

SURREY LOCAL HISTORY COUNCIL

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The Surrey Local History Council exists to foster an interest in the history of Surrey by encouraging local history societies within the county, by the organisation of a one-day Symposium on Local History at Dorking and an Annual General Meeting, which includes a visit to a place of historical interest and, also by co-operating with other bodies in order to discover the past and to maintain the heritage of Surrey in history, in architecture and in landscape.

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Membership on the part of local history societies will help the Council to express with authority the importance of local history in the county.

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SURREY HISTORY

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The cover illustration shows John Speed's map of Surrey, 1611

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PHILLIMORE



Interior and Exterior views of the Rood Stair Turret, Blechingley Church.

THE REFORMATION IN BLECHINGLEY

Uvedale Lambert

Blechingley Preservation and Historical Society

It may be of interest to try and set down what happened in a particular parish at that confusing period of English history known as the Reformation, together with some of the subsequent results and consequences. Blechingley is lucky in having a good many facts preserved on which to base reasonable conjecture.

Benedict Mulsho was the Rector until 1546. He had been appointed by Sir Nicholas Carew, a devout Catholic, about 1528 and it may be assumed that Mulsho was orthodox. He had seen the Bible in English placed in every church in 1535 and the suppression of the Monasteries 1536-9. His curate was William Day who was presented to Godstone in 1542. A possible straw in the wind is the entry in the Churchwardens' accounts for 1545 "My expense to Cobham to deliver the money for the defence of the faith" which might suggest Mulsho and Thomas Rowse, the Churchwarden, were not in favour of the Reform, although this may refer to defence against the Turks.

In 1539 Carew was executed and Henry VIII next year gave the Manor to Anne of Cleves, whom Thomas Cromwell had chosen as a good Protestant Queen. Henry soon disposed of her and she lived part of the time at one of her Manors, Blechingley Place (1 mile north of the village), the vast mansion built about 1517 by the last Stafford Duke of Buckingham. But in 1546 the Blechingley Register records "My Ladye's grace prest" died. Anne of Cleves's Chaplain was apparently of the old tradition. On October 18th the Rector followed him to his rest. In fact no less than five priests were buried in Blechingley between 1544 and 1547. A possible explanation is suggested by the fact that in a distribution to the poor is found an item "Thomas Owton prest and blyend [blind] 12d". This may indicate that some of the clergy turned out of the monasteries at the dissolution found their way to Blechingley.

In 1547 Cawarden took over the Manor from his mistress, Anne of Cleves, and she moved to Hever Castle. He was now able to choose a Rector to his liking and it took him five months to find one, John Stanton, curate, doing duty in the meantime. It is surmise but possibly William Wakelyn, whom he appointed, was only a deacon and Cawarden had to wait to have his new broom priested, but he seems to have been a local man. As became a clergyman of the reformed persuasion he was married, and had four children christened before he was driven out under Queen Mary and two more after he returned. We do not know what happened while he was away but can we assume 'childer ceased bornin' during the Marian Reaction?!

Before we pass to the actual alteration in the Church there is one item which is of some interest as denoting the views of the Parishioners. Mention has already been made of the 1545 Churchwarden's entry, but in the accounts there also appears an item concerning the watching of the sepulchre. It was an old custom that on Good Friday, in deference to our Lord's death, there should be no celebration of the Eucharist. But it was usual to celebrate the Mass of the Presanctified when a Host from the previous day's Mass was used and afterwards the Crucifix and Reserved Sacrament were carried in procession to an Altar of Repose where they were laid to typify the Body of our Lord resting in the Tomb. All other altars were left bare. 'The Easter Sepulchre' was watched till the first Mass of Easter as our Lord's tomb had been watched by the Roman soldiers. Then in solemn ceremony with bells, incense and lights, singing "Christus resurgens", priest and choir fetched back the Crucifix and the Host in token of the Resurrection. Some doubtful and rather profane accretions may have centred round this striking piece of symbolism (for which Cromwell had specifically allowed lights in 1538). The Reformers, however, regarded this ceremony as idolatry and were determined to abolish it. In 1547 and 1548 the Churchwardens paid one Brand 8d. for watching the "sepulker" (wages had risen - in 1519 it was only 4d.). In 1549 and 1550 there is no entry, which perhaps suggests Cawarden had abolished the idolatry. In 1551 there appears "John Brande ffor watching of the sepulcur 4d."; in 1552 the pathetic entry "John Brande ffor watching of the vestre 2d.", suggests that possibly the parishioners had insisted on retaining the practice and this compromise of a watch in the vestry was the outcome. There are no more Churchwardens' accounts, but we can guess that though the parishioners' wishes were no doubt observed under Queen Mary, the practice was abandoned in an age which classed visual aids as idolatry.

Blechingley Churchwardens' Accounts 1546-52 have been preserved in two differing forms, one in the Public Record Office¹ and one among the Losely Papers.² In the Public Record Office copy is included a most interesting loose leaf headed "Reconnyng for the Church of Blechinglee and the money paid by Sir Thomas Cawarden to William Johns.

"Item to hym for payenting the qwyer and the rood loft, the king's aerns,³ the owet eyell [outer aisle] jownyeng to the qwyer and for the cullers and stuff tharto aperteyning vil. xvs. iid. [£6 15s. 2d.]

"Item to bricklayer for pavyng and haunssyng [raising] the place for the communion to be mynsterd in ls [50s.]

"Item for iij ml brycke to the same, xxs.

"Item for ij loeds to the same, xs.

"Item for a table for the communion to be mynstryd on jowynd upon a frame, viiis.

"Item for iij long furms to the same, xs.

"Item for fower sceatts and dooble deskhes for the syngyng men to syt in and to laie yer boockes, xxs.

"Item for to ooper pertysyons [2 upper partitions] in the qwyre and chaunsell, xijs.

"Item for quarters and tymber to ye same, vis.

"Item for nayells occupyed therabowtt and in the same churche, vis. iijd.

"Item for removing the sceatts and scettyng the pulpyt and the mending of dyvers thyngs, xs.

"Item for lath nayells and hear [hair for plaster], vs."

And last comes the item – small in cost itself – which accounts for all this new work:-

"Item pluckkyng don the awters, plasteryng the wall and mendyng of dyvers plassys, vijs."

This totals to £14 19s. 5d.

The date of this undoubtedly is 1548 and almost immediately after comes in the Churchwardens' accounts "Item payd to laborers fför polyng down of the rood xiiij d."

The order in Council for taking away all images was made in January 1548 so Cawarden lost no time in implementing it at Blechingley. Besides the High Altar, there was an altar in St. Catherine's Chapel (where the Clayton Monument stands and a piscina still exists), one where the pulpit stands and where, behind it, a niche still remains, one in the Ham Chapel and probably one on the opposite side of the Chancel Arch (crowned perhaps by the canopy, now used for the aumbry, which was found in 1952 blocking the lancet in the South Chapel).⁴ The "payving and haunssyng" [paving and raising] appears to have made a dais in the present chancel on which the "Communion Table" stood placed lengthwise E and W and surrounded on E.W. and S. sides by long forms. On the N. side the Celebrant would stand, but it is clear that the communicants did not sit on the long forms, for in 1552 the inventory mentions "houceling cloths". These cloths were held under the chins of communicants as they made their communion and indicates that they knelt for this purpose outside the forms. Seats and desks for the singing men were probably in the west end. "The owet eyell [out aisle] joynyng the quier", as somewhat clumsily, the Clayton Chapel has to be called to avoid calling it a Chapel, was probably used for separating the communicants from the rest of the congregation. The rood screen itself remained and was indeed repainted, but the rood beam with the figures of St. Mary and St. John standing on either side of the Crucifix was pulled down to make way for the King's Arms. There is no record of the removal of the screen itself, but it presumably took place in Elizabethan times.

There are two inventories of Church Goods, one of 1549⁵ and one of 1552⁶ which do not show anything of particular note – there in 1549 are a silver Chalice, 5 copes, 5 vestments (chasubles), altar linen, 2 big candlesticks and 2 small ones, "ffower belles in the styple" and in 1552 a sanctus bell lent by Richard Chamley to the Ladye Cleves.⁷ In May 1553 the Commissioners (one of whom was Cawarden) came round and made a list of items allowed to be kept, taken by the King, or sold.⁸

Left to the Churchwardens,

1 Chalice

4 Vestments for the Communion Table

4 Bells in the steeple	
1 Sanctus bell.	
Sold to John Gamley Bristow and Ounstead 5 copes	46s. 8d.
8 Vestments	41s. 8d.
Copper and latten 5 lbs.	10d.
2 Latten basins sold to Christopher Chapman (the Churchwarden)	2s. 0d.
The residew of the ornaments sold to John Ounsted of Farley for	<u>6s. 8d.</u>
	£4 17s. 10d.

So the remnant of the pious gifts accumulated through the centuries was disposed of, for one cannot help feeling that a good deal had disappeared already.

Cawarden had his churchwardens, John Dawber and Christopher Chapman before they completed their six years of office 1546-53, repair and "garnish" the church at a cost of £32 14s. 6d., which was £2 more than the proceeds of the various items removed and sold. But it did not cost Cawarden even the £2 for "repayering and garnysing the Church by ye consent of the parysyoners". A memorandum by the same faithful churchwardens at the end of the 1552 inventory states that: "Thear is dew unto Sir Thomas Carwarden by the Church boex [books] and wardens for mony by hym lyed owt and dyspended upon the Church in the abolleshing and defasyng of the idollatre and allterying the olldc superstysyon over and besyedds (94 lbs.) brokern lattern at . . . the pound to hym delyveryd in parte of payement and over and besyed twente and seynyn pounds to hym payd by . . . Toeke golldsmyth for broken plaett to hym solld before the makyng of the first invytors and before any commandement had or any restrayent made the sum of . . ."

The great quantity, nearly 3 cwts., of latten⁹ points to many candlesticks in front of images and pictures as well as on the altars, besides crucifixes, censers and other "idollatre".

Cawarden had finished with the Church only just in time. Edward VI died in the evening of 6 July 1553, but his death was kept secret for twenty-four hours and only on 8 July were letters sent out by the Privy Council, headed by Archbishop Cranmer, to the local government. A copy was sent to "Mr. Carden and Mr. Saunders" (Sir Thomas Cawarden and William Saunder of Pendell) saying that the Lady Mary having "gone to the sea coast of Norfolk, either to fly or meet some foreign power, intending by such ungodly means to disturbe the communc quyet of the realm and to resist syche ordinances as the kynges majistie hath sett forth for the succession of thimperiall crowne after his decease" (i.e. Edward VI's will excluding Mary). Cawarden and Saunder are to put themselves "in readyness to defence and stand faste to our orders and keep watch that no styrre. nor uprore be attempted". On the 16th the Privy Council sent another letter pointing out that the Lady Mary's return would "lead to the bondage of this realme to the old servitude of the Antichriste of Rome, subversion of the true preaching of Godde's word and of thancien laws, usages and liberties", when the large "nombre of

obstinate Papistes would seek to bring in again the miserable servitude of the Busshop of Rome to the great offence of Almighty God". Cawarden was also ordered to send a supply of tents for the guards at the Tower of London.

We can only guess whether Cawarden's Protestantism inclined him to support Northumberland and Cranmer in their attempt to make the Lady Jane Queen and Northumberland's son King Consort, or whether common sense and loyalty to his old master, Henry, swayed him in favour of the Lady Mary. There was little doubt that the country preferred Mary to Jane with her Geneva Protestants and the hated Northumberland.

On 19 July a letter was despatched to Cawarden telling him that the nine days reign was over and Mary Tudor Queen of England.

In January next year Wyatt raised a rebellion in Kent and on 26 January Cawarden was ordered to march with his men for the suppression of Wyatt's rebellion, but Lord William Howard, Lord Admiral of England, had already been deputed to take command of Surrey and Kent and he clearly regarded Cawarden as a dangerous man. At 8 o'clock on 25 January, Lord William, with James and John Skinner of Reigate, came to Blechingley Place, arrested Cawarden and carried him off to the Star Chamber. Stephen Gardiner, the restored Bishop of Winchester and Lord Chancellor, examined and discharged him. Cawarden went back to Blechingley with two letters in his pocket, one to muster his men and march against Wyatt, and the other to tell Saunder, who had occupied Blechingley Place for two days and a night, to go home. But Lord William sent for Cawarden at once and re-arrested him, keeping him prisoner at Reigate Priory. He then proceeded to have all the "harnes, weapons, gounes, munycions of war and horses" seized by the Sheriff. Cawarden appears to have had sufficient to equip three hundred men-at-arms, one hundred bowmen and nearly fifty horsemen, and it took seventeen wagons to carry it all away. Meanwhile Cawarden was taken off to Lambeth, where Chancellor Gardiner, astonished to see him back in custody, sent him to the Council sitting at St. James's which "with gentill wordes willed him to repayre to his own house at the Blake Fryers", [Blackfriars, London] apparently under house arrest. After a month he was discharged and immediately began petitioning for the return of his armoury and horses.

The rest of his life is a sad story of illness, litigation and debt. He never got much of his armoury back. Twice he appears to have been sent to the Fleet Prison for "ill behaviour to the State". He survived Queen Mary's reign and died in 1559, four days after making his will and was buried on the right hand side of the High Altar in Blechingley Church, where his handsome table tomb can be seen to this day. That he at least conformed to the Marian reaction seems to be clear for when his nominee, William Wakelyn, was dispossessed, because he was married, in 1554, Cawarden appointed Robert Harvey, who appears to have been an easy-going orthodox priest, to the Rectory of Blechingley. As soon as Elizabeth became Queen, Cawarden appears to have persuaded Harvey to resign Blechingley, but he was appointed rector at Godstone on 1 December 1599.¹⁰ William Wakelyn was restored to Blechingley and resumed the christening of his children there.

We shall probably not be far wrong in imagining that Mulsho had clung to the old ways and greatly preferred a Latin Mass, while Wakelyn clearly preferred an English one. But Harvey was easily swayed as were most people at the time and was happy to say English Communion or Latin Mass as required. In Godstone there was no powerful Lord and probably the people preferred things as they always had been — at least there was no Cawarden with strong views and great power.

It is interesting that in Harvey's will, dated 1591 (he died in 1593, having out-lived Wakelyn by eighteen years), he leaves half his goods to Elizabeth, younger daughter of John Grene of Fleetwyke in Bedford, and made Edward "whom I lawfully begot on the body of the said Elizabeth", his executor, thus reflecting the pre-reformation attitude towards priests' wives. He will not call Elizabeth his wife (presumably he had canonical scruples), but he asserts the legitimacy of his son, though he does not give him the surname of Harvey. Only in 1605 did an Act of Parliament make the children of ecclesiastics legitimate on the same footing as those of laymen.

