

XXV.—CHOPWELL WOODS.

By WILLIAM WEAVER TOMLINSON.

[Read on November 24th, 1897.]

Stretching northward from the banks of the Derwent between Lintzford and Blackhall Mill, and making of the whole hillside a sylvan labyrinth in which a stranger might wander long in foggy weather before finding an outlet, are the well-known Chopwell woods. Attractive to the naturalist as the habitat of the adder's tongue and other rare ferns, and the breeding-place of the kestrel and the woodcock, they are also of interest to the antiquary on account of their association with some of the principal strongholds and towns of Northumberland, and with the British navy at an eventful period of its history. They occupy a great part of the manor of Chopwell, which, in the first half of the twelfth century, belonged to the priory of Durham, but, sometime between 1153 and 1159, was granted by bishop Pudsey to the first abbot of Newminster in exchange for Wolsingham. At this early date the name was spelt 'Cheppwell,' which Mr. Boyle derives from the A.S. *ceap* (cattle) and *well* (a well).¹

It is interesting to follow the old boundaries as given in Pudsey's grant²:—

'From the spring which is called Milkewelle where it runs into the Derwent, and from the upper part by the road which is called Ledehepes weye³ to the wood called Fulscaleside⁴ where the field and wood adjoin Lynneburn⁵ and by the same stream to Rudeforde⁶ and thence

¹ *The County of Durham: Its Castles, Churches, and Manor-houses*, 4to ed. appendix xxii.

² *Newminster Chartulary* (66 Surtees Society Publ.), p. 45.

³ Now known as the 'Lead road.'

⁴ No doubt, the wood called 'The Guards.'

⁵ The Clinty burn, on which is a small waterfall or 'linn.' This burn seems to have been called, in 1315 and 1317, 'the Wodclouk' or 'Wodechik.'

⁶ Rudeforde; probably identical with the Cottage burn ford on the Red burn, near its junction with the Stanley burn.

by a way to Hangandeswell⁷ and thence to Gladenhefde,⁸ to Fifakes⁹ and thence by the road which is called Lincestrete¹⁰ to Lintzford ; and on the south side of the Derwent, in length from Birdene¹¹ to the water which is called Pont, and in width from the said Derwent to the ditch which they made by our leave, so that the cross-line (*transversum*) of the actual breadth is two furlongs in these places : viz., the first cross-line is taken from Birden up, the second opposite Histlihalch,¹² the third where the scroggy brae (*rupes rubea*) descends to the Derwent and thence by the aforesaid ditch to the Pont, where the fourth cross-line is of two furlongs.'

Several other place-names occur in a description of the boundaries which is given in a quit claim of common right in Chopwell by John de Horseley, lord of Graucroke (Crawcrook), in 1313.¹³ From the eastern side, 'where the Escotlesche¹⁴ falls upon the Stockstall,¹⁵ and

⁷ Hangandeswell ; possibly 'Hollywell,' in the bankside close to the lane leading from West Pit house to Buck's nook, about 650 yards from the latter place and one furlong from the Lead road. It has been much affected by the working of the neighbouring collieries. It owes its present name to a holly bush which, till recently, grew above it. Very old people remember it being called the 'hanging well.'

⁸ Gladenhefde ; the head of the Barlow, or Blaydon burn, near Coalburns. Half an acre of land on the east side of 'Gladen,' in a certain place called the 'Strete' on the Tyne, was granted to the monks by Robert de Nevill, lord of Raby, early in the fourteenth century.

⁹ Fifakes ; probably the 'five oaks,' from the A.S. *fif* (five) and *ae* (oak).

¹⁰ Lincestrete : the paved road leading to Lintzford.

¹¹ Birdene. A part of the southern boundary line—seven furlongs in all—appears on the south side of the Derwent, cutting across bends of the river, etc. It occurs in four places, which are no doubt identical with those mentioned in the old grant. *Birdene* I take to be a narrow little dene, through which runs a slender thread of water called in the district 'the Howlet Hall burn,' adjoining Westwood colliery on the east, and just opposite to the mouth of the Milkwell burn.

