

XXII.—‘DARGS AND DAYWORKES.’

1. By THE EARL PERCY, F.S.A.

[Read on the 29th October, 1897.]

In the second volume of the *History of Northumberland*, now in course of publication, in the account of the township of North Charlton (vol. ii. p. 295), a quotation from a survey of 1578 is made to the effect that ‘the moore of North Charleton . . . contains of due measuring MMCCCXXXVIII acres, 3 roods and vii dayes worke.’ To this the editor has appended a note: ‘another passage in this terrier states that a plot of land containing 71^a. 1 rood, 5 dayes worke and 2 perches. See p. 128 where the letter D stands for a unit of measurement on an estate map made in 1599. Cf. Heslop, *sub cap.* “Darg,” *Northumberland Words*, “in ancient terriers *dagg* is used as an equivalent for a certain portion of land, probably as much as can be ploughed in one day’s work, or a day’s work of mowing”’ etc.

Turning to page 128 we find a survey of the manor of Rock employing the letter D to represent a unit of measurement, and a note pointing out that this D may represent the tenth part of a strip measuring 2,200 yards, or $\frac{1}{2}$ of an acre. I believe I am responsible for having made this suggestion to the editor. I am convinced, however, on further consideration, that ‘D’ stands not for $\frac{1}{2}$ of acre, but for $\frac{1}{4}$.

The terms in question are used in two ways: as measures of time and as measures of space.

I. A ‘day work’ (not ‘day’s work’) is sometimes, and a ‘darg’ is generally, if not always, used to describe the work or service to be rendered. Thus ‘the tenants of Hawkle pay yearly for iiij precarious plough dargs, at the feast of St. Cuthb^t, in March only, viiiij^d’ (‘precarious’ is, of course, the translation of the Latin ‘*precariae*’), ‘The aforesaid tenants pay yearly for xij^o harvest day workes, at the feast of St. Cuthb^t, in September, xij^d’, ‘The heirs of William Herrison rent by the year for 6 harvest day-workes,’ ‘The tenants of Byllton pay yearly for xvij p’carious plough darges, at the feast of St. Cuthb^t, in March, xvj^d.’ From these entries it would appear as if ‘darg’ was the

appropriate word for service with the plough, harvesting being described as 'day worke;' but 'day worke' might include ploughing. 'The towne of Shilbottle payeth yearely to the lord of Alnewicke for xxvj dayworkes; y^t is to say, for ploughing and shearing day workes, at the feast of St. Cuthb^t, in the moneth of September only, viiijs xj^d.' 'Darg' is still, or was till recently, used in the vernacular in Scotland. In the *Heart of Midlothian*, Jeanie Deans tells Dumbiedykes that she has 'a long day's darg afore' her.

II. But a day-worke was also formerly as definite a unit of mensuration as an acre, a rood, or a perch. Leonard Digges, in his *Tectonicon*, published in the year 1556, says:—'It is requisite, also, here to open what a Pearche, a Day Woorke, a Roode, and an Acre is. Although there are diuerse opinions engendred, through long custome, in many places, of the length of a Pearche (upon whiche our chiefe matter dependeth), yet there is but one true Pearche by Statute appointed to measure by, wherein is ordained three Barly cornes, dry and rounde, to make an Inche, 12 Inches a Foote, 3 Foote a Yarde, five Yardes and $\frac{1}{2}$ a Pearche, 40 Pearches in length and 4 in breadth an Acre;¹ so an Acre by Statute ought to contain 160 Pearches, the halfe Acre 80 Pearches, a Roode, commonly called a quarter, 40 Pearches, a Day worke 4 Pearches.' And in the subsequent pages of the book the problems are regularly worked out in perches, day works, roods, and acres.

Norden also, in his *Surveyor's Dialogue*, published in 1607, gives us the following conversation between the surveyor and the balliff 'Sur.—You must know that there go 160 perches to one acre, 80 perches to halfe an acre, 40 perches to one roode, of foure parts and a halfe of an acre, ten day-works to a rood, foure perches to day-worke, 18 foote and a halfe to a perch. Bayly—Then I perceive, that as many times as I find 160 perches in 400 perches, so many acres the peece is, and if the overplus come to 80 perches, it makes halfe an acre more, if to forty, one roode, if to foure perches, a day-worke: and so according to the odde perches it maketh parts of an acre. Sur.—You take it rightly. Bayly—Then I divide 400 by 160 and I find 160 twice in 400 and 80 over: so it amounts to two acres and a halfe. Sur.—It is well done: but I would have you to observe

¹ This statement, with regard to the theoretical shape of an acre, is curious.

a form in setting down your quantities : for as the parts are foure, so set them down in foure columnes : as for example : 2-2-0-0 : the first is acres, the second is roodes, the third is day-workes, and the fourth perches.'