The Elizabethan Injunctions of 1559 required a quarterly sermon to be preached by all licenced preachers, and the Government saw to it that only those were licenced who could be relied on. This was directed against Puritans as much as against Roman Catholics. Incumbents who had no licence were to read the homilies and teach from the pulpit the Lord's Prayer, the Creeds and the Ten Commandments. Sometimes missionaries were apparently sent round to "maintain the Queen's Majesty as the Supreme Governour of this Church" where these "dumb dogs" held benefices. In the episcopal certificates of 1563, under the deanery of Ewell, appears "Rectoria de Blechingelye, William Wakelyn, D.D., married priest, sufficiently learned, he resides, is hospitable, at Blechingelye, licensed and preacher, holds two livings". His other living (from 1559) was at Alresford in Hampshire,¹¹ where he resided after 1565 and the note as to hospitality, based on 1 Timothy, III, 2, recalls the duty not only of succouring the poor but of helping strangers, as a mark of the apostolic succession. The Visitation of 1569 refers to "unlicensed and non-preaching curate, ruinous chancel and absent vicar".

The Reformation was of course a long process, quite as much political as religious, and certainly should not be supposed to be complete with the accession of Queen Elizabeth. We should perhaps add therefore a brief note of further developments.

There is a Diocesan Return of 1603 in which Blechingley is recorded as having no recusants (i.e. Roman Catholics), no non-communicants besides recusants (i.e., Puritans) and 304 communicants.

There are also two notes dating from about the same time, in the Churchwardens' books, "I am to give notice that all communicants which receive are to give their names and paie their offerings, that so their names may not be returned at the visitation among such as receive not. And the parishioners are to paie for bread and wine by their severall houses, according to the ancient custome". The other note has a more threatening conclusion, "otherwise they may happen to be

returned among the defaulters". There is little to show that much dissent existed in the parish, though it looks rather as if the Collingbourne family may have had Puritanical leanings. Nicholas Collingbourne christened a daughter "New Berth" in 1582, "Suriell sonne" (the Clerk was wise to make clear the sex), in 1584, and "Adramica" in 1587. Either his ingenuity became exhausted, or he was converted, for Andrew, Mary, Susan and Michael follow. Other curious names of this period hardly suggest Puritan tendencies, e.g., Chaneybar Masly and his or her sister Doriti. Peter Snelling, the innkeeper and churchwarden, had a son baptised Rasumuns [Erasmus?], and one Cocks had four children baptised between 1565 and 1576, Irione, Iryan, Uryan, Heryon.

In the Civil War Blechingley, like London, was Parliamentary. Moreover, we had our local John Hampden in John Turner of Ham, who in 1636 was ordered to be distrained for the unpopular royal tax called Ship Money. Edward Harbert, the Blechingley constable, accordingly distrained Mr. Turner's cattle, which were forcibly rescued by Allingham and Rooker, servants to Mr. Turner, but we hear nothing of the final result. In February 1647 the then Rector, William Hampton, and others, including John Turner above, were appointed to enquire into the conduct of the clergy. The inclusion of the Rector suggests that no very harsh treatment of local clergy was intended. In 1648 Lord Holland attempted a Royalist insurrection by seizing Reigate Castle, but he was easily rounded up and soon executed at Westminster. For alleged complicity in this effort, John Turner, son of the Ship Money hero, suffered considerable persecution from the Commonwealth Government under the Major-General for Kent and Surrey, and spent some time under house arrest, but he seems to have survived. Rector Hampton, eight years after Holland's rising, was still subject to an enquiry of alleged complicity and of hiring witnesses to swear falsely against his accusers. However, in 1656 he was declared to be a sober and peaceable man of quiet life and behaviour and he remained undisturbed.

One of his accusers was Edmund Blundell, and there seems no doubt that there is a long history behind the entry in the list of Conventicles of Winchester Diocese in 1669, where it is recorded "there hath been no meetings in Blechingley since Edmund Blundell, the Anabaptist, went away from thence". Blundell's feud with the Rector was inherited from the day when the Court of High Commission gave sentence against his father, John Blundell of Blechingley, in 1638. It appears that on Easter Day 1638, John Blundell "in a saucy and scornful manner desired Mr. Hampton to make him a churchwarden for that it was a gainful place". Furthermore on Whit Monday Blundell, as a special Bailiff, with a warrant to arrest one Robert Betts, "about a quarter of an hour after evening prayer, did arrest Betts in Blechingley churchyard and upon some struggling rent a skirt in Betts' doublet". Edmund was a boy of fifteen in 1638 and possibly the incident helped to induce in him even more violent opinions than his father's.

The Conventicle Act of 1664, which probably caused Blundell's departure, forbade a religious meeting of more than four persons, other than members of the Church of England, but Charles II, for financial and possibly tolerant reasons,

- issued indulgences. Thus we find that Mr. James Perkins, teacher in Blechingley, and Mr. Joseph Buttery, who was the Blechingley constable and a Presbyterian, were licensed to hold a Conventicle. In 1676 Parliament compelled Charles to withdraw the indulgences and we have no further record of dissent in Blechingley until the Congregational Chapel was built in 1826.
- 1 Bound with 'Church Goods Com. Surv. temp. Ed VI No. 511.' A transcription is given by Daniel-Tyssen in S.A.C. IV (1869) 101-7.
 - 2 Now in the Folger Library. Lb 84 & 85. A transcription is given by Craib in S.A.C. XXIX (1916) 25-33.
 - 3 Both of these documents are further reprinted and compared by the present Author's father in U. Lambert *Blechingley, A Parish History* (1921) 373-80. The only remaining Royal Arms of Edward VI are at Westerham Church, just over the border in Kent.
 - 4 A. Buckland Kent. Blechingley Church, Recent Investigations & Discoveries in S.A.C. LIV (1955) 66-70.
 - 5 S.A.C. IV (1869) 99-100.
 - 6 S.A.C. XXXIII (1890) 30-2.
 - 7 Chanley was beadle of the Manor. Had he lent his mistress the old Sanctus bell from the rood stair turret for a dinner bell?
 - 8 S.A.C. IV (1869) 183-4.
 - 9 Laten is a form of brass, used for church 'brasses', but of inferior strength to modern brass, since zinc metal had not been discovered and it was made from metallic copper-zinc ore and lacked homogeneity.
 - 10 S.R.O. 1587 Visitation Call Book.
 - 11 Parker Certificates at Corpus Christi College, Cambridge (MSS 97 and 122), translated by Baskerville and Goodman. S.A.C. XLV (1937) 97-115.

THE GREAT EXPLOSION AND THE LATER HISTORY OF THE CHILWORTH GUNPOWDER MILLS

D. W. Warner

In the manufacture of gunpowder on a large scale, as it was at Chilworth, it was almost to be expected that accidents and explosions were likely to happen from time to time. In the early days there were many minor explosions causing the loss of life, and some of these appear in the parish records of St. Martha's. The Home Office Explosives Branch was set up as the result of the Explosives Act of 1875, and thereafter all explosions were recorded. Possibly the worst explosion, certainly the worst on record, occurred on the morning of Tuesday, 12 February 1901. An account of this was reported in *The Surrey Advertiser and County Times*.¹ The report starts "The most terrible accident which it has been our painful duty to record as having occurred in Surrey, took place on Tuesday morning, when, by an explosion at the Chilworth Gunpowder works near St. Martha's, six men met with a sudden and fearful death."

The accident occurred at about twenty minutes to nine, just as the employees resumed work after the breakfast interval. Suddenly, and without a moment's warning, a terrific report was heard, spreading alarm and consternation among the workers and residents in the neighbourhood. Volumes of smoke were seen ascending, and thousands of pieces of timber, bricks, corrugated iron, and, more distressing still, portions of human bodies, hurled through the air in all directions, covering the ground for a considerable distance with a mass of wreckage. The manager of the works at this time was Captain Otto Bouvier. At the time of the explosion he was just coming out of his office; he hurried to the spot with a Mr. Stevens and several others. They discovered that a two-storey building known as the Black Corning House, had been blown to atoms. It was known that men had been working, but how many was not certain. Search parties were immediately organised, and it was soon found that the loss of life was even greater than at first feared. As will be seen later, four men were killed outright, and two were so shockingly injured that their recovery was hopeless from the start, and they died soon afterwards. The Black Corning House was a brick and tile building of two storeys, partly above and partly below ground level, the lower chamber being under the bank of a stream which ran through the works. It may be explained that the ingredients used in the manufacture of gunpowder were mixed in a single-storey building situated between thirty and forty yards from the scene of the accident. The ingredients were formed into cakes, and as this operation was of the minimum danger to workmen, the building was described as a non-dangerous one. From this house the powder cakes were taken to the Black Corning House, where they were crushed and granulated by means of the water-driven machines, using the

stream through the building as power. This process may seem to be one of great danger, but was not so, and it was rare that an explosion took place in this part of the manufacture.

In the Corning House were two corning machines which were used for granulating the powder. They were not working at the time of the explosion, but it seems were just about to start. The powder was taken from this building in barrels on a tram line to what was known as the Dust House, some fifty yards away. By the side of the Corning House, and between it and the Dust House was a very high and thick wall designed to offer protection to both in the event of an explosion.

It will never be known exactly how the explosion happened. There were at most six, and probably only three people who could have told and they are all dead. There are several theories, which may or may not be true. There were certain facts which seemed to be established. It appears that at the moment of the explosion there were three men inside the house and three outside. What the men inside were doing it is impossible to say, but the three outside were in charge of a small trolley on which were some barrels of powder which had to be granulated. So far as it was possible to judge from the reports on the surrounding circumstances the accident seems to have occurred outside the building. In support of this theory, it was mentioned that at the spot where the trolley stood before the explosion there was a very distinct depression in the ground and the tram lines were bent downwards, the trolley was shattered to pieces and the unfortunate men who were in charge of it were blown to atoms, whilst those inside the building were less terribly mutilated. Had the explosion occurred inside the building the men inside could never have lived — as two of them did for a moment after the explosion.

There was a photograph taken of the scene by a Mr. W. Bassett, of Stoke Road, Guildford on the afternoon of the explosion, and this showed total destruction of the Corning House. Of the upper part of the building there was scarcely one brick left standing. What was left of the timber was charred and burning. The heavy machinery was hurled from its position, and was buried in a mass of wreckage. The huge protection wall had withstood the shock, but it was twisted, and some of the top bricks were displaced, while the ivy which grew on its side was burnt black. The building was practically surrounded by trees, and the effect of the explosion on these was remarkable. Some had been torn up by the roots, many were snapped in half where they grew, branches had been torn off, and those which remained were blasted and blackened by the terrible burst of flame. Great lumps of timber were hurled for a distance of a hundred or two hundred yards. One piece which weighed several hundredweight was found firmly fixed, upright, in the bed of the stream 50 yards from the building, while another, blown further still, was found stuck into the hard frozen ground in an adjoining field. The trees themselves were full of pieces of wood, fragments of burning clothing and human remains.

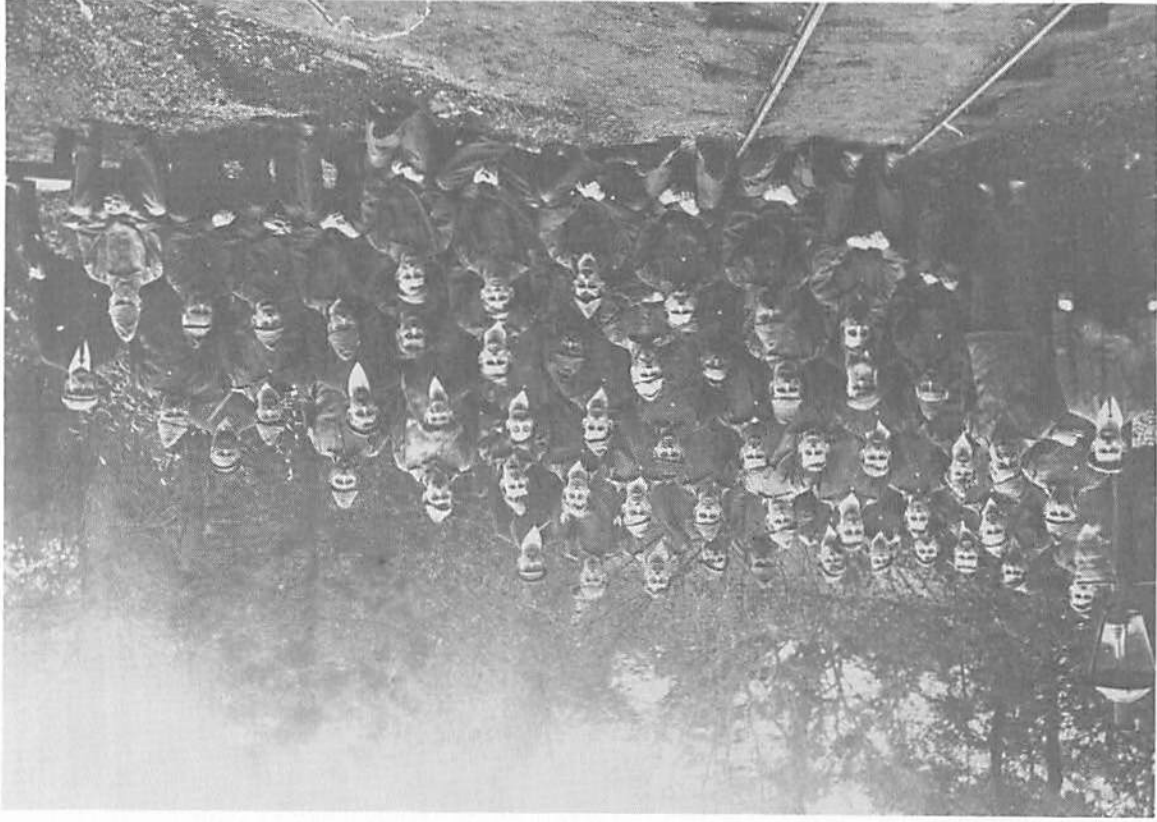
The saddest of all was the fate of the six men who lost their lives. These were the first thought of the manager and the other officials the moment the accident happened. Captain Bouvier, before doing anything else dispatched his carriage to Wonesh to fetch Dr. Scott Watson, who was soon on the spot. His skill however was unavailing. Before he arrived the search parties had discovered the extent of the disaster. The three men who had been with the trolley were beyond recognition, and had been blown in different directions. One was hurled through the trees and was found 150 yards away in a meadow on the Chilworth Road side of the works; the trunk of another was found horribly mangled by the side of the protection wall, a third was blown through the trees onto the top of the mixing house and then onto the tram road, one leg being found in another direction, and one arm a quarter of a mile away. Sopp was discovered in the ruins but dying, Smithers was found 100 yards away in a meadow on the St. Martha's side of the works. He was alive, but terribly injured and the remains of the man Marshall were found in the same meadow. The names of the men who were killed are as follows:-

William Prior, aged 30, from Broadford, Shalford, married.
George Smithers, aged 45, from Christmas Hill, Shalford, married.
William Sopp, aged 28, from High Path Road, Merrow, married.
Robert Flower Chandler, aged 19, from 1 Foxenden Road, Guildford.
Walter Abbot, aged 36, from Shamley Green, married.
William Marshall, aged 32, of New Road, Chilworth.