¹² Histlihalch (? Thistlyhaugh, a name that also occurs in Northumberland, near Weldon bridge)—from the A.S. *thistel* (thistle) and *haugh* (a low lying meadow near a river)—may be the same as *Sillyhaugh*, near Armonsides, which was sold by John Duck and John Heslop in 1671 to Robert and George Surtees. The brae referred to I would place a little east of Armonsides. The fourth piece of the boundary line, nearly three furlongs in length, terminates about a furlong from the Galley burn, and this streamlet, I think, must be the one meant, and not the Pont, which is a mile further east of it.

¹³ *Newminster Chartulary*, Surtees Society, vol. 66, p. 51.

¹⁴ Escotlesch.

¹⁵ Stockstall. These various place-names, conveying the notion of enclosures, clearly point to the fact of the abbots of Newminster having a sheep farm a little to the north of Leadgate. The *stockstall*—A.S. *stoc* (a stock or stake) and *stal* (a place, or stall)—was a stockaded place surrounded with stocks or piles. The *escot*, or east cote—A.S. *cote* (an enclosure for sheep)—seems to be identical with the 'bercarium orientem' [Bercaria : locus berbicibus alendis idoneus, alius tamen ab ovili.—Du Cange] past which the boundary ran, as indicated in a quit claim of common right by Robert, earl of Angus, in 1317, before coming to the streamlet called the Wodechik.

from the Stockstall towards the north up to the northern side of Sticeley-dike,¹⁶ and from Sticeley-dike by Heddeley wai¹⁷ into the Spenstrete¹⁸ and to the ford of Lynce (Lintzford), and so from Milkewell by the western side to that place where the Milkewelburn falls into the Derwent, and so by Milkewelburn to the spring which is called Milkewell, and so from Milkewell by the Rauenside dike towards the north to the road which is called Heddeley wai, and so from Heddeley wai by the Rauenside dike towards the east to the gate which is called Prodow iet,¹⁹ and so from Prodow iet by the ancient ditch around the Tunesteddes²⁰ to the Estcot of Cheppwell.'

The place-names thus mentioned lie beyond the site of the present woods. Certain others, however, which appear in a quit claim of rights in Chopwell by Robert Fitzmeldred of the twelfth or thirteenth century may be located in the eastern part of the woods. 'From Standandestan²¹ "thus runs the boundary," descending by Lynches-trete to the head of Gaunlisker,²² and so descending where the water falls from Gaunlisker into the streamlet of Lyncheclough,²³ and so by the same streamlet into the Derwent, and so by the stream of Derwent, descending to Lynches forde, and so ascending from Lynchforde by the great road of Lynchestrete to Standandestan.'²⁴

The manor was let in 1527 to John Swinburne, esq., a bastard of the house of Edlingham, for £26 13s. 4d. per annum. He devised his farm at Chopwell in 1545 to his second son, John, who obtained a

¹⁶ Sticeley-dike; probably a dike overgrown with whins—A.S. *sticels* (pricks). It might, however, be a dike called after Robert de Stichell, bishop of Durham, 1261-74.

¹⁷ Heddeley wai: the Lead road.

¹⁸ Spenstrete; the paved road leading to the Spen.

¹⁹ Prodow iet, now Leadgate, from which place there is a road leading to Prudhoe.

²⁰ The Tunesteddes—A.S. *tun* (a place surrounded by a hedge) and *stede* (a place, site, position)—probably represented the rudely fortified dwelling of the shepherds. A wood and a cottage still bear the name of the 'Guards,' which is derived from the A.S. *geard*, denoting a yard or enclosure. The Tunesteddes with the Estcot, and probably the Stockstall, may, I think, be identified with the 'messuage and seven acres of land with appurtenances' wrongfully seized by Gilbert de Umfravill, earl of Angus, in 1305, on the ground that these were in the township of Hedley, but to which Robert, earl of Angus, his son, relinquished all claim in 1307 (*Newminster Chartulary*, Surtees Society, vol. 66, p. 50).

²¹ Standestan; probably a prehistoric monolith.

²² Gaunlisker, like *Gaunless*, a streamlet in the S.W. part of Durham, appears to be of Celtic origin. It may possibly be derived from *Gwan* (weak, feeble) and *wysg* (a stream or current).

²³ Lyncheclough; probably the streamlet now called 'Pallinsburn.'

