I emphasized that many bond homesteads, though forming part of *maenors*, were scattered about the countryside to take advantage of the limited cultivable areas.

On the basis of Dr Applebaum's findings at Figheldean Down I suggested that the arable lands of Iron-Age communities, like the commonable arable sharelands of medieval bond hamlets, lay in open field. In North Wales there are, of course, 'Celtic' fields, tentatively ascribed to the Roman period, in areas characterized by bond settlement in the Middle Ages. But even if we accept that these

were originally enclosed, my views can be more readily adjusted to their existence than Dr Applebaum appears to think. The open-field strips which survived in North Wales into the nineteenth century, like those which still exist at Llanynys, were of small dimensions by English standards. Many were only about 100 yards in length and about 10 yards in breadth. At Criccieth, late surviving Welsh 'customary acres' are 90 yards in length. Plough ridges in an arable 'field' at Gwithian in Cornwall, tentatively ascribed by Mr Charles Thomas to the period A.D. 850-1100, are about 180 feet in length by a mean of about 10 feet in breadth. Bundles of strips of these dimensions could well have been established within the larger 'Celtic' fields. As Mr H. C. Bowen has recently stressed, ploughing within and over 'Celtic' fields in historic periods is much more frequent than is perhaps generally appreciated. At Cregennan in Merionethshire an area of former arable land in the vicinity of a medieval platform house, and believed to have been demesne, still betrays traces of 'Celtic' fields. Some of these are rectangular in shape, measuring about 100 yards by 20 yards, and the remainder are sub-rectangular, but in addition the latter contain remains of what appear to be lazybeds. Clearly therefore a dovetailing of new into old must be taken into account in the evolution of field systems.

As Roman villas have not been discovered in North Wales, my emphasis was placed on hill-forts and Roman forts, and especially the former, since they are the more numerous and some were used or re-used in the Dark Ages. For the English lowlands I suggested, but did not develop, the view that the discrete estate which had made feasible hill-fort construction later served to make possible the Roman villa and the hall of many a medieval barony. For this a flexible continuity of organization seems likely to have been much more frequent than continuity in immediate siting. In this general context it is appropriate to recall that Gildas, when describing the subjection to which the Britanni were reduced by the Romans, referred to *praepositi* who

were scourges for the backs of the natives. At the end of the seventh century a reeve (*praefectus*) could serve as an intermediary between Bishop Wilfrid and people of British race living near Walton Head in the West Riding of Yorkshire. In the Welsh medieval laws the *praepositus* (*maer*) was a 'notable' (*uchelwr*), one of the commote officials who regulated the king's bondmen on their bond

lands and had custody of the king's wastes. An important official—not to be confused with the land-*maer* who regulated the cultivation of the demesne land at the *maerdref*—the *praepositus* was allocated for his own support one whole *maenor*, which though smaller than the earlier *maenors* was nevertheless a substantial estate.

GLANVILLE R. J. JONES

Notes and Comments

THE BRITISH AGRICULTURAL HISTORY SOCIETY

The annual conference of the British Agricultural History Society was held from 3 to 5 April 1963 at St Mary's College, Durham. On the first evening a paper was given by Dr A. G. Lunn of the Department of Extra-Mural Studies, King's College, Newcastle-upon-Tyne, on 'The historical factor in contemporary land-use and vegetation patterns on the Anglo-Scottish border'. The following day the conference was taken on an excursion to Cockle Park, Wooler, and Chillingham. In the evening Dr Constance M. Fraser of the Department of Extra-Mural Studies, King's College, gave a paper entitled 'Husbandry and the Convent of Durham'. The conference concluded on Friday morning with two papers, the first by Mrs Helena H. Clark of the School of Agriculture, King's College, on 'The migratory routes of the cultivated barleys', and the second by Mr Mark Hughes of the Extra-Mural Department, University of Manchester, entitled 'Agricultural techniques and rent changes in Northumberland 1750-1850'.

At the annual general meeting held on Thursday, 4 April, Mr R. V. Lennard was

re-elected President of the Society. Professor Edgar Thomas was re-elected Treasurer and Mr J. W. Y. Higgs, Secretary. Three members of the Committee—Mr G. B. Bisset, Dr W. H. Chaloner, and Dr W. G. Hoskins—retired, and the meeting elected in their place Dr A. M. Everitt, Miss L. Pearson, and Dr M. L. Ryder. Mr Harwood Long, in presenting the report of the executive committee, said that membership had risen from 631 to 645. The December conference had had to be cancelled owing to the severe weather, and arrangements were being made for the same programme to take place in December 1963. The committee were exploring the possibilities of a joint conference with the Economic History Society to be held at Reading from 3 to 6 April 1964. In the absence of the Treasurer, the Acting Secretary presented his report. The loss for the year was £40 2s. 9d. as opposed to £55 9s. 3d. the year before. It was hoped that the adjustments made by the committee a year ago would soon stem the loss completely.

At a meeting of the executive committee held later in the day, Mr Harwood Long was elected chairman.

(continued on p. 125)