Some of these men who lost their lives in the accident had worked at the factory for less than a year, Marshall and Abbot had worked for only 4 months, Chandler 6 months, and Prior 8 months, whereas Sopp had completed 11 years and Smithers all of 34 years.

There were of course some remarkable escapes, the most noteworthy of which was that of Mr. William James Bragg, the foreman at the time of the black powder department. Mr. Bragg had just left the ill-fated building when the explosion occurred, and was passing by a poplar tree which was standing adjacent to the roadway running through the works and only a few yards away from the Corning House. The force of the explosion carried him a short distance and threw him to the ground. He was struck on the head by some of the falling debris, and sustained a slight cut, but other than that wound, a few bruises and shock, he escaped. A carman named Hunt was with a horse and cart outside the Mixing House, which was about 30 yards from the Corning House; neither he nor his horse were injured although large pieces of debris fell in a shower all round them.

Some other buildings were damaged in the explosion but in some cases the damage was light. A small store-house on the opposite side of the roadway was considerably damaged. A little further along the roadway was the Mixing House, the contents of which were non-explosive and the windows of this house were all blown out. Some of the men who were working in the Mixing House stated that the floor seemed to be lifted up in the air by the explosion, and they were thrown



1. A group of workmen of the Chilworth Gunpowder Company in the early 1900's. Note the regulation denim clothing without pockets or turn-ups and the nail-less boots. The foremen are dressed in ordinary jackets, collars and ties. [Photograph by Terry Fincher]

off their feet. There was of course a small fire resulting from the explosion but this was soon brought under control by the workmen with manual pumps and buckets. At Chilworth Manor no fewer than 40 panes of glass were broken and glass was also thrown at Colonel Oarmanney's house. In the village itself little or no damage was done.

When the works manager, Captain Bouvier, was interviewed by a reporter from *The Surrey Advertiser and County Times*, he stated that he was just coming out of his office when he heard two reports in quick succession. The second report was much stronger than the first. The Captain hastened across to the works and immediately took over the supervision of the situation. The Captain was asked if he had put any questions to Mr. Smithers, who breathed his last at eleven o'clock. The Captain said that Smithers was conscious, but the only reply he could get from the man was, "My arm, my arm". His arm was apparently broken; he was conscious of the pain he was suffering and that was all. The Home Office was communicated with, and also Dr. Gabb, the doctor under the factory act.

There were several visitors to the scene of the explosion. Major Cooper-Key, one of His Majesty's Inspectors of Explosives visited the works during the afternoon and made a thorough examination of the incident. Another was Inspector Jennings of Surrey Constabulary, who lived in the Chilworth New Road, less than half a mile from the scene of the explosion. He stated that he heard a terrific explosion at about 23 minutes to 9. The windows of some of the houses in the road were shattered, but the explosion was not heard so much in the vicinity as farther away — for instance at Blackheath, owing probably to the noise being directed in an upwards direction by the thick protecting wall. As soon as Inspector Jennings heard the explosion he went to the scene on his bicycle. When he arrived he saw men rushing about to see what the situation was. He saw Mr. Bragg, the foreman, being led away from the scene. He was injured at the back of the head, not, he found, seriously. By this time the wounded man Smithers had been taken to the hospital in the works, and men — there were about 50 of them — were busy with the manuals playing on the ruins which were smouldering. Other men were going about with stretchers and canvas bags picking up pieces of the dead men. The remains of the clothing on these pieces of human remains were still burning. The works manager was supervising the removal of the bodies into a shop which was being used as a mortuary. The injured man Smithers was in the hospital being treated by the doctor. He was very much disfigured, but was conscious for an hour and a half after the explosion. Inspector Jennings further stated that Captain Bouvier at once made arrangements for the relatives of the deceased and injured to be informed of the sad news.

A message of sympathy was sent to the relatives of the deceased from the Duke of Northumberland, the ground landlord of Chilworth Mills. "I am desired by the Duke of Northumberland to convey to you His Grace's very deep and profoundest sympathy with you and your family in the heavy bereavement which has so suddenly fallen upon you by the lamentable and distressing explosion which occurred at the Chilworth Gunpowder works on Tuesday morning last.

May I also add to his Grace's sympathetic message my own condolence with you in your great sorrow. Yours very truly, Andrew Peedles".

Although there had been many explosions at the works, there were very few fatalities. During the 40 years prior to this accident there were only 3 which caused loss of life; in 1864, when 2 men were killed; in 1874, 2 men killed, and in 1879, again 2 men killed. An explosion occurred only the week before that, but nobody was killed.

The inquest upon the deceased men was opened at The Percy Arms, Chilworth, on Thursday afternoon, 14 February 1901, before Mr. G. F. Roumieu, J.P., the Coroner for Surrey. The jury was empanelled as follows:- Messrs, A. Shephard, E. Newnham, J. Chitty, F. C. Smith, W. Shurlock, G. Longhurst, T. Smallpiece, H. Frogley, J. Lloyd, H. F. Prentice, J. Palmer, L. Mercer, A. Atfield, J. Pearce, and W. Horne. Mr. Shephard was chosen as the foreman. The Coroner asked before the swearing in if any of these men had, in any way, any connection with the powder mills. The reply was negative and the jury was duly sworn in. Those present at the opening inquest were Mr. Marcus Westfield, Director of the Company; Captain Bouvier, the Manager; Mr. G. D. Stevens; Deputy Chief Constable Page of the Surrey Constabulary and Inspector Jennings, also of the Surrey Constabulary.

The Coroner at the outset said that before they proceeded to view the bodies, he understood that one of the company directors, Mr. Westfield, wished to address them upon the matter.

Mr. Marcus Westfield then said he was proprietor of the factory before the Chilworth Gunpowder Company was formed, which was now some 16 years ago. He was a large shareholder in the company and was still very deeply interested in the factory. The board was very much distressed indeed at the occurrence which had taken place. Taking, as they had done from the very first, the deepest interest in their workmen, they would be sure to take care of the poor people who were their representatives — those left behind. It was with very great distress that this accident had come upon them, because neither money, nor science, nor thought had been spared to make the workings of the factory safe. He might tell them that for at least 12 out of 15 years — owing to the fact of the invention which was the object of manufacture there, when the company was formed, the powder for use in the large guns of the navy, that invention being worked out and perfected there — the largest contracts ever issued by the Government, he supposed, were issued to the Chilworth Company. For 11 to 12 years, during which they had worked night and day turning out gunpowder — a new kind of the old class of gunpowder — with a staff of 600 men, not a single life was lost, and he supposed that during that period that more was manufactured than in all the rest of the factories in the kingdom put together. From the very first the board had been interested in the welfare of the workers. He might tell them incidentally, that a fund for sharing profits was formed when the company was originated. He could say with great truth that there had been great anxiety on the part of the board in London and on the part of the manager, to insist that the work there

should be accompanied with the greatest care and attention. He did not know whether he ought to say, but they felt that they had nothing to blame themselves for, as the jury would see. They had done the best they could, and any help they could give to the jury and the Coroner, as to the accident, the cause of which they did not know, they would be pleased to afford. The Coroner replied that he was sure the jury would be very satisfied indeed, with the remarks that Mr. Westfield had made. If sympathy were of any consolation to the bereaved under those very sad circumstances, they knew that they had the sympathy of the board. He was much obliged for the offer made by Mr. Westfield to give any assistance which he was sure they would get. It would be necessary for the Coroner to adjourn the inquest as soon as they had been to view the bodies and he had taken the formal evidence of identification, the reason being that the Inspector of Explosives would not be there that day. It was the Coroner's duty, in the event of the Inspector's absence to adjourn for at least 4 days. The Coroner said he proposed to adjourn the inquest for at least a week.

Proceeding, Mr. Roumieu said he would at this point go down to the works and view the bodies. He understood that three, if not four, were in a state of completeness to be identified absolutely, and that two were in such a shattered state that they could not be identified. In regard to the evidence of the identification of these two, he would take the fact that they were at work a short time prior to the occurrence in that place and they had not been seen since.

The Coroner and the jury then proceeded into the works to view the bodies which were lying in the hospital, and on returning to the court, the first, and only witness for the day was called.

William James Bragg, who in answer to the Coroner's inquiries, stated that he was foreman of the black powder department of the Chilworth Gunpowder Works. The Coroner then asked, "Do you know Walter Abbot?" Bragg replied "Yes Sir",

Q. "What was his occupation?"

A. "A tram pusher."

Q. "When did you last see him alive?"

A. "I should say a few seconds before the explosion, I was talking to him."

Q. "At about what time?"

A. "Twenty minutes to nine."

Q. "And have you identified the bodies since?"

A. "Yes Sir."

Mr. Roumieu; "Let me ask you one question before we go any further. I understand that there were three men inside the building and three outside." Mr. Bragg replied in the affirmative, and said that the three men working outside were Abbot, Prior and Marshall.

Continuing his evidence, the witness stated that he identified William Prior who was aged 30 years. He was a tram pusher and was in charge of the tram. He last saw him alive at the time he saw Abbot. The other tram pusher was Marshall, whose body he also identified, and who was 32 years of age.

Q. "All three men were working outside the house?"

A. "Yes."

Q. "What you call the Corning Mill?"

A. "Yes, outside number 12 Corning House."

Witness said that he also identified the body of Smithers, who was leading hand in the destroyed mill.

Q. "What would you call him, foreman?"

A. "Yes Sir" (Capt. Bouvier and Mr. Stevens; "Building Foreman".)

Q. "When did you last see him alive?"

A. "A few seconds before the accident occurred."

Q. "You saw him in the house?"

A. "Yes Sir."

The witness further stated that he identified the body of Chandler, who was aged 19 years, an assistant in the Corning House.

Q. "And you saw him alive in the building at the same time as you did George Smithers?"

A. "Yes Sir. I also identified William Sopp who was an assistant. He was also inside the Corning House with the other two, just before the explosion."

Q. "And would they be the only three inside the house at that time?"

A. "Yes Sir."

Q. "You are quite satisfied about that?"

A. "Yes." Answering further questions the witness said he had no doubt in his mind that the three bodies he had viewed were those of the men he had mentioned.

At this point the inquest was adjourned for one week, the jury being bound over in the sum of £10.

The inquest was resumed at The Percy Arms, Chilworth, on Friday 22 February 1901. Some little delay was caused by the Coroner being late having missed his train at Guildford. He managed to charter a conveyance at Guildford and arrived at 10.40 a.m. and the proceedings began.

The first witness called was once again the foreman Mr. Bragg. Mr. Bragg stated that he went to work as usual on Tuesday, February the 12th at 6 o'clock. An interval of half an hour was allowed for changing of clothes. At 6.30 a.m. he fell the men in, and saw that they had on the clothes in which they worked. He had 30 men under him and he examined all 30 to see that their clothing was in a suitable condition. He found nothing unusual. He was quite sure that he had examined the 6 deceased men. Mr. Bragg was then questioned by the Home Office Inspector.

Q. "Have you ever found anything wrong?"

A. "Only once or twice, but before the man went to work I made him go back and change. In the case of pockets I have made them cut the pockets out or have them sewn up. The workers are not allowed to have open pockets. At 8 o'clock the men had their breakfast in the messroom. Before returning to work I examined them again."

Mr. Bragg continued, stating that he went to the number 12 Corning House to give some instructions. Abbot, Sopp and Prior were the tram pushers. Marshall, Smithers and Chandler were working in the Corning House. He saw the first three named with the tram. They were engaged in bringing from the corning mill, three barrels of dust which had been through the mill; they were being loaded onto the tram. The mills were not at work. They had been working before the breakfast break. He saw one barrel brought out and put onto the tram, and as he turned to leave he saw Prior with another man — he was not quite certain who — carrying another one out. He had just got to the corner near the bridge, about 20 feet away from the tram, when he heard the explosion behind him, but not very loud, and he was knocked down. He must have been struck on the head at the same time. He lost his senses for a few seconds only. He looked round and saw nothing of the tram, which had disappeared, and the building seemed to be up in the air. He did not hear the second explosion. The explosion he heard was no louder than a small gun going off. He had been working at the factory for 15 years and he had never had an accident there of any description. Mr. Bragg continued that he had thought a great deal about the accident, and he did not think it could have happened in the building first. The Coroner asked "What makes you think that?" Mr. Bragg; "Well, there was nothing working." The men inside could not have had the time to do anything more than to pass the dust out to the others. The ground outside was very frozen and was hard. The men working outside would have had on ordinary boots, and might have nails in them. The metals were of steel. Supposing a man slipped when running the powder from the mills, his nailed boot struck against the metal, but he did not however think that the explosion had happened that way. He saw the place after the explosion and it struck him forcibly that the tram had exploded first. It was fine ashes about, and there was no sign of any stones.

The Coroner:

Q. "From the appearance of the tramcar, you came to the conclusion that the explosion had taken place there, because you thought if it had taken place in the Corning House the tram car would have been blown away?"

A. "Yes Sir." Continuing, Mr. Bragg said that one of the barrels of powder would contain from 70 lbs. to 80 lbs. of powder. He should say that on this occasion the barrels were about full, and within an inch or two from the top.

Q. "When you turned your back to walk away, you did not hear anyone call out, or see anything unusual happen?"

A. "No Sir."

Deputy Chief Constable Page then said, "No one would be likely to get into the building who was not employed at the works. The tram pushers wore ordinary boots, with nails in them, this was the ordinary custom in the factory."

Captain Bouvier was then called to give his views as to the cause of the accident. It will be recalled that Captain Bouvier was the factory manager. He stated, "All the deceased men were thoroughly acquainted with the work. The manner in which the work was carried out was in accordance with the Government

Regulations, and their own regulations." He had come to the conclusion that the corning mill was not at work at the time of the explosion for the following reasons: that the time was 8.40 a.m. and the men did not leave from breakfast before 8.30 a.m. They then had to proceed to the building, and they always swept it first and then oiled the machinery, and then they had to hand the powder out. All that must take 10 minutes. The other reason was that, with powder in the mills, had the machinery been running, the machinery would have been injured very much more, but as it was it was nearly intact. The ground outside was always prepared with cinders, but there could be no guarantee there was not a stone there. He made a very careful search after the explosion but he could find no trace of a stone. He thought that the explosion must have happened through the man slipping first of all. The ground was hard frozen that morning, and probably if a man slipped, part of the contents of the barrel came out, and at that moment his foot struck a stone or something hard and a spark was created. This might happen if the man struck the rail. Supposing a barrel slipped down, he could not say that the explosion would have been caused simply by concussion. It might have been caused that way if the barrel struck something hard, and caused a spark, and the spark came into contact with some powder dust adhering to the barrel, that would be sufficient to cause the explosion. He continued saying that he had been at the works for sixteen years. Two years after he had started his employment there was an explosion in the incorporating mills, that was in 1887. That mill was the old pattern mill, but there was no loss of life. The old pattern mills have been done away with. There was nothing left undone to ensure the safety of the men and the works. They had always carried out the suggestions made by the Home Office and from time to time improvements were made. He then continued, he had just left the office when he heard two bangs in very short succession. It was then 8.40 a.m. At that time he was about 300 yards from where the explosion took place. The second explosion appeared to be stronger than the first. Both appeared to him to be at the two mills, he did not think of the Corning House. On getting to the scene of the explosion he noticed the tram lines, and the first report would be consistent with the first explosion having occurred at the tram car, and the second at the Corning House. If the Corning House had exploded first the tram car would be blown away. The Corning House had not started work. From what he knew about the Corning House and the tram car and the management of the whole business, he had come to the conclusion that the explosion must have occurred at the tram car, and the foreman was of the same opinion. He thought the explosion happened by a man having slipped, his boots striking a spark either on the rail or the ground, thus causing the ignition. The tram car having exploded, ignited the Corning House.