²⁴ *Newminster Chartulary*, Surtees Society, vol. 66, p. 48.

fee simple of the manor from the crown. In 1562, this John Swinburne, who had been working coals in Ryton common, had a dispute with Pilkington, bishop of Durham, about his boundaries in connexion with which he roughly used some of the bishop's servants, Robert Saunders and Robert Hedworth being 'sore beth and hurt.' The matter was submitted to arbitrators, who, on October 10th, 1563, delivered their award in regard to the boundaries deciding that the field in dispute called the 'Kyefield' was within the manor of Ryton, and further that John Swinburne should 'cause to be payed to Saunders, 40s. sterling, to Hedworth, 20s., in recompence of their hurts.'²⁵

As several of the places named in the old descriptions of the boundaries were not well known at this time, and fresh disputes were likely to arise in consequence, the descriptions were revised and brought up to date by the arbitrators.²⁶

John Swinburne forfeited his estates in 1569 by his participation in the great northern rebellion. The manor of Chopwell, thus vested in the crown, was, in 1578, granted by queen Elizabeth to sir Robert Constable²⁷ of Flamborough, for the services he had rendered as a spy and informer, the woods, however, being reserved. At his death, 12th November, 1591, it was found that accounts for provisions delivered into the stores and wages, for which, as lieutenant of ordnance (1588-

²⁵ Surtees, *Hist. of Durham*, vol. ii. p. 281.

²⁶ First, according to the old boulder, the same begynneth at a place or fountayne called Mylkwell as it runnyth into Darwent and so by the head of the way called Chappellway, and by the river or becke runyng along the woodside called Falcalside, and so along by the said water, still runyng betwixt the head mores and groundes, and a passage or waye leadyng over the said water commonly called Roderforde or Rudyforde, and from thence turnyng upward toward the East by a little greene platte or waye to the south-syde of a greete rounde hill like a wynde mylne hill [near Frenche's close], and then streght from the said hill up to a grene way or grene pece of ground leadyng eastward directlye to the northe syde of a pece of grounde caste aboute with a greete old diche, by some called the Arbour [? a very small field, two hundred feet square, three furlongs east of the footbridge over the Stanley burn], and from thence eastward directlye over the old holowe waye eynde up to the toppe or highte of the more or hill there, and from thence directlye to the diches of Kyefielde [adjoining Buck's Nook lane], and so directlye to folow the dyche of Kyefielde southwardes, and by the south eynde thereof unto the head of a rivell or sike [the Coal-burn] about a hundreth yeardes from the south east corner of Kyefeld, and from thence to turne downward by the said sike or rivell, as the same runyeth or goyth downwards unto a gayt called Ruelay-gait [? Rogue's lane; a farmhouse to the north-east is called Reeley Mires]. Great stones shall be laid from Roderford untill the head of the sike that descendeth to Ruelay-gait, not above twelve score one from another; and upon every stone on crosse of a speciall marke to be hewen.—Surtees, *Hist. of Durham*, vol. ii. p. 281.

²⁷ *Ibid.* p. 277.

91), he had received the money, viz. £1,707 0s. 2d., were unpaid. His lands were thereupon seized and a lease of them granted, Sept. 18th, 1595, to Ambrose Dudley.²⁸

A grant, on February 8th, 1604, to the heirs of sir Robert Constable, of pardon and discharge of debts due by him to the crown, was followed on November 26th, 1607, by a grant in fee-farm to sir William Constable²⁹ (son of sir Robert), afterwards notorious as one of the regicides, of the manor of Chopwell, certain woods excepted, with a proviso for coal mines if discovered, etc.; and, on March 25th, 1608, the manor, mines, etc., were leased to Ambrose Dudley,³⁰ who, however, on 22nd November, 1613, purchased the estate from Anthony Aucher, to whom sir William Constable had sold it on the same date.³¹

Ambrose Dudley died in June, 1629,³² and the manor passed to his son, Toby Dudley, whose daughter and heiress, Jane, married Robert Clavering, a younger brother of the first sir James Clavering of Axwell. The male issue of Clavering failed in his grand-children, and Sarah, the sister and eventual heiress of John and Dudley Clavering, became wife of the lord chancellor, William earl Cowper.³³ The estate has since been sold in parcels, the Cowper family, however, reserving the mines of coal.

But to return to the history of the woods. It is probable that, after the dissolution of monasteries in 1536, when the crown must have made some arrangement with the tenant of the monastery, John Swinburne, the woods were reserved; for, two years later, Bellasis, Collingwood, and Horsley, the royal commissioners, in their report on Dunstanburgh castle, suggest that certain timber required for a new roof and floors to one of the towers of the great gateway, and for

²⁸ *Cal. of State Papers*, James I. Domestic, addenda 1580-1625, p. 452.

