

Peasant Craftsmen in the Medieval Forest

By JEAN BIRRELL

IN spite of centuries of clearance by generations of settlers England was still a wooded country in the thirteenth century. There were, it is true, large areas where settlement was so dense that only a limited amount of land remained outside the arable fields. Indeed, increasing local shortages of land for farming were one of the characteristics of the century. But there remained numerous extensive tracts of woodland covering many thousands of acres. Many of the largest, like Sherwood, Feckenham, Rockingham, and the Forest of Dean, were royal forest, whose use and clearance were regulated. Others, like the New Forest and Brewood in Staffordshire, once royal forest, had been partially or wholly disafforested. Some, like Needwood in Staffordshire and the Weald had never been fully afforested. And even outside these big forests there were many extensive though isolated woods. The assarting taking place in these forests in the thirteenth, and well on into the fourteenth, century reduced the acreage of woodland but left large areas intact.¹

In the thirteenth century the forests still played an important role in the economy of their regions and of the country as a whole. Even the royal forests were far more than royal pleasure grounds. They provided, besides land to be assarted and added to the cultivated area, extensive pastures for cattle and other animals. In many forests hundreds of local farmers, landlords, and peasants, paid agistment fees to put horses, cattle, and pigs in the forest pastures. But the forests were not only important for agriculture. A wide range of industries developed in them as a result of the presence there of basic raw materials or of ample supplies of fuel. The trees and undergrowth provided the vitally important medieval raw material, wood, and, equally important, wood fuel. In many forests there were easily accessible mineral deposits, especially coal and iron. At a time when transport was slow, difficult, and expensive, the proximity of ores and fuel naturally led to the development in many forests of what is perhaps the best known medieval forest industry, the iron industry. A number of other industries, such as glassmaking, potting, and lime-burning, were attracted to the forests by the fuel supplies, even if their raw materials were not specifically forest ones. Another forest product used in industries in and outside the forests was tree bark.

This paper seeks in the first place to give some indication of the range of these industries in a few forests in the thirteenth and early fourteenth centuries, and

¹ For the extent of the royal forest in the thirteenth century see M. Bazley in *Trans. Roy. Hist. Soc.*, iv, 1921, and J. C. Cox, *The Royal Forests of England*, 1905.

then to describe their organization. As regards this last, it must be admitted that there is much that is still obscure. However, it is abundantly clear that the local peasantry were deeply involved in forest industries. Many peasants living in or near forests were employed, usually part time, in one or more of them. Some worked at home, some in the forest; some were wage-earners, working for landlords or entrepreneurs, some seem to have been independent producers; for some this work was clearly subsidiary to agriculture, for others it perhaps took first place. This diversification of peasant economic activity is of considerable interest to the student of peasant economy, particularly in a century when many peasants were increasingly affected by land shortage. Non-agricultural economic activities were not, of course, confined to forest peasants at this period, as the history of the rural cloth manufacturing industry shows. But, for a variety of reasons, some of them mentioned above and some to be discussed, forest peasants were particularly well placed to engage in them. A second aim of this paper is to try to give some idea of the nature and extent of peasant participation in forest industries, and of how important off-farm incomes were to individual peasants and to forest peasants as a whole.

Two main groups of sources have been used. There is a large amount of material dealing with the royal forests at this period in the Public Record Office, which it has only been possible to sample. Further study of these documents would undoubtedly produce more information. Records of the various forest courts and annual forest accounts have proved particularly useful. Secondly, manorial documents from some private estates in or near forests have been used. Indications of the presence of various industries are usually not hard to find. However, it will hardly be necessary to point out that some of the questions of most interest to the historian, being of no interest to the compiler of the documents, are hardly illuminated at all.

The first and most obvious use of forests was as the source of wood for its many medieval uses, and in the thirteenth century forest timber resources were increasingly exploited. Large quantities of wood left the forests in various forms, simply as tree trunks, rough dressed or semi-manufactured, or made up into one or other of a range of widely used wooden goods. Local peasants were consequently employed in a variety of jobs ranging from felling trees to the manufacture of particular wooden objects. Complete records of the numbers of trees felled do not, of course, exist for any thirteenth-century forest. However, some indication of the scale of exploitation in one forest can be gained from the Forest of Dean records used by Dr C. E. Hart. The king used the timber of this forest for various purposes, particularly in royal building works, to raise money by cash sales, and as the content of frequent gifts. Consequently, large numbers of trees were felled every year. For example, in the two years 1275-7, 935 oaks were cut and sold; in 1252 90 oaks and 60,000 shingles were sent from Dean

to Gloucester Castle; and the 1282 regards found the stumps of 7,497 oaks, 34 chestnuts, and 4,585 beeches. In view of these figures it is not surprising that Dean woodcutters were so numerous that in 1282 the king could demand the services of one hundred at a time to clear passes for the army in Wales.¹ The same sort of exploitation developed in many thirteenth-century forests as private wood owners or the king cut timber for their own use and for sale.

There were specialist woodworkers in all forests. Surname evidence is one indication of this. In the thirteenth century, and often still in the early fourteenth, lower-class surnames were fluid and rarely inherited. An occupational surname can therefore be taken, in the vast majority of cases, to indicate actual practice of the craft concerned. On the other hand, surnames were based on all sorts of other factors besides occupation, so that by no means all specialist craftsmen's occupations were reflected in their names.² Surnames indicating the practice of various wood crafts occur in most forest documents, and are often so numerous as to suggest some degree of local specialization. For example, the surnames Carpenter, Cooper, Fletcher, Bowyer, and Turner appear in Wealden villages in the Sussex lay subsidy roll of 1296. Wheelers, Coopers, and Carpenters appear in Feckenham Forest villages in the 1280 Worcestershire lay subsidy roll and the surname Sawyer is added to these by a mid-century list of vert offenders. Carpenters, Coopers, Sawyers, and Wheelers appear in the 1282 forest eyre of Dean.³ In no case does the distribution of occupational surnames, admittedly only a rough guide, reveal a concentration of woodworkers in any one village or region inside the forests.