The Coroner:

Q. "Did it ever pass through your mind that the explosion might have happened the other way round?"

A. "No."

Q. "Would it be likely that a man would be smoking?"

A. "No, I think that is out of the question all together."

Q. "Would they be likely to have lucifer matches in their possession?"

A. "No, because they would have been searched."

Q. "Are you satisfied that the search made would have been done thoroughly, and not in a perfunctory manner?"

A. "Yes, they are searched, not only when they enter the factory but after each meal."

Q. "What would happen if matches were found?"

A. "The men having matches on them would be instantly dismissed."

Q. "Has this ever happened?"

A. "Yes, I had occasion to dismiss a man for this breach about two months ago, and the other men were made aware of this."

Q. "Do you think any atmospheric influence would have been likely to have caused this explosion?"

A. "Electricity has an influence in causing explosions, but I cannot say if the air was charged with electricity on that day."

Q. "Have you had any experience in this matter?"

A. "No, but I have made a study of this matter."

Captain Bouvier then produced a sketch showing the positions in which the bodies were found and described this in detail. Chandler's body was found 160 feet away, Marshall 270 feet away, Prior 216 feet, Abbot close up by the brick traverse, Sopp in the actual debris and Smithers was 84 feet away. He then went on to relate his actions and sending for the doctor.

Deputy Chief Constable Page then said, "There would not be a train of loose powder from the car where it stood stationary to the Corning House?" Captain Bouvier replied that he would not expect it in any case. He had never seen it. He should like to say, in regard to the men working outside, that their having nails in their boots was not contrary to the rules of the factories of this country.

Mr. Bragg, alluding to the question of smoking, had said that any act of carelessness amongst the young men of the factory was always reported by the other hands. The older hands knew the importance of carefulness for the safety of their fellow workers.

The Coroner:

Q. "That is the spirit which pervades the whole staff; if they saw anything wrong they would repress it and report it to you?"

A. "Yes, he knew that was a fact, and it was also in the rules."

Q. "Are you satisfied that the rules and regulations are strictly carried out?"

A. "Yes, as far as possible. They are all aware that they carried their own lives in their hands."

Doctor Scott Watson, from Womersley, then gave evidence. He said that he was called at about 9 a.m. to the mills, where he found the deceased, Smithers on a stretcher in the hospital. He was alive, sensible and was able to speak. The man was badly burned about the head and neck. His left eye was destroyed. He had a large lacerated wound on the top of his head, a smaller wound over the left

eyebrow, and both hands and arms were badly burned, especially the left. There was a large burn on the left side of his chest, a smaller wound on the left side of the abdomen and a lacerated wound on the back of the right wrist, laying bare the bone. Smithers lived until nearly 11 a.m., the cause of death being 'shock to the system'.

Major Cooper-Key, the Home Office Inspector then addressed the Court. He said he had very few words to say, because he thought the present case was much clearer than was usual in most explosions of that sort, when, as a rule, everything was swept away, and there was absolutely no evidence of any sort or kind. But here they had a certain amount of evidence. Then, as to where the explosion started, it was either at the tram car or at the Corning House, and he thought from what he had heard they would agree that the actual first point of ignition was at the tram car, which stood at its place at the end of the tram rails. There were two explosions — according to a certain number of witnesses — of which the latter was most violent. On the tram car there would be about 200 pounds of dust, and about 500 pounds in the Corning House. Lastly, and it was perhaps more conclusive than anything, the heavy brass or copper handle of the car was found about 200 yards away on the far side of the House, showing that it must have been thrown straight over the House, and showing that it could not have been done if the House had exploded first, or that the Corning House went a long time before the tram car, which was quite impossible, because they knew that the tram car exploded on the rails themselves. So they thought they might say that the tram car certainly went first. Then at the time of the explosion they had the men with their hob-nailed boots, the ground frozen, and steel rails, and the powder being carried, in barrels from the Corning House, which was always filled with dust, although he would like to say that this house was far more clear of dust than any other Corning House that he had ever seen. In fact, on the occasion of his last Inspection only a few months ago, he made a note to the effect that it was much cleaner than most corning houses. At the same time however, there must have been a certain amount of dust on the hoops of the barrels, and so on. So they had men carrying their casks to the tram, the ground frozen, the men slipped, the jar shook the dust off the barrel, and they knew what followed. He did not think there was any need to look further for the cause of the accident.

As far as other possible causes might be considered, they had got the question of lightning, but there was no lightning on that day. There was also the question of a spark from a neighbouring chimney, but the nearest chimney was 160 yards away and it was provided with a spark catcher, which was inspected, he understood, twice a week. There was always a chance of fire being carried in the men's clothing from the mess room. In this case there had been no fire in the mess room, which was heated entirely by steam. Then there was the chance of men smoking, but this chance, he thought, they might dismiss at once. If the men did intend to have a smoke, they certainly would not when they knew that the

foreman was about, and it was most unlikely that men working as they were, would smoke. No smoking was allowed in any part of the factory area. In most factories there was a room set apart in which men may smòke after their meals, but in those instances special precautions were taken against fire being transmitted into the factory. But at Chilworth there was no smoking at all in any part of the factory. The next possible cause would be the undiscovered pipe in a man's back pocket, but it was almost impossible to think that the accident happened in that way, as the men were not even supposed to have pockets in their clothes. Then they had the cause of a lucifer match either carried in a man's clothing or lying about loose on the ground. He thought that these two should be taken together, considering that the sole incentive of having a match would be to have a smoke. But there was no reason to believe that smoking had ever been indulged in, and he thought they might as well dismiss the case of a match. If a man had taken a match in by accident, it would have been found as they were searched. He thought that there was very little reason to doubt what was the real cause of the accident, and that was a spark struck from a hob-nailed boot either on the steel rail, or by a stone, or perhaps by an old piece of iron which might have been lying about; there being no reason to think that an old piece of iron might not possibly be lying on the ground. A spark, as he had suggested, communicated to the powder dust outside the cask the men were carrying; or the cask half slipping out of the men's hands, or quite slipping from their hands; or a man having fallen flat down on the frozen ground might have caused a spark. This he thought, was the cause of the accident. The next thing to consider was whether the accident could have been avoided. In his opinion it was an accident, pure and simple, but what should be considered was whether it could have been avoided by other arrangements. He confessed that he regarded as inadequate the arrangement whereby a space of five yards, of the ordinary surface of the ground, had to be crossed by men wearing hob-nailed boots and carrying powder barrels covered with dust. The reason for this, curiously enough, was a pure oversight on the part of the company; the sole reason being in the endeavour of the company to improve the law — to improve on the regulations laid down by the Home Office. According to the company's licence with regard to the tramway, the rules of such tramway within three yards of any part, etc., of the Corning House were that the tramway should be of wood, brass, or other suitable material, but in order to improve on this, the company said that they would not have a tramway to within five yards of the building. He thought that on the whole it would be preferable to have tram rails of wood or brass and have them right up to the platform of the building. And that the men in the building should have proper over-shoes, with no nails in their construction, and to have the loading of the trams from the platform. He had been speaking to the representatives of the Chilworth Company, who were not only prepared to do that, but also to provide the tram pushers with special shoes, without nails. He could not speak too highly of the smartness and efficiency of the arrangements in the factory. As far back as he could see from the reports at the Home Office, every single angle of the

factory was excellent. So that he thought that this slight oversight might be put down to extra zeal on the part of the company to have things extra safe. The accident certainly did show one thing; it showed that not only was the spirit of the law to be carried out as well as the letter, but the letter of the law must be carried out as well as the spirit. The company were willing and anxious to act up to the spirit of the law, but they had not observed the exact letter of the law, because the case of the tramway not being continued up to the house had never been contemplated by them.

The Coroner said what he had gathered from Major Cooper-Key's remarks was that the tram lines were in accordance with the Home Office rules and regulations, because, they made two rules and regulations. They either said if there was a metal tram line it should not go within three yards of the cornering house, or if they had one it must be of wood. The Major replied "Yes", therefore, said the Coroner, the company were not contravening. The Major said: "They were not actually contravening, they were quite within our rules and regulations in having the tramway end where it did. The Home Office had never contemplated the case of steel tramways being stopped more than three yards short."

Mr. Lloyd, a juror, said he knew from experience that the men were most careful in not taking matches into the factory, because when he kept that house (The Percy Arms), they used to call in there on the way home for matches, not having any with them. He might also say that he felt the two explosions. He was in bed at the time and was drinking a cup of beef tea, the first shook it and the second overturned it.

Major Cooper-Key in reply to the Coroner said he could not speak too highly of the way in which the company had been found on his Inspections. Replying to further questions he said that the company had not had a fatal explosion since the year 1879. The last explosion was a mill only, and five or six of these went up over the United Kingdom every year.

The Coroner, in summing up, carefully reviewed all the points brought forward in the evidence, and expressed thanks to all for the assistance given to him and the jury. He thought it was clearly demonstrated where the accident happened, all three witnesses coming to the same conclusion that it was first outside the building. There was no doubt whatsoever that if the accident was caused by a spark having been ignited by the nails of one of these men's boots coming into contact with a stone, a bit of old metal, or the metals, even then they were not contravening any order laid down by the Home Office. It was perhaps an oversight that the men were allowed to work at this job with hob-nailed boots, but they heard that the same sort of thing was done at other mills, therefore they could not say that the accident happened by wilful neglect or disregard on the part of the men or the company. They heard that no doubt in the future an alteration would take place. The provision of special boots would be made for the men working inside, and also the men outside should have special boots so that the risk of a similar accident should be done away with entirely: It would be for the jury to say, first of all, having regard to the evidence, how the accident happened, and as to how the poor fellows met with their deaths.

The jury returned and the foreman said "We find that Walter Abbot met his death by an explosion of gunpowder which took place at the tram, which caused the Corning House to explode. We are of the opinion that no one was to blame for the accident, and we entirely agree with the evidence and theory put forward by experts, and are pleased to hear that the company are to make improvements." The jury returned the same verdict on the other five men killed. The Coroner said it was a fair verdict and that everybody would agree with them.

There were, as to be expected, many instances of false alarm. One in particular instance was on 3 April 1902. A rumour spread throughout Guildford and district that an explosion had occurred at the factory. Much anxiety was caused to the persons having family and friends working there. Local residents at Chilworth were contacted and it was found that no explosion had in fact taken place and a notice had to be placed outside the Surrey Advertiser Office to this effect.

Had the factory not been so well equipped and organised with regard to its duties and firefighting, there would have been many more disastrous accidents. The most notable of modern times happening in the late 19th century, between 1886 and 1897. Situated in close proximity to the factory was a paper mill owned by Messrs. Unwins. One weekend this paper mill caught fire and blazing paper floated across the part of the gunpowder factory nearby, some of the paper settling on the factory magazine. Usually stored in these magazines was about 60 tons of gunpowder. Fortunately the blazing paper was put out before any damage could be done. If it were not for the brave action of these men from the works the whole of the gunpowder mills, Chilworth and St. Martha's would most probably have been flattened causing a tremendous loss of life.

During the early 1900s the Chilworth Company continued to prosper. By this time it had established another factory at Fernilee, Derbyshire, and it had magazines scattered over the country. In 1909 a list of all gunpowder factories was compiled and this gave a very good indication of the state of the company. The company had capital of £100,000 and had its head office in London. The personnel employed at Chilworth numbered, 1 Head Chemist, 1 Assistant Chemist, 2 Chief and Assistant Engineers, 20 Manufacturing, Commercial and Administrative employees. 300 male workers and 6 females. The company had its agents in all principal Colonies of the Empire, also in all foreign parts. At this time there were a total of 143 buildings at Chilworth. There were boilers and steam engines which were aggregating about 1,500 horse power, also water power of about 100 horse power, there was electric lighting by arc lamps and incandescent lamps. The machinery installed consisted of over 200 separate machines, many of special design. There was about 5 miles of tramway of two-feet seven-and-a-half inch gauge. There were three ten-ton weighbridges. The company had a benevolent scheme to provide for those who were past work.

All this was very nice for the company, but what was it really like to work at this factory? I was fortunate enough to be able to interview one of the ex-workers, Mr. Edwards, who lived at Blackheath. He worked at the factory from 1901 until 1920 when he was made redundant. His first, and without any doubt

most vivid recollection was the explosion of 12 February 1901, he had been working at the factory for a very short time when this accident occurred. He was not involved in any way as he was not employed near the ill-fated Corning House that day. During the 1914-1918 war the factory was worked round the clock, but the normal working day was from 6 a.m. until 5 p.m. The wage for an ordinary workman was 18/- a week and during the war the factory employed over 600 people, men and women; the women incidently also worked on the night shift. The workers usually walked to work, a lot living near to hand, but some had to travel from as far away as Godalming, Guildford, Bramley and Peaslake. The workers had to clock in at 6 a.m. and if any one was late, up to 10 minutes, they lost one hour's pay and if they were late for three mornings running, on the third they would be sent home again losing a whole day's pay. Many a man to whom this fate befell, rather than go home and face his wife, spent the day roaming about or in one of the Ale Houses and returned home at the normal time. The normal daytime working routine was as follows:—

- | | |
|------------|--|
| 6 a.m. | Lodge: clock in and be searched. This was very strictly carried out. If a worker was found to have matches or any other prohibited article on his person he would be sent home.
Boot House: change boots. The men changed into boots, provided by the company, with brass nails. If the man was employed in a building, such as a corning house he would have to change his boots again to a pair with wooden pegs and no nails. These were kept in a locker inside the Corning House and were never worn outside the building.
Mess Room: change out of ordinary clothing into Powder Kit, again provided by the company. Dinner baskets were left in the mess room, each worker having his own locker for this purpose. |
| 6.30 a.m. | Commence work. |
| 8 a.m. | Mess Room: for breakfast. |
| 8.30 a.m. | Work resumed until dinner. |
| 12 noon. | Mess Room: for dinner. |
| 12.30 p.m. | Work resumed until — |
| 4.30 p.m. | Mess Room: Wash and change back into ordinary clothing.
Boot Room: To change into outside boots.
Lodge: For search. |
| 5 p.m. | Clock out. |

Overtime was a normal thing, the men working on until 7 p.m., although during the Great War many worked anything up to 18 hours. The rate of pay was basic, there being no overtime rates.