²⁹ *Ibid.* 1603-10, p. 384.

³⁰ *Ibid.* 1603-10, p. 418.

³¹ Surtees, *Hist. of Durham*, vol. ii. p. 277.

³² He was buried at Ryton, June 24, 1628-9. Ambrose Dudley seems to have been a man of considerable business aptitude, but perhaps a little unscrupulous in his methods, if we may read between the lines of a letter from his father to lord Salisbury in 1610, complaining of his son's 'unnatural dealing with him' in regard to his estate. As early as 1595 we find Dudley in conjunction with Peter Delaval obtaining a grant of a lease of the coal pits in Bebside and Cowpen, and in 1597 he had a grant of the stewardship of Bywell lordship. On January 29, 1620, a grant for life was made to Ambrose and Toby Dudley of the office of collecting the subsidies and customs in the port of Newcastle.

³³ Surtees, *Hist. of Durham*, vol. ii. p. 277.

other purposes, should be obtained from Chopwell woods and carried by water to Dunstanburgh.³⁴ They also made a similar suggestion in regard to the timber required for the roofs of several decayed buildings at Bamburgh castle.³⁵ In the grants to the Constable family, we know definitely that this portion of the manor was reserved, the description of it being 'all wood and woody grounds called the East Wood, the Moore Close, Deane, and the Carres' (Confirmatory grant to sir Wm. Constable, 14th November, 6 James I.).³⁶

In the sixteenth and seventeenth centuries, Chopwell woods furnished large quantities of bark to the tanners of Newcastle.³⁷

Most of the timber used in the reparations of the 'longe bridge' at Berwick and the pier at the haven mouth, and for the gun-carriages on the walls, for over a quarter of a century came from Chopwell. It was the 'nearest place convenient,' according to the officers there.³⁸

As may be imagined, the cost of transport was considerable. In 1593 the land and water carriage of sixty tons of timber from Chopwell woods to 'the watersyde' at Blaydon, at 4s. a ton, was £12. £1 6s. 6d. was the charge for bringing forty tons of this timber from Blaydon to Newcastle. The freight of two ships, each of forty chaldrons burden, from Newcastle to Berwick was £20. The fees of two pilots amounted to £3 15s. 2d. To this cost had to be added the 'riding charges' of the master carpenter of Berwick between Berwick, Newcastle, and the woods, forty-seven days at 2s. 6d. per day, £5 17s. 6d., so that the transport of forty tons from Chopwell to Berwick cost nearly £1 a ton.³⁹

Before the crown had gained possession of Chopwell woods, the controller of Berwick, sir Valentine Brown, paid as much as 54s. to 60s. a ton for the transport of timber to Berwick from other places, but in 1595, as John Carey informed Burghley, the cost was not more than 14s. or 15s.⁴⁰

³⁴ *Border Holds*, p. 183. The compiler of the index to vol. ii. of the new *County History* has erroneously concluded that Chopwell woods were near Dunstanburgh, see p. 518.

³⁵ *Ibid.* pp. 259-261.

³⁶ Surtees, *Hist. of Durham*, vol. ii. p. 277.

³⁷ *Newcastle Courant*, March 2nd, 1877. Newcastle Incorporated Companies, Tanners, article iii. by W. Pickering.

³⁸ *Cal. of Border Papers*, vol. 1, pp. 10, 243, 462.

³⁹ *Ibid.* vol. 1, pp. 471 and 503. ⁴⁰ *Ibid.* vol. 2, p. 67.

In 1595, it was recommended that one hundred tons of timber should be brought from Chopwell to Norham to be used in the repairs of the castle, at that time in a state of great decay.⁴¹

Berwick obtained forty tons of ash timber from Chopwell in 1597 for making carts, cart wheels, hand-spikes, etc.,⁴² and on September 30th, 1620, a licence was granted to the mayor and burgesses to cut down two hundred and fifty tons of timber in Chopwell woods for the bridge.⁴³