There is abundant evidence that this form of mensuration was in vogue in Northumberland, as the survey above quoted shows; *e.g.*, 'This same containes by measure 18 foot to the perche 3063 ac. 6 ro. 11 day workes, per : nul.' 'There be in the said p'kes iiij^{or} Keep's which have allowed them pasture for iiij^{or} kyne wth their followers and iiij^{or} day workes of meadow ground towards the finding and feeding of the said Cattell in Winter,' etc. 'The Lorde hath alsoe in the said Parkes one Grayser or Joyster w^{ch} hath allowed him likewise for his Fee, for the exercising of his said office, pasture for ij kine and their Calves, ij^o dayworkes of meadow towards the feeding the said Cattell in Winter,' etc. 'Thomas Riccoby Carpenter and menteyner of all the pales in both P'kes afore-said who hath allowed to him as a Fee for the same Pasture for ij^o kyne & ij^o dayworkes of Meadow,' etc.

On this system the demésne lands of Rock are easily calculated. The scale is 'statit measure, vidzt : 16 foot & a halfe to the perch.' The account should stand thus :—

	Acres.	Roodes.	Dayworkes.	Perches.
In arrable	165	3	0	0
In meadow	52	1	0	0
In pasture	150	0	0	0
In moore pasture	455	0	0	0
Lady close	16	0	0	0
Mill closes	0	0	6	0
John Lyle	5	3	5	0
Total	845	0	1	0

The surveyor has made a slight error in putting the '1.' of the total in the 'roodes' column instead of in that of the 'dayworkes.'

I cannot resist the temptation of pointing out a somewhat curious arithmetical or geometrical coincidence which follows from the re-insertion of the dayworke in the scale of land mensuration, though it would be idle to attach much weight to it. If the hide of Domesday contained 120 acres, then by dividing it by 4 we get the virgate, or normal holding of the villein. Under a three field system the amount

of land held by the villein in any one field would be represented by a square furlong. Divide this area by 10 and we get the acre. Dividing the acre by 4 gives us the rood. Divide the rood by 10 and we obtain the dayworke. Divide the dayworke by 4 and we find the perch. Thus the perch may be derived from the hide by successively dividing it by 4 and 10 alternately.

2. By F. W. DENDY.

My impression was that the word 'darg' (or 'dargue' as it is sometimes written) was derived from the Scandinavian word 'dag,' a day; but Mr. Heslop has called my attention to Dr. Murray's explanation in the *New English Dictionary*, which I have no doubt is more correct. Dr. Murray says the word is 'a syncopated form of *day-work*, or *day-wark*, *day work*, through the series of forms *dawork*, *da'ark*, *dark*, *darg*, the latter being now the common form in Scotland.'

Earl Percy has done good service in unearthing the meaning which was given to the word day-work as a unit of mensuration by Digges and Norden, in the sixteenth and seventeenth centuries. His explanation undoubtedly clears up the difficulty which was felt by Mr. Bateson in construing the areas given in the schedule attached to the map of the manor of Rock, preserved in the Bodleian library, and extracted in the second volume of the *History of Northumberland*. Another authority to the same effect is cited by Dr. Murray under the head of 'Day's work,' dated in 1610, from W. Folkingham *Art of Survey*, ii. vii. 59. 'Foure square Pearches make a Daiesworke, 10 Daiesworkes a Roode.'

It is, however, difficult to believe that so small an area as that definition includes, namely, 4 rods by 1 rod or 22 yards by $5\frac{1}{2}$ yards could ever have been considered a day's work in actual ploughing. I am inclined to think that that definition only came into use after the custom had grown up of receiving from the tenant a recognised money equivalent in lieu of the actual services which had been formerly rendered, and that the term was then used either as a convenient division for assessing the rent payable or perhaps for plotting out the common field strips on their re-distribution.