A certain degree of specialization on the part of the individual is suggested by an occupational surname. However, it is probably safe to assume that their owners did not normally specialize to the exclusion of agriculture. In the lay subsidy rolls already quoted they appear simply as taxpayers, but other documents show that they were also agricultural producers, in fact, peasant craftsmen. A 1297 rental of the estate of the bishop of Coventry and Lichfield reveals peasant craftsmen among the tenants on several manors in Cannock Forest in Staffordshire. At Rugeley, Alexander the Turner held 3½ acres of new, that is assart, land, and Richard Carpenter held a cottage and a curtilage; at Baswich,

¹ C. E. Hart, *Royal Forest*, 1966, ch. II, *passim*.

² G. Fransson, *Middle English Surnames of Occupation, 1100-1350*, 1935, pp. 29-41. See also B. Thuresson, *Middle English Occupational Terms*, 1950, and P. Reaney, *The Origin of English Surnames*, 1967.

³ *Sussex Subsidies*, ed. W. Hudson, Sussex Record Society, x; *Lay Subsidy for the County of Worcester, c.1280*, ed. J. Willis Bund and J. Amphlett, Worcs. Hist. Soc., 1893; J. West, *The Administration and Economy of the Forest of Feckenham during the Early Middle Ages*, unpublished University of Birmingham M.A. Thesis, 1964, p. 159; P.R.O., E.32/30. On some East Sussex woodland manors the tenants' services included the manufacture of casks, troughs, and other wooden objects—F. R. H. Du Boulay, *The Lordship of Canterbury*, 1966, p. 173. See also the services at the Wealden hamlet of Fure, part of Ferring.—*Sussex Customals*, ed. W. D. Peckham, Sussex Rec. Soc., xxxi, 1925, p. 76.

Bate the Cartwright held a messuage and 10 acres of land, and John Carpenter shared a 3-acre holding. At Eccleshall, a well-wooded village outside the boundary of Cannock Forest, Stephen Wheeler held 3 roods in Great Wood, Adam Fletcher a cottage in the same place, and Henry Wheeler held $4\frac{1}{2}$ acres of new land. In Feckenham Forest in the middle of the thirteenth century Robert Carpenter illegally built a shed and pastured his two cows.¹ Crafts of the sort indicated by these surnames, whether followed at home or in the forest, could probably be practised largely in the winter months, when less time was needed on the peasant holding. They would, therefore, combine relatively easily with agriculture. In any case, it is noticeable how often peasant craftsmen in any trade, like most of those mentioned above, had smallholdings, not full sized peasant tenements.

Unfortunately, it is rarely possible to discover either how this work was organized or to what extent forest peasants were working for more than purely local demand. The felling and rough dressing of trees on a large scale was, of course, work which had to be done in the forests. It was probably the most important of the wood crafts discussed. Woodcutting was normally done for wages for the king or landlord who held the wood concerned, the latter using their woodland in very much the same way as the king at this period. The numerous Dean woodcutters employed by the king at the end of the thirteenth century were paid by the day, the rate being 3d.²

Wooden goods, such as bows and arrows, agricultural tools, building timbers, and vessels, were made and used in the thirteenth century in large quantities, but it is difficult to ascertain to what extent forest villages specialized in their manufacture. Most thirteenth-century peasants were probably capable themselves of making many of the wooden goods they used. Wooden goods were also made wherever they were in demand, in towns or villages outside the forest, or on building sites, using small local supplies or wood exported from the forests. Nevertheless, there is evidence of some specialization of wood crafts in the forests, for example, those occupational surnames characteristic of forest villages and mentioned earlier. Other surnames of this type which appear in forest documents of this period include Wainwright, Tonwright, and Arkwright.³ A mid-thirteenth-century source refers to sieve-makers (*criblarii*) in the Forest of Dean.⁴ It is noticeable that the range of specialities in the forest manufacture of wood objects indicated in the thirteenth- and early fourteenth-

¹ Stafford Record Office (S.R.O.), D1734. J2268, ff. 21v, 25d, 26v, 19v, 19d; P.R.O., E.146/3/3.

² Hart, *op. cit.*, p. 28.

³ A Tonwright at Tottington (1324).—*Lancashire Court Rolls, A.D. 1323-4*, ed. W. Farrer, Lancs. and Cheshire Rec. Soc., 41, 1901, p. 9; Wainwrights in several places (1304 and 1323).—*Ibid.*, pp. 3, 30 and *De Lacy Comptoti, 1296, 1305*, ed. P. A. Lyons, Chetham Soc., cxii, p. 185; Arkwright in Inglewood (1324).—P.R.O., E.101/130/9 m2.

⁴ *Cal. Pat. Rolls, 1247-58*, p. 450.

century documents so far used is smaller than that noticed by Professor Everitt for the sixteenth century; nor is there any convincing evidence of the sort of regional specializations he suggests.¹

In the case of manufacture of agricultural tools, vessels, and vehicles, work was probably mostly done on contract or for wages for local customers. Both peasants and landlords hired local specialists for work of this sort. Two cases from Staffordshire forest manors show this. In 1312-13, on the manor of Longden, a Cannock Forest manor of the bishop of Coventry and Lichfield, 6s. 10½d. was paid to William the Cooper for the repair of vessels on the demesne. William had worked for eighteen days, with help for fifteen of them. In 1325 a peasant of Anslow, a Burton Abbey manor in Needwood Forest, brought a case in the manorial court against Henry the Cartwright, concerning a broken contract. Henry had apparently contracted to build a cart with timber supplied to him.² But, interesting as they are, cases of this sort showing specialist wood craftsmen at work would, no doubt, be found in manors outside forests as well.