The conduct of those who had charge of the woods at the time was far from exemplary. John Carey and Richard Musgrave, writing from Berwick, the one on October 31st, 1595,⁴⁴ and the other on July 22nd, 1597,⁴⁵ gave Burghley strong hints that things were not all right at Chopwell, bidding him beware of those who, under colour of a lease of the underwoods, were carrying off the timber; and lord Willoughby, on June 4th, 1598,⁴⁶ definitely informed him that the 'bayley' (John Rutherford) had ordered 100 oaks to be cut down for his own profit, saying that they had been given to him by the surveyor of woods. 'Knowing,' says Willoughby, 'the great use of these woods for the service of Berwick, Newcastle, etc., it may please you to give charge to your servant, Mr. Ambrose Dudley, who dwells thereby, to inform your lordship of any such default hereafter.' Possibly in consequence of reports made by Dudley to his detriment, John Rutherford appears to have been removed a few years later from his position of trust. On November 24th, 1613, Henry Sanderson, the constable of Brancepeth castle, who had charge of the woods there, received orders to take care of Chopwell as well.⁴⁷ Either on account of the action he had taken in this matter or in connexion with some question of rent or boundary, the new lord of the manor seems to have made a very bitter enemy of the old bailiff, for in 1615 the latter, accompanied by Charles Rutherford of the Blackhall, Hugh and Gawen Rutherford, and William Shafto entered forcibly into the manor of Chopwell and made a murderous attack on Ambrose Dudley, George Gifford, and others at a place called the Westwood. In the affray George Gifford was wounded

⁴¹ *Cal. of Border Papers*, vol. 2, p. 92. ⁴² *Ibid.* p. 365.

⁴³ *Cal. of State Papers*, Jas. I. Domestic, 1618-23, p. 182.

⁴⁴ *Cal. of Border Papers*, vol. 1, p. 67. ⁴⁵ *Ibid.* vol. 2, p. 365.

⁴⁶ *Ibid.* p. 535. ⁴⁷ *Cal. of State Papers*, Jas. I. Domestic, 1611-18, p. 332.

in the thigh with an iron lance by William Shafto, and died shortly afterwards.⁴⁸ For the part they had played in the affair the Ruthersfords were outlawed.

In 1620 the bailiff of the woods was stated to be 'cutting down and selling wood for his own advantage,'⁴⁹ and a few years later Ambrose Dudley, who held the office of keeper of the woods, though described by the bishop of Durham in 1597 as 'an honest gentleman and forward enough,'⁵⁰ seems to have succumbed to the temptation of 'converting timber trees to his own use.'⁵¹

Charles I., on the 19th of December, 1631, appointed Robert Worral of London keeper and forester of Chopwell woods, and this officer in his turn appointed Roger Fenwick of Meldon his deputy.⁵² In 1634 sir Henry Vane is stated to have been in charge of the woods.⁵³

In 1634, the eyes of the naval authorities were directed to Chopwell as one of the crown estates from which could be obtained the timber required for the construction of new war-ships, and orders were given by the lords of the admiralty, December 23rd, 1634,⁵⁴ that as many of the trees as were fit for this purpose should forthwith be marked. This was the time when Phineas Pett, the great naval architect, in pursuance of the far-seeing policy of Charles I., was remodelling and strengthening the navy, and when the plans were passed for a great new ship,⁵⁵ greater even than the 'Prince Royal,' launched in September, 1610, Chopwell was one of the woods selected by the king himself⁵⁶ to furnish the necessary timber. Shipwrights were accordingly sent down in February, 1635, to view the woods,

⁴⁸ Surtees, *Hist. of Durham*, vol. ii. p. 282.

⁴⁹ *Cal. of State Papers*, Jas. I. Domestic, 1619-23, p. 158. Henry Sanderson to sir Robt. Naunton, June 29th, 1620.

⁵⁰ *Cal. of Border Papers*, vol. 2, p. 459.

⁵¹ *Cal. of State Papers*, Chas. I. Domestic, 1631-33, p. 458.

⁵² Hodgson's *Hist. of Northumberland*, part ii. vol. ii. p. 7.

⁵³ *State Papers*, Chas. I. Domestic, 1634-5, p. 367.

⁵⁴ *Ibid.* p. 367.

⁵⁵ On the 26th of June, 1634, says Pett, 'his majesty came to Woolwich to see the frame of the "Leopard," then half built, and, being in the ship's hold, he called me aside privately and told me his resolution of building a great, new ship, which he would have me undertake, and said, you have made many requests to me, and now I will make it my request to you to build the ship.' (*Archaeologia*, vol. xii. p. 278.) The model of this ship was finished on October 29th, 1634.