Unless the worker was a tradesman, (e.g. Carpenter, Engineer etc.) he could be, and often was, put to any task in the factory. In each working shift there were five Foreman (in charge of Carpenters, Engineers, Blacksmiths, Black Powder Department and Brown Powder Department), and a Forewoman whose job was basically to take charge of the women and to carry out the searches of them.

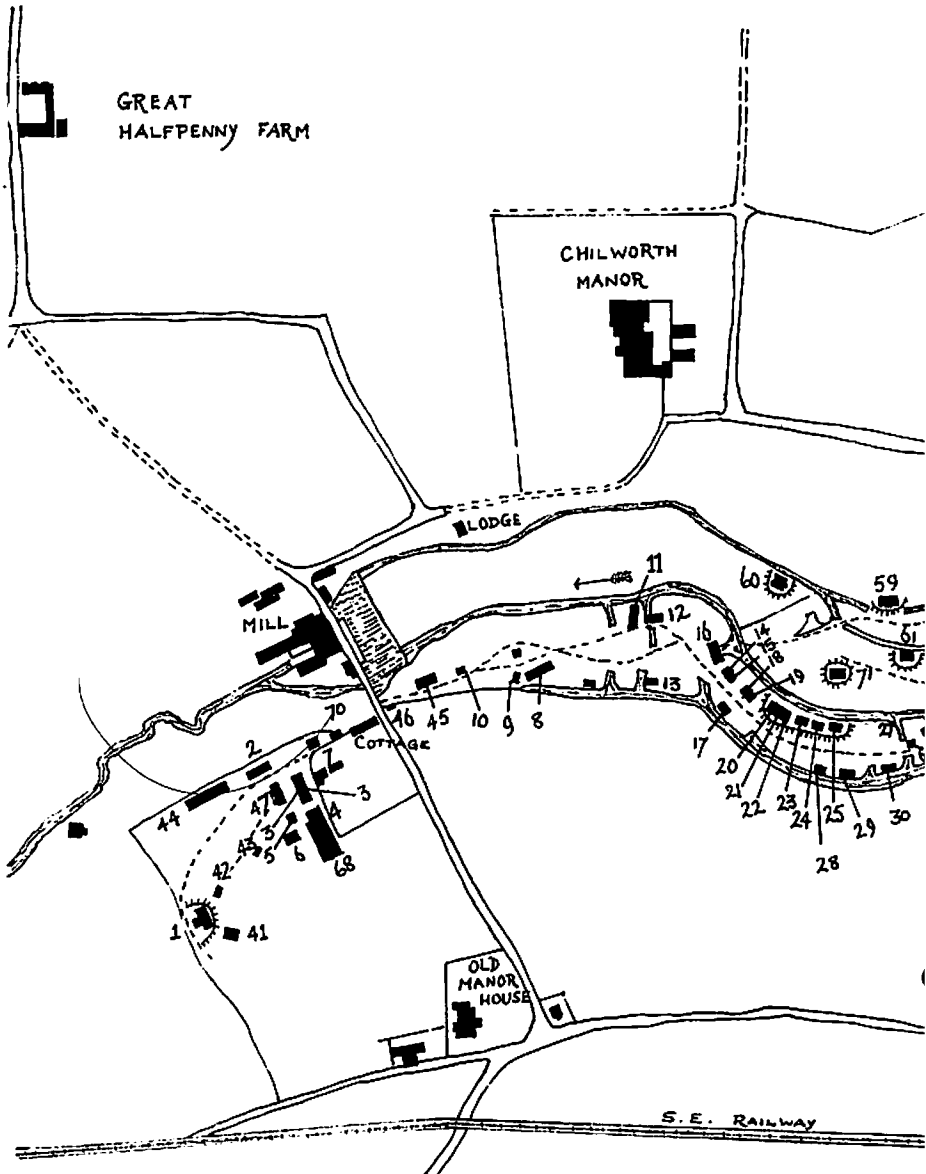
KEY TO PLAN OF 1922
(based on the sale particulars)

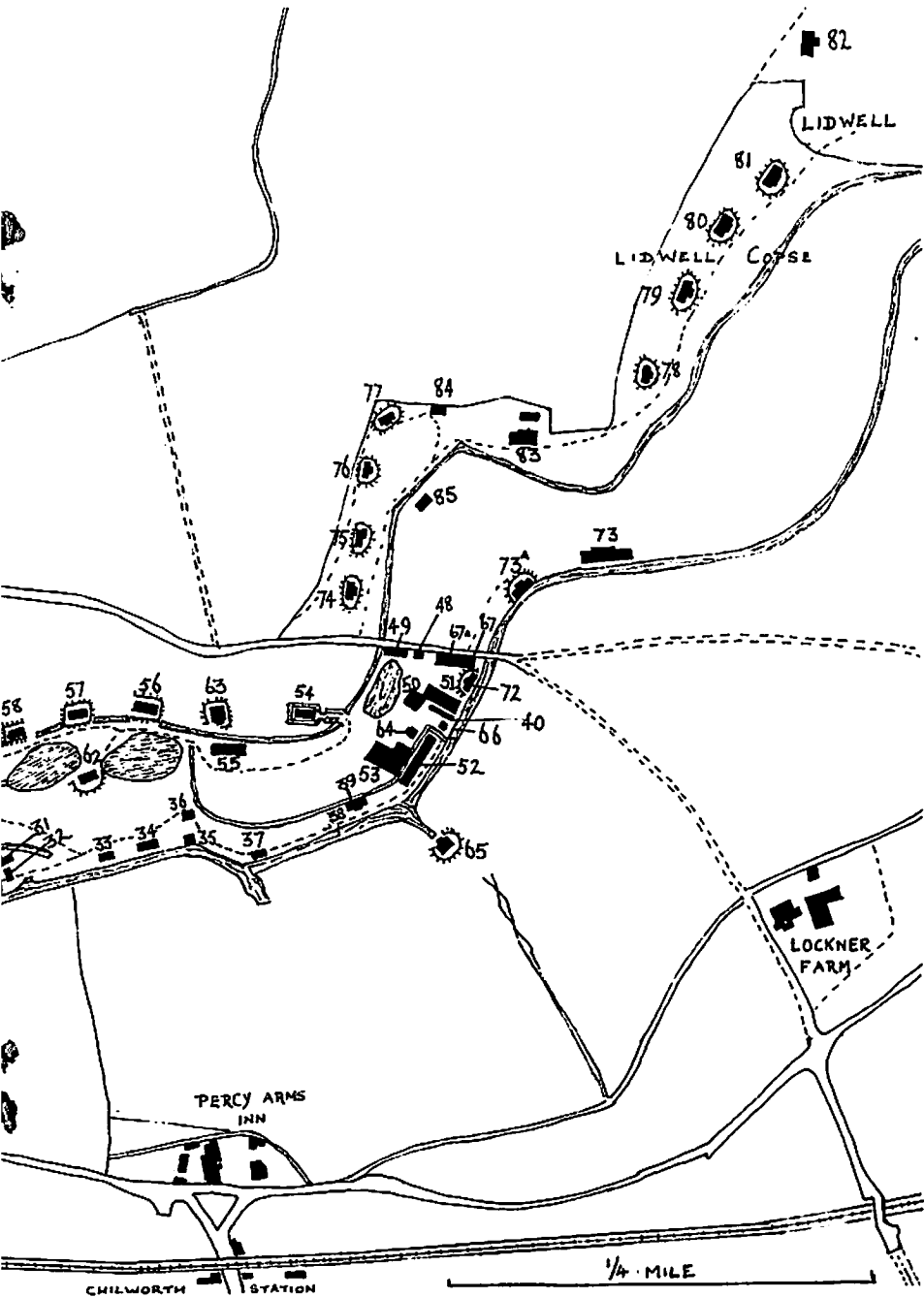
1	Factory Magazine	44	Workshop and Stores
2	Carpenters' and Coopers' Shops	45	Cask Store (removed from near Old Marlor House and renewed)
3	Saltpetre Refinery, Engineers' and Carpenters' Shops, Meal Room and Wash House	46	Lodge to West End of Factory
4	Charcoal House	47	Factory Office and Laboratory
5	Store	48	Densimeter and Examining House
6	Charcoal Kiln	49	Store
7	Brimstone Refinery	50	Engine House
8	Dusting House	51	Mixing House
9	Wash House for do.	52	Incorporating Mills
10	Expense Magazine (Lower)	53	Engine Boiler and Wash Houses
11	Brick Traverse	54	Blending House
12	Press House &c. (Lower)	55	Press and Engine House
13	Packing House	56	Stove
14	Charcoal Store	57	Packing House
15	Mixing House	58, 59, 60, 61, 62 and 63	Expense Magazines
16	Incorporating Mills (Lower)	64	Charcoal Store
17	Charge House (Lower)	65	Blending House
18	Press and Engine House	66	Corrugated Iron Screen
19	Watch House	67	Store
20, 21, 22	Incorporating Mills (Steam)	67a	Laboratory &c.
23	Engine and Boiler House	68	Charcoal House
24, 25	Incorporating Mills (Steam)	69	Accumulator House
26	Site of Old Water Mills	70	Weigh-bridge
27	Site of Old Water Mills	71	Press House
28	Lavatory	72	Charge House
29	Charge House (Middle)	73	New Incorporating Mills
30	Charge House (Upper)	73a	Charge House
31	Press and Breaking-down Press and Mill Cake House	74	Packing House
32	Wash House for do.	75, 76, 77, 78, 79, 80, 81 and 82	Magazines
33	Glazing House (Middle)	83	Factory Cottages
34	Packing House (Upper)	84	Agricultural Implement Shed
35	Stove	85	Unoccupied Cottage
36	Do. Boiler House		
37	Expense Magazine (Upper)		
38	Site of Old Wash House		
39	Corning House		
40	Charcoal Mill		
41	Packing House		
42	Target House for Chronograph Range		
43	Chronograph Range		

Chilworth Gunpowder Mills 1922



SE MARTHA'S CHURCH





In 1913 discontentment started at the factory among the workers, who felt that they were being exploited. The wages were kept low, as a result of the employment of a large number of ex-soldiers, who were already in receipt of a pension. The outcome was the formation of a Workers' Union, which every employee joined except two, the weekly dues for this union being five pence. Mr. Edwards could not recall any benefit he gained from joining the union. Before the formation of the union the workers paid into a fund, the money from which paid the wages of any sick man. If a man did fall sick, this was checked and he was paid his full wage for a fixed period of time. This scheme was run on a voluntary basis by Mr. Trice, one of the foremen, who was to become better known as the pioneer bus man in the district. This scheme carried on after the union was formed.

Mr. Edwards could recall the bomb scare which took place in 1915. It appears that a Zeppelin dropped a string of 10 bombs between Guildford and St. Catherine's, the nearest one landing on the common at Shalford, west of the magazines. There was some speculation as to its target, some saying it was off course for London, others that it mistook St. Catherine's Church for St. Martha's. If the latter was in fact the case, then the target was most certainly the gunpowder factory. The raid resulted in very little damage, and the only loss of life was a swan. If the bomb had landed on one of the magazines the result would have been very different — at the time they were full to the roof.

During the Great War, in the year 1916, a set of special rules were issued to every employee. These rules took into account all the existing and suggested rules which came from the inquest in 1902.

Special Rules

- 1 No person is to enter or leave the premises except by the general entrance, or to loiter thereon after his or her employment is finished.
- 2 Every person is to submit to be searched by the Lodge Keeper or other authorised person, and is to allow any bag or basket he is carrying into or from the factory to be turned out and its contents inspected.
- 3 The Foreman on duty is himself to examine every man and boy before work is commenced, to see that they have no pockets. The Forewoman is to examine the women in a like manner, and report to the Foreman before any work is commenced, and also after each meal before recommencement of work.
- 4 All dinner baskets are to be kept in the meal rooms, and are under no pretence to be taken into any Danger Building.
- 5 No one is to enter any Danger Building without putting on the Magazine boots or shoes provided, which are to be kept within the Danger Buildings, and are never to be allowed to come into contact with grit. Ordinary shoes, when not in use, are to be deposited in the place provided for that purpose.
- 6 Waterpots and mops are to be kept on the platforms of all Danger Buildings, and such platforms and stages are always to be kept strictly clean. The Foreman or Forewoman is to see that the benches and floors of all Danger Buildings are frequently swept and kept clean.

- 7 A careful inspection of the whole of the machinery shall be made daily by the Chief Engineer or his Deputy, or in their absence by the leading man in each house, and a weekly written report of the condition of the machinery, signed by the Chief Engineer, will be sent to the Manager.
- 8 Every Foreman shall record the date and hour of every visit paid by him to the Danger Buildings in the 'Visiting Book' supplied him for that purpose.
- 9 If any machinery should get out of order, or if any workman has any suspicion that it will do so, such machinery is to be instantly stopped, and on no account to be set in motion till it has been made safe and perfect, and authority has been given by the Chief Engineer or Foreman to that effect. The workmen are to keep a vigilant look-out on the condition of the machinery.
- 10 Under no circumstances within a Danger Building or Magazine must a barrel or case be dragged, but it must always be lifted.
- 11 Before entering any Danger Building the workmen are to put on the working clothes without metal buttons, provided in the changing rooms for that purpose, and take them off again before leaving the factory when work is over.
Pockets are not to be worn in any Danger Building, and in no case are trousers to be turned up at the bottom when outside the Danger Building.
- 12 No article of iron or steel is to be taken into Danger Buildings save only when repairs are in progress.
- 13 No implements or tools are to be used in the Danger Buildings except those supplied for the purpose, and afterwards they must be replaced carefully, and never thrown down.
- 14 Open barrels are not to be placed one in or on another.
- 15 The limits of quantity of explosive and ingredients affixed at or within the several buildings and parts of the factory, as the limits of quantity respectively allowed to be in such buildings or part, or in any machinery therein, at any one time, shall be duly observed by every workman engaged in or about, or in connection with such buildings, machine, or part. The explosive in packing rooms is to be carefully reduced to the smallest quantity, and never be allowed to accumulate faster than it can be packed.
- 16 Machinery while in motion shall be invariably stopped for oiling, in accordance with the notice posted to this effect.
- 17 Where oil other than mineral oil is used, no cotton waste is to be taken into Danger Buildings, but only the sponge cloths provided, which are to be exchanged for clean cloths by the Foreman as often as may be necessary. Sponge cloths in use are to be kept in the box provided, outside each Danger Building. All disused oiled cotton waste and oiled sponge cloths (whatever oil may have been used) shall be kept in the iron box provided for that purpose.
- 18 Whenever it may become necessary in the Danger Building to remove any explosive encrustations, whether from the machinery or elsewhere, which

cannot be easily brushed off, such removal is to be effected without the use of metal tools. The hard explosive is to be removed by means of hot water or acetone, supplied, supplemented if need be, when the whole of the encrustation has been thoroughly saturated, by a suitable wooden implement, gently applied.