Some wooden goods were widely available and it seems likely that many were manufactured in forests by the local peasantry, including those with the sort of occupational surnames mentioned above. The Bowyers and Fletchers frequently found in forest documents were presumably making bows and arrows to be offered for sale. However, little light is thrown on this process. H. J. Hewitt has shown that bulk orders for bows and arrows for army use in the early years of the Hundred Years War were placed with sheriffs all over the country and not just in wooded areas.³ There is no indication of where they were made. Building accounts show that goods such as laths and boards, though often made up in a forest or on the site for a particular job, were regularly bought ready made, and tolls were paid on their import into towns.⁴ Large numbers of objects such as pitchers could be bought in certain places. For example, in the 1260's the king bought several hundred or a thousand pitchers at a time on several occasions in Kingston for use at Westminster, but there is no indication whether these were made in the town or in one of the nearby forests.⁵

So, though there was clearly much employment in forests for local peasants in felling and rough-dressing trees, and though surname evidence suggests that specialist wood craftsmen were common in forest villages, the evidence for the extent or organization of the manufacture of wooden goods in forests is still regrettably thin.

¹ *The Agrarian History of England and Wales*, IV, 1500-1640, ed. J. Thirsk, 1967, p. 427.

² S.R.O., D1734. J2057; D1734/2/1/101 m4.

³ H. J. Hewitt, *The Organisation of War under Edward III*, 1966, pp. 64-5.

⁴ L. F. Salzman, *Building in England to 1540*, 1952, ch. xvi, especially p. 240; *Bristol Charters, 1155-1373*, ed. N. Dermott Harding, Pubs. Bristol Rec. Soc., I, 1930, p. 55; E. Gooder, *Coventry's Town Hall*, Coventry and North Warwickshire History Pamphlet, 4, p. 3.

⁵ *Cal. Lib. Rolls, 1260-67*, v, pp. 145, 162, 210, 252.

Another important forest industry was the preparation of wood fuel, especially charcoal. This, too, was work which could be done part time, and concentrated at the time of the year when the peasant was not fully occupied on his holding. It seems normally to have been a subsidiary occupation of peasants and charcoal-burner peasants are indicated in many medieval forest documents. They often appear as smallholders in thirteenth-century rentals. For example, on the Feckenham Forest manor of Himbleton on the estate of the Prior of Worcester, a John the Charcoal-burner (*carbonarius*) held a cotland. His rent was 2s. in cash, a cauk of charcoal, and three days each of haymaking, harvesting, and weeding on the demesne. At Rugeley, a Cannock Forest manor of the bishop of Coventry and Lichfield, two tenants were surnamed Colier in 1297; one held 1 acre, the second 2½ acres. At Longden a third man surnamed Colier held a messuage and a curtilage.¹

Four surviving early fourteenth-century forest accounts for the Cumberland Forest of Inglewood reveal the presence of a group of charcoal-burner peasants. Each year several men paid for licences to burn charcoal for part or the whole of the year. Altogether about two dozen charcoal-burners are mentioned by name in four accounts. None bought a licence in all of the four years, but one did in three. Several bought licences only once. In 1335-6 eleven, the highest number recorded for one year, paid between 1s. 6d. and 10s. each to work for periods ranging from half the winter to all the year round. Licences for the summer or winter or for only half the summer or half the winter are more common than those for a full year, and indicate that charcoal burning was normally a subsidiary, not a main, occupation. The forest accounts give no information about the holdings which we can assume these men to have had, but show that they often owned animals. One of them, John Cokeson, in 1326-7 paid 2s. for a licence to burn charcoal and 1s. 4d. to agist eight draught animals in the forest. This may well not have been his total stock. In 1335-6 his name does not appear among those buying licences to burn charcoal, but he had forty sheep and six pigs as well as several cattle in the forest.²

The surnames of the Inglewood charcoal-burners of this period are worth special mention. Of those with occupational surnames, a couple, as one would expect, are called Colier (or Charcoal-burner). One is called Wheeler. By this date (1326-7) the surname could be inherited, but this could also be an interesting case of a man combining two separate occupations. A couple have the Latin surname *Cinerarius*, and several are surnamed Askebrunner, or Ashburner. This suggests the manufacture of potash, used in the Middle Ages

¹ *Register of Worcester Priory*, ed. W. H. Hale, Camden Soc., 1865, p. 56a; S.R.O., D1734. J2268, ff. 21v, 2v.

² P.R.O., E.101/534/10 (1323-4); E.101/130/9 (1324-5); E.101/534/2 (1326-7); E.101/131/27 (1335-6).

in various industrial processes including glass manufacture, the latter also found at this date, as we shall see, in Inglewood. The same man was often ash-burner and charcoal burner. Richard *Cinerarius* paid 1s. for a licence to burn charcoal in 1323-4 and was amerced 3s. 4d. in December for cutting down wood "for ashes" (*ad cineras*). He agisted draught animals in the forest the year after. Richard le Askbrunner, who paid 2s. to burn charcoal in the summer of 1327, had at least six draught animals and ten pigs in the forest in that year, and young cattle in the forest in 1335.