⁵⁶ *Cal. of State Papers*, Chas. I. Domestic, 1634-5, p. 499.

and out of 11,083 trees they marked 1,610 as 'useful for his Majesty's service,' which number, however, they thought might be brought up to 2,000.⁵⁷ The timber they reported could be conveniently laden into barges at Blaydon and 'thence transported to Newcastle at about 16d. a load, and from Newcastle to Woolwich, Deptford, or Chatham at about 14s., so that the timber being valued at 10s. per load the plank will stand his Majesty in 42s. the load, and the other timber at 36s. per load.'⁵⁸

It was decided at first to obtain the whole of the timber required from Chopwell for an order was signed by the king [February 24th, 1635] for 2,500 trees from these woods to be cut down before the sap should come into them.⁵⁹ However, in the early part of June, the great Phineas Pett himself arrived at Chopwell,⁶⁰ and found that the woods came far short of his expectation,⁶¹ and therefore he made arrangements for getting 1,400 choice trees from Brancepeth West Wood, where there was 'excellent provision of long timber.'⁶² Under the direction of Pett's son, rapid progress was made with the felling and squaring of the timber, and soon a large collier was on its way to Woolwich with a portion of the framework. Pett remained in the north till July 22nd, when he left Newcastle on his homeward journey.

The great ship, which was thus built from timber out of Chopwell and Brancepeth woods, was the celebrated 'Sovereign of the Seas,'⁶³ the first three-decker, remarkable not only for its size—it was 232 feet long, from stem to stern, and 48 feet in width, a gross tonnage by depth 1,466, by draught 1,661, and by beam 1,836—but for its gorgeous decorations, its elaborate carving and gilding. It cost nearly £41,000, exclusive of guns, which cost £25,000.

A historic interest attaches to this ship, for the ship-money levied to pay for it was one of the prime causes of the Civil War. Launched October 13th, 1637, it was in almost all the great actions with the

⁵⁷ *Cal. of State Papers*, Chas. I. Domestic, 1634-5, p. 512.

⁵⁸ *Ibid.* p. 512.

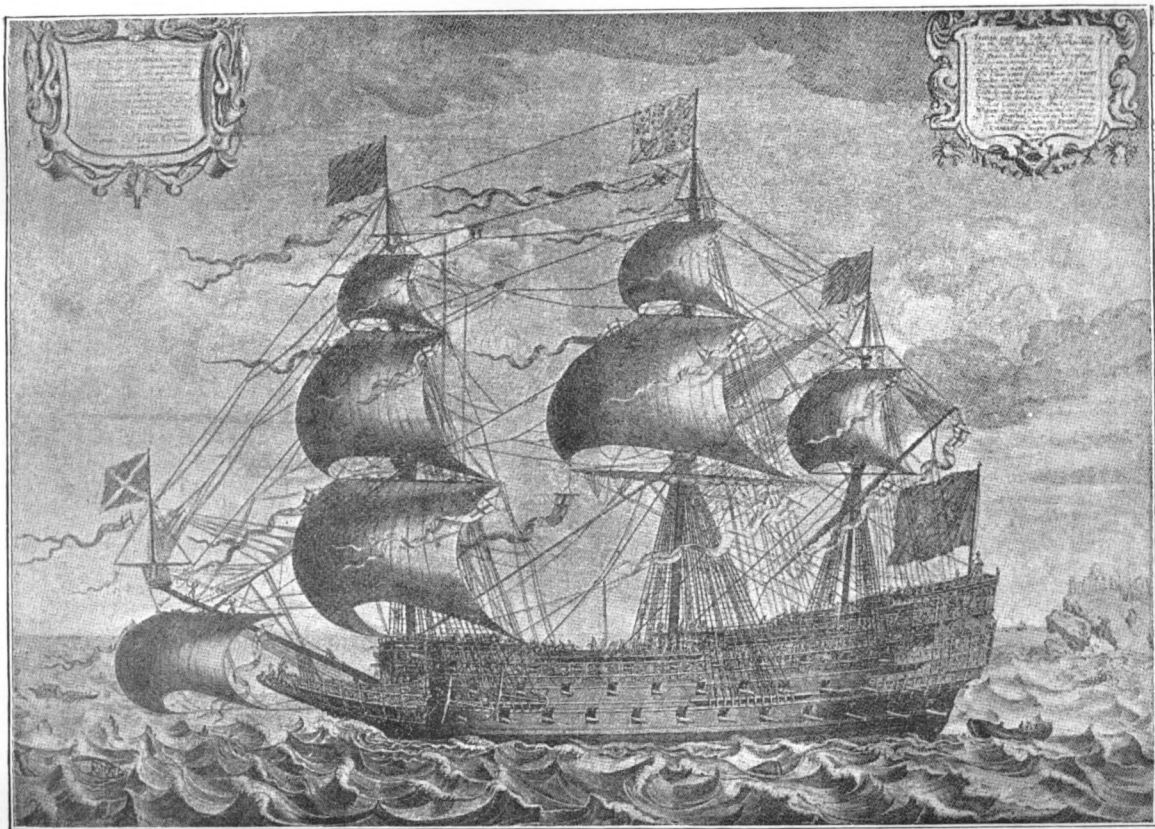
⁵⁹ *Ibid.* pp. 523 and 592.