Earl Percy has since suggested that this day-work of four square rods may represent the spade-work of a cottager (who, as is well known, had no cattle or plough), on his small plot of arable land.

There is considerable evidence that the word or similar words were also used conventionally to express the larger area of an acre. Mr. Heslop, in his *Northumberland Words*, mentions that Mr. Dand possesses a field at Amble Moorhouse called 'the four-and-twenty *darg*' containing 24 acres. Last year my firm sold a meadow in North Yorkshire held under a lease granted in the sixteenth century in which the quantity it contained was expressed to be 'nine day's mowing.' When we sold it, it contained 9a. 1r. 0p.

The terms *journal*, *tagwerk*, and *morgen*, used on the Continent also denote an acre strip.

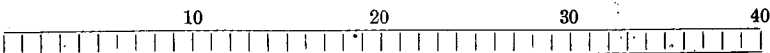
The definition of 'Dawach,' quoted in *Spelman's Glossary* from Skene, is to a somewhat different effect—'Apud priscos Scotos *one dawach of land* quod continet quatuor aratra terrae quorum unum-quodque trahitur octo bobus : Alii quatuor aratra duplicita intelligunt, quae sunt octo simplicia : Sed servari debet usus & consuetudo locorum. In nonnullis libris hic legitur *Bovatae terrae* contra fidem veterum codicum authenticorum. Bovata autem terrae continet 13 acras, cujus octava pars comprehendit unam acram dimidiam acrae et octavam partem acrae.'

The much smaller area given by the authorities cited by earl Percy can be very clearly shown in the diagrams used by Mr. Seeböhm to explain the constituent parts of an acre. As they do not seem to be familiar to all our members they are here reproduced, with additions.

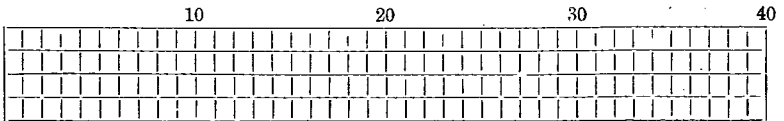
PLAN OF THE CONSTITUENT PARTS OF THE NORMAL ACRE STRIP IN THE OPEN FIELDS AFTWARDS ADOPTED AS THE STATUTE ACRE.

A furlong or furrow long

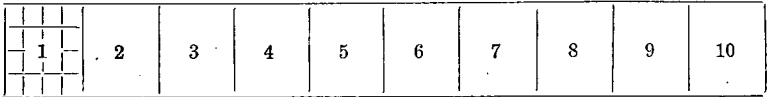
containing 40 rods and forming the 8th part of a mile = 220 yards.



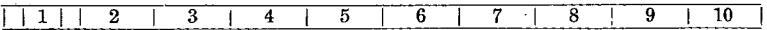
A furlong rodded or a rood containing 40 square rods.



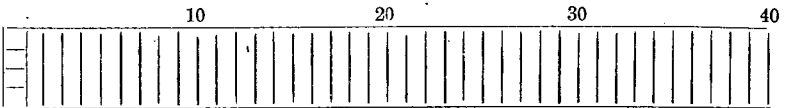
An acre containing 4 roods side by side = 160 rods = 220×22 yards.



An acre containing 10 square chains, each chain containing 16 square rods, *i.e.*, 22×22 yards each square chain.



A rood containing 10 day-works of 4 rods each.



An acre containing 40 dayworks of 4 rods each.

Earl Percy has observed that these divisions are all multiples or dividends of the figures 10 or 4. He might have carried that multiplication on to the three-field carucate of 160 acres, and also to the square mile of 640 acres, by multiplying the 160 acres by 4. I am inclined to think that the rod, pole, or perch, the actual measuring tool (which varied in length in different places, and thus produced varieties in the area of the acre), was the unit of measurement, and that the larger areas were produced by multiplication, rather than that some larger area was the unit, and that these smaller areas were produced by the division of it.

Mr. Pell has pointed out in *Domesday Studies*, and it is a curious fact, although apparently unconnected with the present subject, that the Egyptians combined their weights by a binary or joint duodecimal and decimal system, *i.e.*, $2 \times 10 \times 10$ or $4 \times 10 \times 10$, etc., a system which has some of the conveniences incident to each method of calculation.