The largest sum recorded in the surviving early fourteenth-century accounts from the sale of licences to charcoal burners in Inglewood was 39s. 6d., the total for 1335-6. One individual paid 10s. for a licence to work both summer and winter for one year. Both the total sum and the sum for individual licences are small compared with those paid by charcoal burners in the Forest of Dean, where the charcoal-burning industry was most developed in the second half of the thirteenth century. Two lists of sales of licences in this forest in the period Michaelmas 1278 to April 1279 survive. Together they record sales to about fifty-three men from the Dean villages of St Briavels, Dean, Staunton, Ruardean, Lidney, and Bicknor for a total of £101 5s. 6d., at rates ranging from 3s. to 10s. a week. The industry was clearly on a much larger scale here. Some individual charcoal burners paid quite considerable sums for licences to work. Roger Spore of St Briavels paid £6 11s. od. for twenty-three weeks' work between October and April, whilst Stephen Edy of Lidney paid £6 9s. od. for twenty-one weeks' work in the same period. Others were working on a smaller scale, buying licences to work for only two, three, or four weeks in the same period.¹

Charcoal burners were sometimes wage-earners, employed by the king or local lords, but most of them, including many of those in Dean, seem to have been independent operators. Charcoal, like faggots and other fuel, was exported from forests both for the use of local landlords and for sale.² But probably the main market was provided by local fuel-consuming industries. Chief amongst these was the iron industry, established, as is well known, in many forests where iron-ore deposits had been found, and particularly important in the thirteenth century in the Forest of Dean. There were forges of very different sizes in thirteenth- and early fourteenth-century forests. One belonging to the king in Dean was estimated to be worth about £50 a year, and many local lords here, as in other forests, were privileged to work large forges in the royal forests and to take fuel for them.³ Such forges may well have employed local

¹ P.R.O., E.32/333, E.32/334. It is possible that slightly fewer than fifty-three men were involved, as two or three men may have been given different surnames in the two lists and so counted twice.

² The export of charcoal from the Sussex and Kent Weald was prohibited in 1290.—*Cal. Close Rolls*, 1288-96, p. 70.

³ Hart, *op. cit.*, pp. 31-2, 46-7. See also H. R. Schubert, *History of the British Iron and Steel Industry*, 1957, especially pp. 98-109.

peasants. Perhaps more interesting from our point of view are the much more numerous, small, often itinerant, forges, the *plures forgie errantes* of a 1282 Dean document, found in so many forests at this period. They were often temporary structures which could fairly easily be abandoned or moved to sites with easier access to fuel, and often worked sporadically for part of the year only. The Dean forges illustrate many of these points. Forty-three are listed in the 1270 eyre roll, mostly paying 2s. 4d., or half a mark, each. Fifty-eight are mentioned in a fuller list at the eyre of 1282. The forges had been working for periods ranging from seven years to a few months since the 1270 eyre. The amercements, virtually equivalent to licences, varied, presumably as a result of information about their size not revealed to us, ranging down from 10s. and 6s. 8d. per year.¹ Two men had two forges each, but the rest one only. Well over eighty individuals are mentioned in the two lists, three-quarters of them from the four Dean villages of St Briavels, Dean, Staunton, and Ruardean. The fluctuations in the numbers of these small forges in the pre-1282 period are characteristic of Dean all through the century. To some extent they were the result of intermittent royal fears about the destruction of the Dean woodland, but such fluctuations are widely found throughout the thirteenth-century forest iron industry.

The Forest of Dean was exceptional in the degree of development of both the iron and charcoal industries. The two were obviously closely connected, and the smiths and charcoal burners of the 1270's and 1280's were often, in fact, the same people. About twenty-three of the fifty-three charcoal burners named had forges in the forest at about the same time. Two of the most prominent charcoal-burner-smiths were the two men mentioned above, Roger Spore of St Briavels, and Stephen Edy of Lidney. The former paid half a mark for a forge in 1270 and two marks for two forges which had worked for seven years between 1270 and 1282. Stephen Edy similarly paid half a mark for a forge in 1270 and two marks in 1282, this time for one forge which had worked for ten years. Thomas Ian of Staunton, who paid £1 13s. 4d. to burn charcoal for the short period of four weeks between Michaelmas of 1278 and April 1279, operated a forge for five years in the pre-1282 period, for which he was amerced £1. The evidence suggests that the scale of operations of individuals varied considerably. Men such as Roger Spore and Stephen Edy must have been employers of labour. Perhaps their non-agricultural activities were on such a scale that they cannot, or can no longer, be regarded as peasants. It seems likely that most of the charcoal burners listed as paying 10s. a week were employing servants and not working alone.²

¹ P.R.O., E.32/29 m2; E.32/30 m23d.

² Dr Hart shows that early in the fourteenth century it took a man nine days to convert an acre of woodland to charcoal. Charcoal-burners working for the king were paid 2s. 3d. for this, or 3d. a day.—Hart. *op. cit.*, p. 63.

Unfortunately, no manorial documents survive to throw further light on these charcoal burners and smiths. But an interest in land is shown by the presentation of several of them for illegal assarts at the 1270 and 1282 eyres. Stephen Edy, for example, had taken eight crops from 1 acre in 1270, for which he paid 6s. and seven crops from 5 acres (described this time as "old assart") in 1282 for which he paid the high sum of 25s. Roger Fowel (?) of Ruardean, who paid for a forge in both 1270 and 1282, was presented at the later eyre for the assart of half an acre in partnership with Roger, son of Walter. They paid 2s. together for the seven crops they had taken.¹ A couple of the smiths were also presented at the 1282 eyre for the illegal export of wood from the forest by boat. One of them, the enterprising Stephen Edy, apparently kept a boat for this purpose at Lydney.²

The surnames of the Dean smiths named in 1282 deserve some comment. Thomas Lewelin, William of Hereford, and John of Hereford were presumably immigrants, perhaps attracted to Dean by the iron industry. Adam the Colier, who had operated a forge in the forest for six months in the years 1270 to 1282, was perhaps more charcoal-burner than smith, hence his surname. William the Sharsmith and Geoffrey the Nailer of Dean presumably specialized in the production of shares and nails at their forges. The surname Nailer occurs quite often in Dean documents, but the general term Smith (*Faber*) is much more common. Unfortunately, how nails, shares, or other iron objects, or even the charcoal reached their market is not revealed.