⁶⁰ See appendix.

⁶¹ *Cal. of State Papers*, Chas. I. 1635, Domestic, p. 113. Letter from Newcastle, June 8th, 1635.

⁶² *Ibid.*

⁶³ There is a splendid model of this ship in the museum at Greenwich hospital. A good illustration of the ship will be found in Green's *Short History of the English People* [edition 1894], p. 1098, and in Commander Robinson's *The British Fleet*, p. 229.



'THE SOVEREIGN OF THE SEAS, SUBSEQUENTLY 'THE ROYAL SOVEREIGN. From an old engraving. (See opposite page.)

Dutch, and after being renovated in 1684, when the name was changed to the 'Royal Sovereign,' it was accidentally burnt at Chatham in 1696.

After having yielded the best of their timber to the 'Sovereign of the Seas,' the woods, with the exception of 187 trees marked for ship-timber by the purveyor of the navy, were granted, August 19th, 1637, to sir Henry Vane,⁶⁴ comptroller of the household, father of sir Harry Vane who called forth a famous exclamation from Cromwell, and was addressed by Milton in a well-known sonnet. Sir Henry was licensed to remove the trees granted within the space of twenty-one years, and in 1640 we find sir Lionel Maddison negotiating on his behalf for the sale of the timber. When surveyed by Joseph Pett, purveyor of the navy, and his assistants in September, 1636, there were 10,407 trees, valued at £2,547 12s. 2d. (inclusive of 187 valued at £83 13s. 4d.)⁶⁵ In April, 1640, however, there were only standing 9,741.⁶⁶

Charles I. having made a grant of timber from Chopwell woods for the reparation of Tyne bridge, the town council of Newcastle in 1649 directed that application should be made to the parliament for 40 trees for this purpose.⁶⁷

It is doubtful whether the woods, after the wholesale felling that went on during the latter years of Charles the First's reign, ever recovered their former importance. On account of the quantity of coal in the district, the wood does not seem to have found a ready sale, and a good many trees continued to be stolen by the country people round about, as they had been about the time of the grant to sir Henry Vane.⁶⁸

During the first quarter of the present century, about 900 acres of land at Chopwell were planted with the object of raising oak timber for naval purposes. The rapid diminution of oak in the forests of the country was causing alarm. It was feared that material for the oaken walls of old England might fail at no distant date. Lord Collingwood, we know, shared this apprehension. At Morpeth he raised with much care some seedling oaks, and, at Heathpool, had a plantation of oaks growing to provide 'knee-timber' for his ships.

⁶⁴ *Cal. of State Papers*, Chas. I. Domestic, 1637, p. 378. ⁶⁵ *Ibid.* 1636-7, p. 96.

⁶⁶ *Ibid.* 1640, p. 5. ⁶⁷ Brand's *Hist. of Newcastle*, vol. i. p. 47.

⁶⁸ *Cal. of State Papers*, Chas. I. 1636-7, Domestic, p. 95.