- 19 On the approach of a thunderstorm, work in Danger Buildings is to be suspended, and the buildings are to be closed, and the men are to retire to the mess room.
- 20 No unauthorised person shall be admitted into the factory or to any buildings thereof, and no workman is to go into any part of the factory, except where he or she is employed, without the authority of the duty Foreman. No workperson is to leave the Packing Room without the permission of the Foreman or Forewoman in charge.
- 21 No Intoxicating Liquors are to be brought into the Factory on any pretence whatsoever.
- 22 No person shall be admitted into the Factory in a state of intoxication, or otherwise unfit for work. Any person found on the premises in a state of intoxication will be deemed to commit a breach of these Special Rules.
- 23 The electric light fittings must not be opened or the bulbs removed except by the Electricians. The Electrician on duty is to see that the lamps are maintained in a safe and satisfactory condition. Only Safety Matches are to be used in the factory, only by the Foremen, and kept in the boxes provided for that purpose.
- 24 All trams are to be kept clean, and the sweepings to be put into the tubs provided for the purpose.
- 25 The temperature in any Danger Building must not exceed the limits of temperature posted in that building.
- 26 The interiors of the Stoves are to be kept thoroughly cleaned with Acetone.
- 27 No defective case or barrel may be received into or issued from the factory magazine.
- 28 In the interval of receiving or delivering explosives, the magazine doors must be kept constantly closed, and the storekeeper in charge must not leave the magazine while the doors are open.

Extra Special Rules for Repairs

When any repairs are reported necessary in any Danger Building either by the Foreman, the Chief Engineer, or by any Workman employed therein, the following course shall be adopted. . .

- 1 The Chief Engineer shall in person report to the Manager what work he finds needful to be done. The Manager shall request the Foreman of the department connected to such work to examine into the specific repairs required, and to report to him or his deputy.
- 2 The Foreman so reporting shall on no account proceed with such repairs until he has obtained permission to do so in writing from either the Manager or his Deputy.

- 3 When this permission in writing has been obtained, the Foreman is himself to see the commencement of any such works, after the building, machinery therein, and ground outside the building have been thoroughly saturated with water and kept wet during the progress of repairs, which must always be undertaken with the greatest of care and circumspection, and no repairs may be commenced, and no tools used in the stoves or in any trays or utensils used therein, until after the whole of the woodwork has been thoroughly washed with acetone. The Foreman shall conduct the repairs in person so far as his other duties will allow.
- 4 During the progress of any repairs the Foreman of that portion of the factory must be himself in attendance as often as possible, and is responsible that no repairs are undertaken except under the above conditions. Any person committing a breach of the foregoing rules shall, on conviction be liable to a penalty not exceeding Forty Shillings. These rules were made by the Home Office, Whitehall and were dated 20 March 1916.

Notes on the Rules

In cases of gross negligence or carelessness the Proprietors will avail themselves of the powers given them by The Explosives Act of 1875, by which they can arrest by themselves or their servants any person so offending, and take them without warrant to be dealt with by the law; and the court before whom he is brought is authorised to inflict summary punishment, either by fine, or by imprisonment with hard labour for six months.

The Foremen are responsible that every man engaged in these Works has a copy of these rules, with which all are requested to make themselves familiar. Additional copies can be had by any Workman on application to a Foreman.

The men are to use every means to increase the security of themselves, their fellow Workmen, and all concerned, and to preserve the property of the Company. They are to be especially careful that all work connected with gunpowder is done deliberately and thoughtfully, and immediately to check, either in carelessness in themselves or others, any tendency towards trifling carelessness, and are to report to the foreman any breach of the General Rules or Special Rules which may come to their notice.

The rules of the company were strictly enforced and they remained in force until the company ceased their operation at Chilworth.

When reformed in 1885 as The Chilworth Gunpowder Company, the firm was effectively a branch of the Vereinigte Koln-Röttweiler Pulverfabriken, which were members of the Anglo-German Dynamite Trust.² Vickers had acquired a minority interest by 1914 and the business was greatly enlarged by the Ministry of Munitions in 1915-1917. When peace came once again to England, in 1918, the call for gunpowder fell off and all the explosives manufacturers amalgamated to form Nobel's Explosives Ltd., later to form part of I.C.I.³ The demand for powder for use in industry was negligible; the gunpowder industry at Chilworth was doomed

to closure. A notice was given to all the employees, signed by the Managing Director at the time, Mr. T. G. Tulloch, dated 16 June 1920.

"It is with great regret that we have to inform you that the shareholders have decided to put the Chilworth Gunpowder Company into voluntary liquidation and to cease the manufacture of explosives at Chilworth. Ever since the Armistice, when work on Government orders ceased at short notice, the Directors have allowed the works to continue operation in hopes of a resumption of better times and that a large demand for blasting powders would return. It has now become apparent however that these hopes cannot be realised, and on examination of the losses which the Company has sustained in keeping the factory going since the Armistice, with the object of keeping workers employed, do not permit the continuance of any further manufacture of black powder. This coupled with the enormous taxation to which the Company is now subjected makes it impossible to continue. There is an additional reason also looming in the near future, i.e. foreign competition, not only in home but in overseas markets, from Belgians and Americans which make it impossible for the Chilworth Company to compete. The price at which Belgian powder can be produced, owing to lower wages there compared to wages in this country, will result in their being able to sell powder at a profit, at probably lower costs than it can actually be produced at Chilworth. The Americans on the other hand, owing to the very large orders they received from the British Government during the war which enabled them to extend their factories and to work on an enormous scale of output, and also owing to the less stringent regulations governing their conditions of manufacture, can sell against us at prices which it is hopeless to compete with on the small-scale output at Chilworth, already so heavily burdened with taxation and stringent regulations. There is nothing for it, therefore, but to cease manufacture of black powder at Chilworth, and this is all the more regrettable as most of the employees have given long and faithful services throughout the best part of their lives to the business of the Company. The Chilworth factory is the oldest powder factory probably in the world, and that it should now come to an end after such services to the State as it has rendered in the past, since the days of Queen Elizabeth, is extra reason for regret. The Directors however in accordance with their past traditions which have governed the friendly relationship between them and their employees are anxious to do all in their power to lessen the hardships which must undoubtedly fall, especially upon those employees who are too aged or who suffer from disabilities which might prevent them from securing situations elsewhere. With this object in view, it has been decided to endeavour to establish new Peace industries at Chilworth, and if this can be arranged it is hoped that employment may be found for a limited number of our employees, but it may be some months before these new kinds of work start. The Directors therefore, in order that the hardships inflicted by discharges may fall as lightly as possible upon the employees, wish that all who can find work elsewhere should endeavour to do so as soon as possible. In saying goodbye to all those who are fortunate enough to find such work outside, the directors desire to express their grateful thanks for the loyalty and

good feeling which has always been characteristic of the workers at Chilworth and if at any time the directors can assist by recommendations and interest towards obtaining employment for those about to be discharged, they will feel it their duty to do their utmost in this direction."

The factory remained in the possession of the Chilworth Gunpowder Company until the year 1922. In that year His Grace the Duke of Northumberland sold the outlying portions of The Albury Estate by auction. This sale included the site of the gunpowder factory, the buildings thereon and all the dwellings belonging to the factory. The following extract from the Sale Particulars will give a good indication of the extent of the factory and the number of buildings.

Lot 24

The valuable and well situated freehold commercial premises formerly part of the Chilworth Gunpowder Company, situated on the West Side of Halfpenny Lane about a quarter of a mile from the Chilworth Station, (S.E. and C.R.) with Goods Yard. It is immediately adjacent to a good hard road with a wide entrance for goods vehicles. The property enclosed an area of over 6 acres and included a capital Manager's residence, spacious and well built Office Premises, Large Workshops and Stores, Pair of Cottages and a small Entrance Lodge.

Bungalow Lodge, situated at the Northern entrance, built of timber with tiled roof, with a large room, with fireplace, and lined with matchboarding, and a storeroom at the end.

The Extensive Office and Workshops, a brick built block of six spacious offices, an excellent carpenter's shop, brick-built and tiled engineer's shop. Large brick-built Magazine, lined with matchboarding, iron roof.

Brick-built packing house, iron roof.

Brick-built Target house, iron roof.

Timber-built shed with felt roof.

Lofty brick-built Retort House, with iron span roof and cement floor about 32 feet 6 inches by 32 feet, with large iron lean-to adjoining with brick-built Charcoal House with iron roof.

Brick-built Charcoal House with iron roof.

Brick-built Boiler House with iron span roof and a brick-built chimney shaft, about 120 feet high.

Brick-built and timber-built store with iron roof.

Sulphur Store and Oil store.

Lot 25

The extensive freehold property formerly part of Chilworth Gunpowder Factory, about 33 acres. Situate about a quarter of a mile from Chilworth Station and Goods Yard, adjoining a hard road. Comprises a wide strip of woodland containing a number of scattered buildings formerly used for the manufacture of explosives. There are two watercourses flowing through this property and the upper stream being at a considerably higher level than the lower, there is excellent opportunity for the employment of water at several points.

The buildings included in the sale are as follows:-

Brick-built and Tiled Entrance Lodge.⁴

Timber-built and tile-heled building, used as a cask store and hospital.

Timber-built Dust House on brick foundations, with two floors and a basement.

Brick-built and matchlined Magazine with iron roof.

Timber-built Corning House, about 32 feet 6 inches by 24 feet, with two floors.

Timber-built Packing House with iron roof.

Brick-built Charge House with iron roof.

Timber-built Mixing House about 51 feet by 16 feet 6 inches, on a brick foundation with iron roof, on two floors.

Timber-built Grinding Mill on brick foundation with a felt roof.

Brick-built Charge House.

Brick- and Timber-built Mess Room about 23 feet by 10 feet 6 inches, wood floor.

Range of timber- and brick-built buildings 55 feet in length, used as Incorporating Mills.

Brick-built Engine House with Boiler room in basement, brick-built smoke shaft.

Two timber-built buildings on two floors.

Buildings in three compartments 49 feet long, brick-built.

Brick-built lavatory with cement floor.

Two brick- and timber-built Charge Houses.

Brick-built Accumulator House, 20 feet by 12 feet.

Large timber-built Press House, brick foundation, on two floors.

Timber-built Glazing House, with two floors.

Brick- and stone-built Packing House, 47 feet by 13 feet.

Old brick- and stone-built Boiler House.

Brick- and stone-built Stove House, 22 feet square.

Timber-built and felt-roofed Corning House on two floors, 36 feet long.

Timber-built and iron-heled Charcoal Mill on two floors.

Brick-built Magazine with iron roof.

Timber- and iron-built Store House.

Brick-built Engine House, iron roof.

Brick-built Mixing House, about 101 feet long, iron roof.

Brick-built tool shed.

Large brick-built building (Boiler House, Engine House and Mess Room) with iron span roof and octagonal brick-built chimney shaft about 120 feet high, with wrought iron bands and a lightning conductor.

Tramway, Weighbridge by Avery, with timber enclosure to weigh office.

This lot includes the site of a Tramway connecting the premises with the railway, and the existing bridge carrying this tramway over the stream.

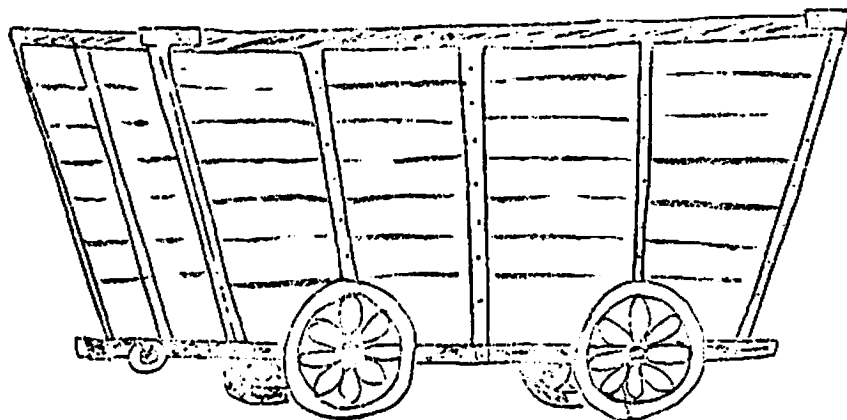
There is a siding on the Railway Co. premises reached by this tramway held

from the Railway Co. under an agreement dated 31 December 1888, at an annual rent of £1.

To the casual walker on the site very little remains of the great mass of buildings listed above. The Plan with this paper, drawn from the Sale Particulars, shows the position and use of the buildings described.

- 1 *Surrey Advertiser and County Times*, Guildford (16 February, 1901).
- 2 J. E. Salmon (ed.) *The Surrey Countryside* (Guildford 1975) 162.
- 3 R. Trotter (ed.) *The History of Nobel's Explosives Co. Ltd.* (1938) 136-7.
- 4 Still standing and known as West Lodge.

The Old Manor House, at the junction of Blacksmith Lane and Dorking Road, was the manager's house, where Captain Bouvier lived. He died on 9 August 1906, aged 59, and was buried at St. Martha's.



All the trams were made of wood and bound with either brass or steel; the former if used within the factory and the latter for carrying coal from the coal yard situated on the South side of Dorking Road to the furnaces. These trams held a ton of coal and were loaded and unloaded by hand. The railway ran from the coal yard, crossing Dorking Road at a slight angle to a place where The White House is now situated, along level with the line of the road to the weigh-bridge which was situated on the site now taken by Chilworth Stores. The rails ran down what now is a footpath between Chilworth School and the Stores, crossing a swing-bridge spanning the canal, to the furnace. The trams were man handled in both directions, two men pushing each tram. (After the weigh bridge it was downhill and the crew would ride on the rear of the tram.)

THE ACCOUNT BOOK OF WILLIAM GADCUM
A Glimpse into the Working Life of a
Farnham Carpenter, 1754-1842

Miss L. Grosset

Farnham Museum Society

A beautiful copper-plate hand inscribed the words "William Gadcum April ye 24th 1778" in a green leather-bound account book.¹ It probably was the hand of William's father, Richard, wheelwright of East Street, Farnham, Surrey, from whom William learned his craft and with whom he worked until he was 31 years old. Richard saw the time approaching when his son, then 24 years old, would have to keep his own accounts as he was to be married in December, 1778, to Sarah Bridger.

Opening the brass clasp of this little book William proceeded with pride to make his first entry — a record of an event which had taken place four years previously when he completed his seven years' apprenticeship: "Entered the Club January the 10th 1774", penned in a clear but as yet immature hand on the now yellowing page. William's Club was probably a Friendly Society held at the *Goat's Head* which was later demolished to make way for the Town Hall at the foot of Castle Street. While William had been a mere apprentice he had not been allowed to frequent inns: "Taverns, Inns or Alehouses he shall not haunt, at Cards, Dice, Tables or any unlawful Game he shall not play . . . during all the said term".