Small forges and peasant smiths were found in most thirteenth-century forests. In Knaresborough Forest, for example, in 1304-5, six small forges (called "nailsmiths" in a later account) paid a total rent of 22s. and in 1297 a lorimer paid 4d. for his forge.³ Men with surnames derived from specialization in the iron industry are found in nearly all forest documents. The surnames Smith and Marshall are common in Wealden villages as shown by the Sussex Lay Subsidy of 1297; Smith, Marshall, and Lorimer appear frequently in the records of the 1285 forest eyre of Inglewood.⁴ Often the surnames appear in contexts which show their owners to be peasants. For example, two smallholders on Cannock Manor in 1297 were surnamed Smith, whilst a Marshall at Rugeley held 4 acres. Three men surnamed Smith pannaged pigs in Rockingham Forest in 1295.⁵ By far the most common surname of this sort is the general one Smith, but Marshall, Nailer, and Lorimer appear often. Arrowsmith and Cutler appear, but seem, at this period, to be rare.⁶

¹ P.R.O., E.32/29 m7d.; E.32/30 m18, 19.

² P.R.O., E.32/30 m24.

³ P.R.O., SC.6/1085/1; *V.C.H. Yorks.*, II, p. 347.

⁴ *Sussex Subsidies*, ed. W. Hudson, *Sussex Rec. Soc.* x; P.R.O., E.32/5.

⁵ S.R.O., D1734. J2268, ff. 22v, 21v; P.R.O., SC.6/195/11.

⁶ An Arrowsmith at Clitheroe (1294).—*De Lacy Compoti*, 1296, 1305, ed. P. A. Lyons, *Chetham Soc.*, CXII, p. 124; a Cutler at Rugeley (1327).—*Exchequer Subsidy Roll*, 1327, ed. G. Wrottesley, *Staffs. Hist. Coll.*, VII, p. 237.

The evidence, in particular the small sums paid for forges, suggests a fairly small scale of operations on the part of most individuals. But smiths were numerous and total output in several forests must have been considerable. Royal orders for army equipment, a great stimulus to the iron industry, were often for large quantities. For example, in 1254 as many as 30,000 horseshoes and 60,000 nails were purchased in the Weald.¹ Dr Hart estimates that at least half a million quarrels (crossbow bolts), and probably many more, were made in the Forest of Dean in the period 1223-97.² In this case, as often with army supplies, specially commissioned royal officers seem to have organized production.

Smiths were not, of course, found only in forest areas. By the thirteenth century most villages had their smith, and both smiths and more specialized iron workers were found in towns. Forest smiths produced roughly worked iron for further processing as well as manufactured iron objects. But there were undoubtedly many smiths in many forests turning out a range of basic iron objects. Indeed, the manufacture of iron objects was perhaps more developed than that of wood objects in thirteenth-century forests. It is revealing that royal orders for bulk supplies of iron objects in the early years of the Hundred Years War were made from four or five forest areas, in contrast to the widely diffused orders for bows and arrows.³ This specialization is not altogether surprising in view of the particularly favourable circumstances for the development of the iron industry found in forests, that is the presence together of the accessible ores and fuel. Also, iron objects, which it was impossible for most people to make for themselves, would have a wider market than wooden ones.

Unfortunately, it has proved as difficult to find information about how forest smiths' iron or iron objects reached the market, as about the relationships between smiths, iron miners, and charcoal burners. Tolls were paid on the import of iron objects into towns, but it is not clear who brought them in. Records of royal purchases give little information about independent smiths beyond statements such as that which mentions one hundred iron rods purchased "from a certain smith in the Weald." The London ironmongers were apparently important customers of Wealden smiths and complained about their standards of work in 1300. It is known that these ironmongers put out work to nailers and smiths in London, but their dealings with Wealden smiths are obscure.⁴

Iron mining at this period is best documented in the Forest of Dean, where it was in the hands of the Free Miners described by Dr Hart.⁵ Briefly, they were

¹ *V.C.H. Sussex*, II, pp. 241, 242.

² Hart, *op. cit.*, p. 49 and App. v.

³ Hewitt, *op. cit.*, p. 70.

⁴ G. A. Williams, *Medieval London*, 1963, p. 179; *V.C.H. Sussex*, II, p. 242; E. Straker, *Wealden Iron*, 1931, p. 33.

⁵ C. E. Hart, *The Free Miners*, 1953, *passim*.

a body of locally born men, whose customs and privileges were recognized by the king, who taxed their product. They could dig for iron ore and have access to their mines through most of the forest. This, and the simple techniques and equipment used in their shallow pits, meant that small-scale independent mining enterprises of individuals or small groups of men were possible, and perhaps the norm, in the thirteenth and early fourteenth centuries. Elsewhere iron mines on forest manors were leased for small sums of money to the miners. In Cannock Forest, for example, an iron mine at Longden was leased for 12s. in 1284-5. In a 1297 rental a mine at Rugeley was estimated to be worth 1s. a week "when working."¹

Mining for coal started in several forests in the course of the thirteenth century.² The mines, like iron mines, were usually shallow, giving access to surface or near-surface seams. They were abandoned when they became deep enough to be in danger of collapse or flooding. Little equipment was needed by miners and thirteenth-century forest coal mines were typically small-scale, sporadic peasant enterprises, and coalmining another way in which forest peasants diversified their activities. Small annual or weekly rents were paid for mines to the appropriate manorial lord or the king. The Cannock Forest mines revealed in the Longden manorial accounts were probably typical. In 1305-6, five separate pits were worked, each by one or two miners and for part of the year only. A rent of 6d. per week per pick was paid to the bishop. The longest time worked by one miner was twenty-seven weeks between March and Michaelmas, the shortest seventeen weeks between May and Michaelmas. The mines were evidently abandoned in the winter months when the weather deteriorated. The situation had changed somewhat by 1308-9. At that date two pits were working. One, with four picks, worked for forty-four weeks from February till Christmas, the second, with one pick, worked for twenty-eight weeks from February to Michaelmas.³

The names of the miners are recorded in the 1305-6 account, and look like peasant names. They include, for example, William, son of Sarre de Halsey (the latter a common local name), and Richard Hirdman. The uncertainties of thirteenth- and early fourteenth-century coal mining are shown by the fluctuations in the numbers and values of the mines and miners working both during the year and from year to year. For these reasons it was typically a part-time enterprise of men with other forms of income. The surname Coleman appears three times in the Longden rental of 1297, and is held by two cottars at nearby Brewood. The rental also records a coal mine at Cannock estimated to be worth 48s. a year.⁴ Work in many of the forest industries could be done largely

¹ Dean and Chapter Library, Lichfield, N15; S.R.O., D1734. J2268, f. 20d.