The first portion of these crown lands planted was a tract of four hundred and fifty-four acres in 1813, 1814, and 1815. A hundred of these acres consisted of 'woodland and wet bogs, growing alder, birch, and other wood peculiar to such land.' The other portions of the lands were planted in 1820 and 1821, under the direction of William Billington, who had superintended the enclosing and planting, etc., of eleven thousand acres of land in the Forest of Dean. In a little work published in 1825 he gives an account of his 'experiments on the different modes of raising Young Plantations of Oaks for future navies from the acorn, seedling, and larger plants, showing the difficulties and objections that have occurred in the Practical Part, with remarks upon the Fencing, Draining, Pruning, and Training Young Trees.' He relates what trouble he had with the field mice, which he found more destructive than the hares and rabbits. 'Since I have been at Chopwell,' he says, 'previous to the great storm of 1823, the mice were pretty numerous, and had done considerable damage by biting off several very large oaks; and though after that winter I found none for two years, yet I perceived they were again increasing. It is said by naturalists that the beaver will fell trees with his teeth, but I have never seen an account of mice felling oak trees. Yet have I found oak trees cut down by them of seven and eight feet high and an inch and a half in diameter at the place bitten off, which was just at the root.'⁶⁹ A successful plan was devised of trapping the mice by means of holes twenty yards apart, these being from eighteen inches to two feet long, sixteen or eighteen inches deep, about ten inches or the breadth of a spade at the top, fourteen or fifteen inches wide at the bottom, and three or four inches longer at the bottom than the top.

A memorable day in the history of the woods was 'Windy Monday,' viz., January 7th, 1839, when, it is computed, upwards of twenty thousand trees were uprooted. Since this time the history of the woods is simply a series of experiments in forestry.

⁶⁹ A series of facts, hints, observations, and experiments on the different modes of raising young plantations of oaks, etc., p. 44.

APPENDIX.

PHINEAS PETT IN THE NORTH OF ENGLAND.

[Extensive extracts are given from Pett's diary in vol. xii. of the *Archaeologia*, but, as those relating to Pett's visit to the North of England are much condensed and contain slight inaccuracies, I have had this portion of the diary carefully transcribed.]

May
1635.

Sunday morning we gott horse with some difficulty & rode to Whiteby, where we were kindly entertained & lodged at one Cap^t foxes hous then lying sick there we found much kindness at y^e hands of one Mr Bagwell a Shipwrite & Yardkeeper this was the 31 day of May Munday morning we parted thence & came to Gisborough a great Markett Towne where we baited from thence we went to Stockdome where we found but mean entertainment being lodged in the Maiors house being a poor thatched Cottage. On Tuesday we came to Durham where we baited from thence we came to New Castle about five of y^e Clock lodgeing this night at the Post house where we were very homely used but the next day we removed thence to Mr Leonard Carrs house where we were very well accomodated & neatly lodged in which house we lay all y^e time of our abode at New Castle, this was y^e 3^d of June 1635.

June

After our Coming to New Castle & had lodged our selves Conveniently we advised together how to proceed in our businesse & that no time might be lost & first viewed the Places from whence we were to make Choice of our frame & other provisions w^{ch} were Chopple woodes & Bramespeth Park a good way from one another then having marked such Trees as were fittest our purpose our Workmen were disposed of to their severall Charges and began to fell square & saw with all the Expedition we could that work being settled my Sonne Carefully followed that businesse whilst I my self attended the Lord Bishopp of Durham with my Commission & Instructions whome I found wonderfully ready & willing to give all furtherance to us assisted by other Knights & Gent. Justices of the Peace in the County who with all Care & dilligence took order with the Country for present Carriage God so blessed us in our proceedings that in a Short time as much of y^e frame was made ready as laded away a great Collier belonging to Woodbridge which was safely landed at Woolwich & as fast as provisions could be made ready they were shipped away that from Chopple woods was laded from New Castle that which came from Bramespeth from Sunderland.

June
1635.

Having ordered all our business both for Carriage moneyes & all other needfull things to sett forward the businessse leaving my loving son Peter to oversee all I took my leave of my friends at New Castle the 22^d day of July being Wednesday & came to Durham where we lodged that night at the Post house next morning I waited upon my Lord of Durham with whome I dined, & after dinner took leave & returned to my lodgeing.

July
1635.

Fryday morning, being the 24 day I parted from Durham accompanied with son Christ^o Charles Bowles & the Guide we mett alsoe bound our way for London three Scottish Gentlemen and their attendants who very kindly accepted of our Company & we rode together to North allerton, where [we] lodged that night at the Post Masters next day we rode to York.
[Extract from Life of Phineas Pett, 1570-1638. *Harl. MS.* 6279, British Museum.]