William Gadcum's account book was handed down to his son, James (1788-1874), whose daughter Elizabeth married John Burningham, and the book eventually came into the hands of their grandson, Horace Burningham, (1882-1968) who maintained the family's continuity in association with building since the time of his great-great-grandfather, the writer of the account book.

Horace Burningham extracted and transcribed some of the contents, realising that what seemed at first sight merely a record of wages, expenses and moneys owing, revealed a good deal about contemporary prices and the everyday circumstances of William Gadcum, carpenter, whose craft must have contributed to one of Farnham's most pleasing aspects — her Georgian buildings. I have tried to arrange these extracts and relate some of them to the social and economic trends of the late eighteenth and early nineteenth centuries.

William had the fortune to learn his craft from local builders and carpenters who observed the rules of proportion laid down for their guidance in handbooks, and who had the skill to transform many a wayward timber-framed house with a tumble of gabled roofs so that it presented to the street a symmetrical facade graced by well-proportioned windows and an elegant fan-lit doorway; and an interior enriched by fine woodwork and a graceful staircase.

William acquired a "Universal Pocket Book" giving prices of building works undertaken by bricklayers, masons, carpenters, and joiners; also Peter Nicholson's



1. Former Carpenters shop, Knockhundred Row, Midhurst



2. The Carpenter from N. Whittock, *Book of Trades*, 1842

"Carpenter and Joiner"; and "A Young Man's Best Companion" with the prices of 1760 and information on geometry, book-keeping and the whole gamut of learning of the period. There is no record of his having been at the Grammar School, (then called the Free School) which was "low in reputation" in about the middle of the eighteenth century, but the deviating spellings in the account book should not be held against William as phonetic approximations were quite acceptable in his day. His handwriting throughout develops in style and confidence suggesting frequent use of the pen.

Having learned his craft from his father, in 1785 William was employed by Mr. G. Allen, a carpenter in Farnham. He earned 2s. a day and often during the summer months he worked seven days a week as by then he had a family to support. In 1793 Mr. Allen retired and William was employed for 32 years, the rest of his working life, by Mr. Thomas Birch, also a local carpenter, at the rate of 2½d. an hour or 12s. 6d. for five days, though in 1801 his wage was increased to 16s. for five days.

Unfortunately William's account book does not give any information about the particular carpentry activities he undertook while employed by Allen or Birch, and his contribution to domestic architecture is destined to remain anonymous. However we do know that William's son, James, was responsible for the building of Winkworth Place, two three-storey houses still standing in East Street; and that Birch's son, William, became a leading local builder, and that Zingari Terrace, in East Street, nearly opposite Dibben Builders Merchants, Ltd., is known to be his work. Though it was built in the early 1860's it has a strong feeling of Georgian proportion and to-day it still retains much of its architectural distinction.

William Gadcum's account book is primarily concerned with his personal money affairs and his various spare time activities aimed at increasing his income. For instance the book records his ventures into the buying and selling of pork:-

Went to Godleman on Sunday July the 12th 1778.

Brought from Godleman 83 pound of Bacon, one fleck [flicht] waid 56 pd.

and a half waid 27 pd.

Fathers ribsher [sparerib] waid 5¼ pd.

However it is nearly four years later that we first hear of his buying a live pig to fatten up for killing.

March 14th 1782

	£	s.	d.
Bought the pig		12.	0.
A peck of Barley meal			9.
At different times 60 Bushells grains		15.	3½.
1 Bushell of pollard [meal or bran]		1.	6.
Beans		1.	1.
1 sack of peas	1.	1.	0.
2 Bushells Barley meal		8.	6.
Miss Youngs Barley 7 Gallons		3.	9.
½ Bushell Peas		2.	6.

Dec 12th 1782. Cilling [killing] 1. 0.
£3. 6. 4½d [sic]

1782 Mrs Restall 3pd½ of lean meat 1. 4½.
 Mrs. Restall sowce [pork steeped in pickle] 5.
 Old Edwards 1pd½ of lean meat 6%.
 Mr. Meeres 2pd½ of lean meat 1. 0%.
 Mr. Meeres 7pd sowce 10%.
 Mr. Edwards spare rib at 8d. pd 3. 4.
 Dick Smiths chine 2pd 2oz 3. 11.
11. 6. [sic]

Later William bought numerous pigs ranging from 9s. Od. to 16s. Od. each and had regular customers for his pork.

bought a hog of Mr. Hore [Hoare] waid 25 stone 2 lb and paid him 2s. 6d a stone . . . £3. 3. 1½d.

Jan 14th 1787 paid Mr Nowles² £2. 14. 2d. for a pig that waid 18 stone and 1 pound at 3s. Od. a stone.

1790 Paid Taylor for a pig £3. 12 Od waid 24 stone 2 lbs.

William may have had plans to improve his own accommodation or that of his pigs for in 1791 he bought some wood from his employer:

		£.	s.	d.
<u>Of Master Allen</u>				
<u>April 30th 1791.</u>	1/13' x ½" White Deal		2.	2.
<u>May 7th 1791</u>	4/13' x ½" White Deal		5.	5.
Nov. 5th	600 sap Lath		8.	0.
	9' x 1¼" Yellow deal		2.	3.
	6' x ½" Yellow deal at 1½d			9%.
	¼00 of Hart Lath			9.
	¼00 of 3 pd Lath nails			10.
Feb. 17th 1792	Borrowed	1.	1.	0.
	¼00 of 4pd Lath nails		1.	1.
	¼00 of 3pd Lath nails			10.

William frequently undertook odd jobs outside his regular working hours, e.g. for Mrs. Clark who kept a shop:-

		£.	s.	d.
July 1779.	To the Blankwindows			2.
	[Probably to do with Pitt's Window Tax.]			
	A job in the Parlour, four nights and nails	1.	6.	
June 1781	A Draw work in the shop			6.
	and nails and slips			2.
	hold fastses to the jack			6.
	easen the fore door			2.
Nov. 1782	Putting up window curtains			2.

	£.	s.	d.
			letting a piece in the door cill
			in the kitchen, Stuff and nails ...
		6.	5 hours to the ironing board ...
	1.	0.	Glue and nails
		4.	July mending the copper led time,
			8 nails
		6.	Dec. 1 hour and ½ to a copper led.
			[lid]
		3.	1 00 of 8pd nails
		4.	Jan 21st 1783 1 howers ½ to the shop table ...
		3.	Feb 1st 1783 To shelves and nails in the shop...
	1.	0.	Feb 19th Stuff and nails to the chicken
			coop
		4.	2 howers to ditto
		4.	½00 nails 8pd
		2.	March 7th 2 Candelsticks for the wash house
		6.	Putting the Backon up the Chimney
			and taking it down
		6.	
			<hr/>
		9.	8.
			<hr/>

Meanwhile Sarah was doing her share of the work by accommodating lodgers and washing their linen as well as caring for her own family.

“David Elson came to lodge with wee Wednesday Jan. 8th 1783, settled with Master Elson Oct 15th 1783 £1. 3. 6d and owed him for a pair of shoes 6. 6d.

There are two other settlements of 28 and 25 weeks at 9d per week, with a final one as follows:

Settled with Master Elson March 30th 1785 and received 17s. 3d and went away to his kinsmans.

Mr Thomas and John Taylor Day came to lodge at our house Thursday May 27th 1784 and went away March 11th 1785.

Mr White came to lodge with here March 11th 1785 and went away August 8th.

Thomas Leach came to lodge with wee April 3rd 1785 and begun washing is linning for him from that time.

April 2nd 1786 received of Thomas Leach for washing and lodging £2. 2. 0d

Thomas Hole came Feb 11th 1788 and stayed 6 months: before he left William gave him two shillings for a “hankr”. He comes back again:-

Thomas Hole came to lodge here Jan 25th 1789 had a new chest 3ft long 18in wide 14in deep is 11s 6d the first week bord to Feb 1st comes to 3s 4½d . . . lodging and beer 1s 6d.

Thomas stayed a year and ten months and the total bill came to £26 5s. 8½d. including the chest and a comb 8d.

Valuation of Timber &c on
 Mr Carter's farm at Hartley
 Nov 19th 1863
 39" 46 of Oak above 10 ft. 100
 16" 9 of 10 fms under
 6" 12 of Elm above 10 ft.
 5" 31 of 10 and under
 2" 38 Oak
 38 Bush
 81 Pollards
 372 Sallows
 430-172
 Valued by W. Thomas Birds
 and Isaac Adams

For a Burn or Soil apply
 a poultice of Junceon and
 steamed to get the sweat
 and then apply ground ivy
 and horse teeth; and the inside
 of Elm and the inside
 of alkem and a little bit
 lice mark, Junon and Bog
 on record for a little
 and apply upon furrow

3 & 4. Two extracts from Notebook

On March 16th 1795 Musshire [Monsieur] Norman came to lodge here.

Nothing further is recorded of him, but perhaps he was escaping from the Reign of Terror in France 1793-1795.

There is also a little mystery about the one lady lodger who came to the Gad-cums and for whom William shows compassionate concern:-

On Oct 17th 1790 Ann Remnant came to lodge with us and in
 part paid for fetching her in a cart 5s 6d
 Paid for Mrs Remnant for making a gound 3s 0d
 mending her ring 6d
 carriage for her goods 2s 6d

Except of these bare statements nothing is revealed about Ann but at the same period William had this entry:-

6 bottles of Gin 8s 0d
 Rum 10d
 1 Bottle of Rum 1s 8d
 1 " " " 1s 8d

William bought wine only occasionally from Jonson for sickness and in the grocery list 2s. 0d. is shown. Could Ann have been a victim of the horrors of "Gin Lane" immortalised by Hogarth when gin was cheap, in the period between 1720 and 1750? Some tragedy seems implicit.

Sarah also did washing, mending and sewing for people in the neighbourhood. The following laundry list of Mr. Towns suggests that he may have been one of Farnham's Georgian dandies:-

		s.	d.
Feb 5th 1785	4 shirts, 3 stocks [cravats] ...	1	1½
	1 night cap		0½
	1 pr Breeches		3
	4 prs Stockens		4
	3 Hanks		1
Feb. 26th 1785	7 shirts, 5 stocks	1	11½
	6 Hanks		3
	5 prs Stockens, 1 cap		5½
Mar. 12th 1785	4 shirts, 2 stocks	1	1
	4 hanks		4
	4 prs Stockens		4
	mending		5

£0. 6. 6 [sic]

Mr. Lamport, Mercer and Draper had his shop at the bottom of Castle Street where the *Coach and Horses* Public House now is, and he sent his 'prentice to Sarah:-

		s.	d.
Apr. 6th 1788	Mr Lamports prentice		
	Macking a pair of sleeves		4
	5 ps Stockens runing [mending] ...		10

Wosted [worsted, i.e. woollen yarn]	2
Macking a round frock	6
Heming 1 pocket hank'r	1
	<u>1. 11</u>

Nancey's mother was perhaps a neighbour who turned to Sarah when in need:-
1791 Received of Nanceys mother

	s. d.
Sope and blue	1 6.
a Ribsher waid 14 lb	5 10.
Sope and starch	1 6.
2 fowles	4 0.
Hog meat	2 9.

William started brewing his own beer at the age of 28 on 8th Oct 1782:-
Brewd 2 bushels of malt 10s 0d and put up one copper full and 4
buckets full the first time and then one copper full and 6 buckets
of cold licher.

He brewed again on Dec 3rd 1782 "1½ bushels 8s. 3d."

Brewd Feb. 1st 1784, 2 bushels of Malt from Peter Hughes and
put up one copper full, 7 Getfulls³ the first time and the second
time one copper full and 3 full buckets of cold licure.

William bought malt from various local people:-

Mrs Restall ½ bushel	2s. 3d.
Mr Meere 3 bush.	15s. 9d.
Mr Meere 4 Bush.	21s. 0d.

Sometimes William worked with Cooper Richards, for instance, when the
Great Cask or Vat at the Castle had to be cleaned. The rate of pay was 2d. an
hour as was usual at that time.

Went to Cooper Richards about the Great Cask	s. d.
Nov. 29th 1784 1½hr	3
Nov. 30th 1½hr	3

On 9th, 13th and 14th Dec. he worked the whole day and then the rate of
pay was 2s. a day.

William also worked occasionally for Cooper Richards:-

In account with Cooper Richards Dec. 1781	s. d.
2 nights in the Ashole [charcoal burning]	1 0
To the Hogpen	1 2
Dec. 8th 1783 ¾ of a day to the cellar	1 6
April 1783 Making a lite for the cellar window	6

4 2

William, never idle, earned a little extra money carrying charcoal to a customer,
Mrs. Restall, who had kilns near 41 West St. Charcoal was used for firing the
kilns to dry the hops. He carried 47 odd bushels of ashes from August 9th 1782
every month except July, until Oct. 15th 1783 at 2½ per bushel, and received

7s. 10d. on Oct. 17th 1783. He had from Mrs. Restall ½ bushel of malt for 2s. 3d.

The following recipe for treating burns or scalds, copied out on one of the back pages of the account book, was perhaps tried out by Sarah in case of an accident when her husband worked in the ashole or scalded a pig's carcase to remove its bristles:—

For a Burn or Scald apply a poultice of Lincedoyle and Otemeal to Get the fire out and then apply groundivey and houseLeeak and the inside rine of Elder and the inside rine of Elm a little bit of allem and a littel bit of bees wax Simmerd together in hogs Lard for a plaster and spread uppon primrose Lieves

The handwriting suggests this was copied soon after he started the account book in 1778.

By the end of the 18th century nearly every piece of land around Farnham was planted with hop vines, and William, with characteristic enterprise, seems to have concerned himself with growing hops in a small way, perhaps for his own brewing:—

Paid Mr Bradley May 8th 1784 for 1 cord of Hoppoles	13s0d
May 14th 1813	Paid Thomas Knowles for ½ load
	of Hoppoles 10s. 0d.
Dec 16th 1813	Paid John Knowles for ½ load
	of Hoppoles 10s. 0d.

William had bought some land in 1791 and a house in 1792, both in the vicinity of St. James' Church, East Street. His first employer, Mr. G. Allen, illustrates the happy relationship between master and journeyman when he lent William £5, the equivalent of eight weeks' wages, to enable him to buy a house.

Borrowed 5 guineas of Mr Allen when I bought the House and Ballance 3 guineas September 2nd 1792. Paid him 1 guinea and settled for all accounts December 29th 1793

When William bought the house he had five children:— William, 12 years old, Ann 9, John 6, James 4 and Thomas 3. The eldest son, Will, "Entered into the Free School February 8th 1790" He was then ten years old and when he was 14 he became an apprentice after having been fitted out with new clothes.