² L. F. Salzman, *Medieval English Industries*, 1923, ch. 1.

³ S.R.O., D1734. J2057.

⁴ S.R.O., D1734. J2268, ff. 2d, 3d, 15d, 21d.

in the winter, but coal mining was exceptional. Peasant coalminers like those in Cannock presumably entrusted their holdings and stock to the care of their families for much of the year.

Another group of industries attracted by the easy availability of fuel was frequently, though not exclusively, sited in forests at this period. Amongst these was the glass-making industry, still very small, but established in several widely separate places. There is evidence of it at Bromley Hurst in Needwood Forest by the end of the thirteenth century, and nearby Abbot's Bromley had two taxpayers surnamed Le Glasmon in 1327.¹ Surnames recorded at the 1285 forest eyre (*Verrer*, *Vitrear*, and *Glasenwright*) show it was well established by that date in Inglewood Forest.² The only evidence of the industry in the surviving early fourteenth-century forest accounts, however, is the payment by a man called John Vitrear for a glass house (*logium in quo operatur vitrum*) and the right to take dead wood and ferns of 13s. 4d. in the 1320's and of 26s. 8d. in 1335-6. John Vitrear was a farmer as well as a glass worker; the 1335-6 payment included payment to agist his cattle in the forest, and he had paid additional agistment fees for cattle in 1323-4 and for pigs the year after.³

The industry is better known, though still inadequately documented at this date in the Weald. The 1297 Sussex tax list records two taxpayers surnamed Vitrear at Southover just outside Lewes,⁴ but it was further north round the Sussex-Surrey border that the industry seems to have been most developed. A Laurence *Vitrearius* is mentioned in a pre-1240 Chiddingfold deed. G. H. Kenyon suggests that the furnaces shut down for part of the year, and that the industry provided opportunities for local peasants both in part-time employment at the furnaces and in the preparation of fuel of beech or oak billets, the latter probably a winter occupation.⁵ It seems doubtful whether the initiative for the development of the glass industry would come from the local peasantry. Glass-making skills, even those necessary for the manufacture of rough forest glass, would not be widely known and traditional amongst the peasantry as were, for example, iron-making and potting skills. The market for glass at this period was still a small one. The Wealden glassmaker who is known to have been supplying glass from Chiddingfold for Windsor in the 1350's, John of Almaine, was probably a skilled immigrant craftsman.

Potting, though not as specifically a forest craft as glass-making and much more widespread, was practised in many forests in the thirteenth century. Men

¹ D. W. Crossley, 'Glassmaking in Bagot's Park, Staffordshire in the Sixteenth Century', *Post-Medieval Archaeology*, 1, 1967; *Exchequer Subsidy Roll*, 1327, ed. G. Wrottesley, Staffs. Hist. Coll., VII, pp. 208-9.

² P.R.O., E.32/5, m16, 17, 19.

³ P.R.O., E.101/131/22; E.101/534/10; E.101/130/9; E.101/121/27.

⁴ *Sussex Subsidies*, ed. W. Hudson, Sussex Rec. Soc., x, p. 51.

⁵ G. H. Kenyon, *The Glass Industry of the Weald*, 1967, p. 15 and ch. 1.

surnamed Potter or Crocker appear frequently in documents of forest areas, as, for example, in the 1297 Sussex lay subsidy roll.¹ Potters with peasant tenements appear in the manorial documents of forest manors, for example, the Ordricus *Figulus* (Potter), who held an acre at Barston in Feckenham Forest in 1186, or Richard the Potter, tenant of a messuage and 1½ acres of land at Heywood in Cannock, in 1297. William Potter of Lacock illegally enclosed and cultivated 1½ acres of forest at Ash, Wiltshire, in 1270.²

Lime, though often burned for building operations on the site, was also burned in forests where there was plenty of fuel. In 1252, for example, the king had 1,400 quarters of lime burned in the Forest of Dean for works at the castles of St Briavels and Gloucester.³ Independent lime-burners appear in the early fourteenth-century Inglewood forest accounts. They were fewer in number than the charcoal-burners, but often paid as much or more for licence to carry on their work. Like the charcoal-burners they were often men with animals in the forest and were presumably peasants working part time at a non-agricultural occupation. A good example is John Raull, who in the year 1335–6 both paid 6s. 8d. to burn lime in summer and agisted twelve draught animals and a horse in the forest.⁴

The industries discussed above, using the wood, fuel, and mineral deposits of the forests, though probably the most important, were by no means the only industries found in the thirteenth- and early fourteenth-century forests. The growing rural cloth-manufacturing industry of this period was found in some forest areas, but, as it was not in any sense an exclusively forest industry, it has not been dealt with here. Two more typical forest industries were tanning and rope making, both using tree bark. Corders are mentioned in Dean in 1255 and the surname Roper appears in the late thirteenth-century eyre rolls.⁵ In Needwood the inner bark of lime trees was used to make what were called locally 'bastonropes'. Bark was regularly sold for this purpose, and an early fourteenth-century Hoarcross tenant of a half acre of land was called Thomas the Roper.⁶ At Barrow-on-Soar in Charnwood Forest one tenant's services consisted of finding cords of bast for the lord's wagons and carts.⁷ Tanning was forbidden in royal forests but practised there illegally nevertheless. It is found as a

¹ *Sussex Subsidies*, ed. W. Hudson, Sussex Rec. Soc. x. It seems likely that these scattered rural potters made earthenware, rather than copper or brass, pots.—G. Fransson, *op. cit.*, p. 184; P. Reaney, *op. cit.*, pp. 188–90.

² *Records of the Templars in England in the Twelfth Century*, ed. B. A. Lees, p. 35; S.R.O., D1734. J2268, f. 24d; *V.C.H. Wilts.*, iv, p. 411.

³ C. E. Hart, *Royal Forest*, 1966, pp. 30, 49.

⁴ P.R.O., E.101/534/10 (1323–4); E.101/130/9 (1324–5); E.101/534/2 (1326–7); E.101/131/27 (1335–6).

⁵ *Cal. Pat. Rolls*, 1247–58, p. 450; P.R.O., E.32–30.

⁶ J. R. Birrell, 'The Forest Economy of the Honour of Tutbury', *Univ. of Birm. Hist. Jnl*, viii, 2, 1962, p. 132; P.R.O., DL.29/1/3.

⁷ G. F. Farnham, *Charnwood Forest and its Historians*, 1930, p. 50.

legal occupation in other forests, and also, of course, outside forest areas. The surname Tanner appears often in forest documents. There are Tanners in Inglewood in 1285, and another pannaged his pigs in Rockingham Forest in 1295.¹

A rather different sort of forest industry was the trapping of birds, an occupation sufficiently profitable for some peasants to be prepared to buy annual licences to practise it, and in which some specialized enough for this to be reflected in their surnames. A 1297 rental of Haywood, Cannock Forest, records the payment of a few pence a year for licences to catch birds by several tenants. In Pickering Forest in 1334, four men, two surnamed Fowler, said to catch birds with birdlime, snares, and other contrivances, were fined sums ranging from 3d. to 3s. 4d. In Duffield Frith in 1313-14, 14s. 6d. was collected from fowlers for licences.² The size of the sums paid by individuals suggests, however, that this was, with few exceptions, a very subsidiary occupation.

There is evidence, then, of considerable industrial activity in the forests of thirteenth- and early fourteenth-century England. The Forest of Dean, with hundreds of woodcutters and charcoal burners, scores of miners and smiths, and a scattering of corders, potters, and other craftsmen, was perhaps exceptional. Few, if any, forests were without some industries, though there seems to have been little industrial development in some, for example, Sherwood and Rockingham. Inaccessibility and distance from the more advanced Midlands and east of England was no bar to the exploitation of forest resources, as the history of Inglewood demonstrates. The presence together in the forests of fuel and the raw materials mentioned was obviously a vital factor. However, there are other reasons why these resources were exploited at this time and in the manner described.

The attitude of local landowners and of the king, even in royal forest, was not as a general rule unfavourable. The iron industry constitutes a possible exception. In Dean, and in other forests such as Knaresborough, anxiety was felt about the rapid destruction of woodland which was inseparable from the industry. However, this seemed to result in no more than sporadic limitations on the numbers of forges. On the whole, policy in the royal forests in the thirteenth and early fourteenth centuries was designed rather to draw revenue from the controlled exploitation of certain forest resources than to enforce forest law so strictly as to prevent their use. The growing demand for forest products at this time made such a policy both advisable and profitable.

The numerous and increasing peasantry of forest areas were well placed to take advantage of these circumstances for a number of reasons. Amongst them

¹ P.R.O., E.32/5, mm. 14, 16, 21, 27; SC.6/195/11.

² S.R.O., D1734. J2268, f. 23d; *The Honor and Forest of Pickering*, ed. R. Bell Turton, North Riding Rec. Soc., N.S., IV, pp. 60, 69; P.R.O., DL.29/1/3.

are several of those suggested by Dr Thirsk as promoting the development of rural and not just forest industries.¹ The degree of agricultural specialization amongst the medieval peasantry can easily be exaggerated, but pastoral farming was probably sufficiently important in many forests, on peasant holdings and on the demesne, to leave many peasants time for off-farm occupations. In these areas labour services tended to be light, and the peasantry to be relatively free. The former, at least, is true even on the forest manors of a large episcopal estate such as that of the bishop of Coventry and Lichfield. Many of the peasants whose off-farm occupations are documented had only smallholdings, which would leave them with both inadequate income and time to spare. Smallholders were numerous on many forest manors but the land shortage of the late thirteenth century was not, on the whole, acutely felt in these areas. Conditions varied from one forest to the next, but there was usually land available for assarting, at a price. However, though again there are exceptions, it tended to be of mediocre quality for arable farming, making pastoral or non-agricultural activities more attractive.²

So forest peasant families must often have been less than fully occupied on their holdings. Work in several of the industries discussed was seasonal and irregular, and combined well with agriculture because of the different and often complementary work patterns. The combination of occupations brought dual advantages of security for the individual and cheapness of production.

The nature of the evidence seems to rule out any precise estimates of the respective contributions of off-farm and farm occupations in the incomes of individual peasants or of groups. Some slight indication of the scale of individuals' activities can perhaps be gained from the value of the sums paid for rents or licences for mines, forges, charcoal pits, etc. Fowling was presumably very subsidiary to the peasant fowlers who paid a few pence a year for their licences. It seems likely, on the other hand, that charcoal burning was the main occupation of the men who regularly paid several shillings a week for pits in Dean. But the commonly found intermittent work in this occupation here and elsewhere, for example, in Inglewood, suggests it was probably more often subsidiary to agriculture. The rents on peasant land were so variable and determined by so many different factors that a close comparison is impossible, but it is perhaps worth comparing these sums and the others noted above with the annual rents of from 4d. to 1s. per acre widely found for assart and demesne land at this period. Peasant woodcutters may have taken on work as they needed it, the number of days worked varying with the demand for their labour

¹ J. Thirsk, 'Industries in the Countryside', in *Essays in the Economic and Social History of Tudor and Stuart England*, ed. F. J. Fisher, 1961, pp. 86-7.

² At Longden in Cannock Forest, land was still being assarted in the early fourteenth century, but entry fines were high, often 10s. per acre. Assarting in thirteenth-century Dean was mentioned earlier.

and the situation of the individual peasant. The considerable opportunities for wage-earning in forests in felling trees or in jobs such as fencing forest pastures could be demonstrated from many forests. Two examples will be given. At Longden in Cannock in 1308-9 William the Knave, who according to a rental of 1297 was a neif holding 8 acres of arable and a rood of meadow, earned about 8s. on various jobs on the manor, including fencing, and felling alders. Part of the work was paid at the rate of 2d. per day, so altogether it probably represents about forty-eight days' work during the year. In the Earl of Lancaster's Derbyshire forest of Duffield Frith extensive pastures were leased, and regular repairs and renewal of fencing were consequently necessary. In 1313-14 fencing and the construction of a shed cost £14 15s. od. A penny per day was the rate for much of this work, which therefore represents about 3,500 days' work in all.¹ Some jobs, such as woodcutting, could much more easily be taken up and abandoned than others such as those involving furnaces. The latter would demand more complicated equipment, as well as less widely possessed skills. However, for the most part the equipment needed for the occupations discussed was not so complicated or expensive as to rule out independent peasant participation, and most of the necessary skills were traditional.

It is worth making the point that peasant craftsmen in forest villages were often reasonably prosperous by peasant standards. This is indicated by their frequent appearance in tax lists, where they were often by no means the poorest taxed. At the date of the 1332 Fifteenth, two of the Inglewood charcoal burners mentioned in the accounts had taxable goods valued at £2 5s. od. and £3 os. od. Not all were so prosperous, however, and Robert and Richard Askebrenner's goods at the same date were assessed at 13s. and 15s. respectively.² Tax lists do not, of course, include those whose goods were valued at less than a certain level. Nor were all peasant craftsmen smallholders. Two men surnamed Coleman had standard customary arable holdings of 13 and 15 acres each at Longden in Cannock Forest in 1297. A Turner at Barston, Feckenham, in 1186 held one virgate.³

The evidence is perhaps weakest on the subject of the organization of the forest industries, and it is difficult to add anything to what has been said above. The role, if any, of merchant entrepreneurs in stimulating production for the market, for example, is still obscure and merits further research. But whatever the limitations of the evidence, it is sufficient to suggest that thirteenth-century forest and rural industries should be studied with reference to the peasant

¹ S.R.O., D1734. J2057, J2268, f. 4v; P.R.O., DL.29/1/3.

² J. P. Steel, *Cumberland Lay Subsidy*, 1912, pp. 13, 29. It is interesting to note in this context the point made by Miss B. Harvey that in 1332 at Pyrford, on the edge of Windsor Forest, some smallholders were taxed more highly than peasants with standard customary holdings.—'The Population Trend in England, 1300-48', *Trans. Roy. Hist. Soc.*, 16, 1966, p. 29.

³ S.R.O., D1734. J2268; *Records of the Templars*, ed. B. A. Lees, p. 35.

economies in which they developed, and that peasants at this period should not be regarded as wholly dependent on agricultural incomes. In fact, both the forest economy and the peasant economy of forest regions at this date were more complex than has sometimes been supposed.

Letters to the Editor

MADAM,—I was most interested in the letter of Dr Hooper in vol. 16, pt 1, of the REVIEW regarding the age of hedgerows. I have noticed that in this parish the older hedges contain many more species of trees than the more modern, which were planted at the enclosure of Clanfield in 1840. The latter seem to have been all hawthorn. Now, however, even these hedges have odd elms, elder, dog rose, and bramble. Unfortunately, I do not know the date of the older hedges around some earlier enclosures and around the open fields.

One problem which complicates the dating of the oldest hedges is that we do not know whether a hedge just grew wild on an uncut bank, or whether it was planted, and, if so, with how many types. I do not feel that the old idea that the open field was surrounded with a dead latticed fence is very sound. I would think that the Saxons knew the value of a live fence, both to keep large animals out, and to provide fuel when it was cut and laid about every seven years. One thing I believe we do know is that they surrounded their haws with a thorn hedge, for the name hawthorn tells us this.

One point of interest in Clanfield is to see how the fences used in 1850 at the enclosure of Burroway meadow, now part of Clanfield, subsequently filled up with hawthorn. The fence was used across the river valley instead of a hedge so as not to impede the flood water. The hawthorn came from the droppings of birds, for after eating their fruit, they rested on the fence, and the bushes sprouted from their droppings.

E. A. POCKOCK

WINDMILL FARM,
CLANFIELD, OXON.

MADAM,—I wonder whether any of your readers could help me to discover the average size of hens' eggs in England in the middle of the nineteenth century. The information I have so far is still somewhat scanty and further details would help me greatly in my studies of nineteenth-century recipes.

N. KURTI

DEPARTMENT OF PHYSICS,
CLARENDON LABORATORY,
PARKS ROAD, OXFORD

NOTES ON CONTRIBUTORS

Alan R. H. Baker is lecturer in historical geography at the University of Cambridge. He has published articles on Kentish and French rural settlement and field patterns, and an evaluation of H. L. Gray's views on English field systems.

Jean Birrell is lecturer in economic history at the University of Sheffield. She is studying the economy of the medieval English forest.

R. A. Butlin is college lecturer in geography at University College, Dublin, and is honorary secretary of the Agrarian Landscape Research Group. His research interests and publications are in the field of historical geography of Britain and Ireland, with special reference to field systems and urban development.

David Hey is lecturer in history at Matlock

(Continued on page 119)