<u>Laid out for Will's Close [clothes] June 30th 1793</u>	
Stuff for Coat and Waiscoat	17. 0d.
ditto Breeches	7. 6
Macking [making up]	9. 9
Shoes and Hat	6. 6
Shirt and Stockings	4. 10
	<hr/>
	£2. 5. 7d

Expenses to get him bound

At several times	2. 6d
Paid for stamp for the Indentures	6. 3
Paid for Weelers writing	5. 0
Involving and spent	5. 0

Unfortunately the boy died the following year and perhaps this explains why William kept his three other sons at home until they were at least 16 or 17 years old.

John, the second son (1786-1829), later worked as a carpenter with his father. Eventually he went to East Malling, Kent, became ill and died. It was William's employer, Mr. Thomas Birch, who made the journey to bring back the body for burial in Farnham, a moving gesture again illustrating the quality of the relationship between employer and employed that often existed in those days.

Expense to bring him down	£4. 0. 0.
Birches bill	£3. 13. 0.
Parson Clark Sexton	£2. 2. 6.

William's daughter, Ann (1781-1827) was married in 1802 at Farnham Parish Church. Thomas (1789-1826), the youngest son, was bound for six years to Daniel Batchelour, a builder in Farnham, and subsequently Thomas became a plumber. The only son who survived his father was James (1788-1874) who was bound at 17 to Mr. Earl, a builder in Froyle. James married Mary Winkworth in 1810 which explains why the two three-storey houses in East Street were called Winkworth Place: and later his son built Santon Cottages, nearly opposite, and incorporated in the structure some of the timber from the Old Market House when it was demolished in 1866.

As for Sarah, William's wife, in spite of her hard work, she outlived all her children except James, and in the account book there is this statement, the more sincere because of its brevity:

My dear wife departed life July 26 1836.

William likewise had worked hard all his life, and showed prudence in the management of his affairs. Ever since 1783, five years after he was married, he began to save money, not in an old stocking, but where it would yield interest:

Feb 27th 1783	Settled with Miss Young and had to pay me interest upon a Note of hand at four per cent for Ten Pounds.
Feb 15th 1789	Received interest for six years, 2 pound 8 shillings and Miss Young is to pay me interest at four per cent from this time.

Miss Young left a trust fund of some sort in which William had an interest, for in November 1803 we find this entry:

Received of Miss Young's Trust a Legasey	£48. 10. 0d
and Of Mr Carter for half years rent for Farm	£39. 10. 6d
paid the Anuity	£22. 10. 0d.
	<u>£17. 0. 6d.</u>

This explains why William made the 10 mile journey to Carter's Hill Farm, Hartley Wintney on Dec 23rd 1802 to make an inventory of the timber. Evidently the land had been enclosed some time in the eighteenth century and the fields hedged and planted with oak, elm and ash trees, or whatever suited the soil. This was a common practice during the agricultural revolution when the landlord, having added to his estates what waste and common land he could, re-divided the whole into compact farms surrounded by rectangular fields and put in a tenant farmer such as Mr. Carter.

		s.	d.
1825	paid Church rates	1	1
1833	paid Mr Nichol and Mr Eyre for Church rates		10
1833	paid Mr Trimmer and Small for Highways ...		10

There is one reference in the account book to a Banker, James Stevens who owned hop grounds, maltings, breweries and other prospering businesses in Farnham. Evidently William felt he could entrust his savings to the newly established Stevens Bank.

		£.	s.	d.
Jan 7th 1805,	received of Mr J. Stevens		24.	3. 0
	and left in his Bank	750.	0.	0

The account book as a whole reflects the industry and thrift of a craftsman who was determined to improve his circumstances, not by sharp practice or by demanding higher wages but by steady work, and by initiative in pursuing activities outside his regular hours of employment. Certainly incentives were there, because he was able to save what he earned, after he had provided for his family; and because prices were fairly stable and taxes were low, he was assured that his savings would not be eroded by inflation.

He had little in the way of leisure-time entertainment and probably never had a holiday. There is no record of his ever having been to London, and his travels, it seems, did not extend beyond Godalming and Hartley Wintney, a radius of about ten miles from Farnham, his birth place.

He passed the 88 years of his life in the local community apparently composed of self-disciplined and frugal people who paid their debts and had little time for the frivolities and excesses of the pleasure-seeking world of fashion. Thomas Gray, the 18th century poet writes sympathetically of labouring men such as William Gadcum, whose lives were circumscribed but who went about their business with steadfastness, integrity and compassion:-

Far from the madding crowd's ignoble strife,
Their sober wishes never learn'd to stray;
Along the cool sequester'd vale of life,
They kept the noiseless tenour of their way.⁵

- 1 The book was of some fifty pages, each 6" x 4", with cash lines, pages having been cut. The paper had a watermark of a crown upon an oval frame, but the complete mark could not be seen.
- 2 Probably Mr. John Knowles, who later rented The Grange, Farnham.
- 3 A 'jett' is a handbowl or large ladle.
- 4 Boxing day was not then a holiday.
- 5 Thomas Gray, *Elegy in a Country Churchyard*.

A SURREY MAN LOOKS AT HIS ANCESTORS

R. A. Lever

An interest aroused in past occupations and demography led the writer to see what could be found in contemporary local documents about his family in the sixteenth century and, in particular, Valentine Leaver, a forebear ten generations back, and his sons William and Thomas, who lived in Richmond, but came originally from Barnes. The first known record of Valentine is his marriage in St. Mary's Church, Barnes, to Jane Hall on 3 January 1602/3.¹ The manor rolls of the Royal manor of Richmond are in the Public Record Office.² They show that by 1620 Valentine was a member of the homage, but his name appears in the court in spring 1621 as having allowed "a Cowe of his to remain unstaked for three days in the Comon Feildes eating other men's corn". For this he was fined 6d. for every day of the said offence. However, this lapse was not held against him and it is interesting to see his name move from the bottom of the homage in the time of James I to number four, out of ten or fourteen, in the reign of Charles I. He finally became *decenar* or tithing-man; his brother John was also a jurymen.

In 1624 repairs were carried out to the steeple of the parish church. In June of that year it is entered in the vestry proceedings that Valentine agreed to forego the sum of £1 17s. 10d. for carriage of timber, lime, sand, laths and bricks for this work³ and additionally he made a gift of 20s. of ready money. The repair itself has been attributed to him,⁴ but this is clearly an error as the vestry accounts show payment to Henry Walton, freemason. The timber is mentioned as being drawn from the Crane (on the wharf and shown in the map of 1635) to the sawpit. Valentine was appointed churchwarden twice, in 1622-3 and 1631-2,⁵ presumably dying in office. Although the parish register of Barnes for 1605 records the baptism of a daughter to Valentine and Jane, the entry for 24 July 1608 gives the baptism of one William Leaver without any parentage.⁶ Fortunately at the court leet in 1632, after a reference to Valentine's death, his successor to the homage is given as "Thomas, his younger son and heir". This instance of Borough English thus allows us to assert that William would have been the elder son. Hence the clerk's incomplete entry has been remedied from the court roll, a most fortunate occurrence.

Valentine's will, proved in January 1632/3,⁷ includes a number of possessions showing him to have been a well-to-do yeoman (e.g. a feather bed, bolster, coverlet, blankets, sheets and a chest, pewter dish, candlesticks, plate and a posnet of bullen [bullion i.e. brass rather than iron, more usually used for these short-legged metal cooking-pots]). One cow, four ewes and a lamb are left among three people and £2 worth of bread for the poor of the parish. A final legacy of "twenty shillings to the then Minister" was doubtless a *douceur* to ensure the carrying out of his requested burial in the parish churchyard.

At the view of frankpledge for 10 April 1634 we find "at the next Plough" Thomas being ordered to leave two feet of ground in breadth between Giles Hill's land and his own in the worpole or footpath in the common field leading to the Red Conduit. This is now part of a densely built-up shopping centre near Paradise Road. Thomas was later presented in 1635 for making "five Gappes between the Comon and the Comon Feild", being fined 6d. for his pains. (The purpose of these gaps is unclear.)

Rather more is known about William, who became father of a son of the same name in February 1630/1 and the following year was appointed one of the two aleconners for Richmond. In May 1633 he is named as a juror of the homage for our lord the King. At the court baron for April 1636 it is ordered that at the next ploughing of his twenty acres William is "not to encroach upon the King's highway leading from Kewe to Mortlake". Perhaps both brothers were rather prone to cultivate too close to the road or their neighbour's furlong! Nomination as a juryman of the court leet in 1641, and manager of the jury in 1645, were followed by appointment as a churchwarden in 1648. As a copyholder he was taxed 6d. quit rent in 1649, although at the same time Thomas was only assessed at 3d., the reverse of what might have been expected as his father's heir. Neither brother's name has been found among the *essoins* (excuses for non-attendance), so they seem to have taken their duties seriously. On 21 December 1648, William is recorded⁸ as having to do his suit and service and was admitted to 2 roods of land (the fee being illegible on the parchment). By the next meeting of the court on 15 October 1649 he is listed as a juror for the Commonwealth. Two years later the name of William Leaver appears for presentment on 20 October 1651 for "driving his cart laden with stones from the Great House [Richmond Palace] across the Green out of the usual Way . . . contrary to Several Orders". For this he is annexed to pay 3s. 4d. to the lord of the manor, the offence being not in taking a short cut, but for damaging the turf of Richmond Green with the wheels of his cart.⁹ The case was adjourned until 22 December 1651 but dragged on until 12 January 1652, when the fine was paid. This shows that demolition had started within two years of the detailed survey of the Palace of 1649, although repairs were carried out in the reign of James II. The damage to the turf was not held against William as his name appears in the homage for April 1652.

From references in the court rolls of 1651 and 1654 we learn that his house lay west of Park Pale Shot¹⁰ in one of the four furlongs that comprised the Lower Field. A search was made in the Hearth Tax returns for Surrey for Lady Day 1664 where the relevant membrane¹¹ shows William as the owner of a house with four hearths. Also in 1650 William was given a grant of a piece of waste, perhaps his share of the common as a copyholder.¹² From the Acts and Proceedings of the Vestry 1614-1715,¹³ we learn of the payment in 1651 of £1 9s. 0d. to William Leaver "for digging and Carriage of all those [ten loads of] Stones and for the Carriage of nine Loads of Gravel to Brewers Layne and Church Layne". Both of these small streets still exist near the Green.

William Leaver died in 1675, having attained an age of 67, well beyond the average expectation of 37 years for a yeoman between 1625 and 1699, given by Wrigley,¹⁴ although his son Joseph died in 1691 aged 43. Both William and Thomas had six children (comparing well with the average of 5.8 given by Laslett¹⁵ for 1676). From the Parish Registers, Joseph's wife, Mary had eighteen children baptised between 1669 and 1692, the last born posthumously, with a complete blank for the years 1678-87.¹⁶ Thomas lost three children (aged 6, 4 and 2) and William one son of 2, in the plague of 1640 in Richmond. The severe effects of this are well shown by Challoner Smith¹⁷ and it was decided to make a count of the burials during July and August in each of the years from 1638 to 1642. The totals are 11 for 1638, 3 for 1639, 41 for 1640, 7 for 1641 and 2 for 1642. It is known that Richmond was spared in the great plague epidemic of 1665. Unfortunately, the Protestation Returns for 1641 have been lost for Richmond.

It was only during his search for information on his family that the writer realised the value of the manor court records, with their list of minor offences committed and the fines exacted, in showing the mode of life of the inhabitants. Many offences were routine, such as overgrazing on the common, diverting water courses or not scouring ditches. More interesting cases are given, with the fines in brackets: flinging carrion into a pond or ditch near the King's highway (10s.); washing within 20 feet of the Conduit on the backside of the church (2s. 6d.); casting foul water and "sope suds" on Richmond Green for want of a sufficient sink (2s. 6d.); leaving fuzes in "Pentioner's Alley" [the old name for Golden Court], a danger to neighbours if a fire starts (5s.); failing to stop up with brick, earth, splints or studs all the doors facing the Fryers (3s.); carrying away all soil and straw before one's door when it becomes compost, thereby leaving a hole in the road (20s.); loading coals or landing boats at the Fryers (both 5s.); hanging up nets there (6d.); converting the ducking stool to one's own use (10s. raised to £6 for persistent offenders); setting up a post near one's house to the common nuisance of all passing with carriages; selling great quantities of clay off the common and for fishing in that part of the River Thames reserved for the lord of the manor. The manor itself, as a body, was fined 40s. in 1632 for not having erected a pillory as ordered. Clearly the jurors regarded this device as a good deterrent. There was a standing fine of 12d. for keeping inmates in one's house, an act that should have been reported to the parish constable. Such offences as these help to portray the inhabitants as real people and it follows that the more often a person is presented for these minor offences, the more is known both about him and life at the time.

Finally, a remarkably brief period of widowhood was found. Just four days after the burial of one William Hardiman on 23 July 1680, his widow applied for a marriage licence and by 2 August she was legally married to William Brawne; the writer wonders if this period of ten days is a record.

The writer's thanks are due to the staffs of the P.R.O., S.R.O., House of Lords, R.O., the British Library (Map Room), the Bodleian Library, the Richmond Public Library and the Lambeth (Minet) Library. Reproduction of documents has kindly been authorised by His Grace the Duke of Northumberland, K.G., P.C., the Vicar of Richmond and the Rector of Barnes.

1. SRO., P6/1/1.
2. PRO., LR 102/103. Index in the Bodleian. (Gough, Surrey 1 & 2).
3. The account is itemised in: R. Crisp, *Richmond and its Inhabitants from the Olden Times* (1866), p. 151.
4. J. Dunbar, *A Prospect of Richmond* (1966), p. 67.
5. A. C. Piper, *A History of the Parish Church of St. Mary Magdalene, Richmond, Surrey* (1947), Appendix.
6. SRO., P7/7/1.
7. PRO., Prob. 11/163/Russell.
8. PRO., SC2/205/3.
9. K. Courlander, *Richmond* (1953), p. 66.
10. Parkshot is the present name for the road running from the Green to Twickenham Road, over the railway to the west of Richmond station.
11. PRO., E179. 188/481. See C.A.F.Meekings (ed.) *Surrey Hearth Tax, 1664* Surrey Record Soc. XVII (1940). In this the name 'Lever' has been transcribed as 'Lener', but it is very faint and has been checked by ultra-violet light, an aid not available to the editor.
12. Bodleian, Gough, Surrey 1 & 2.
13. Held in Richmond Public Library.
14. E. A. Wrigley, 'Morality in Pre-industrial England, the example of Colyton, Devon,' *Daedalus* XCVII (1968).
15. P. Laslett, *The World We Have Lost* (1971).
16. Miss B. Balche of the Royal College of Midwives suggested that the years without baptisms could well correspond to a series of miscarriages or still-births.
17. J. Challoner Smith (ed.), *The Parish Registers of Richmond, Surrey I.S.P.R.S.* (1903), Introduction.

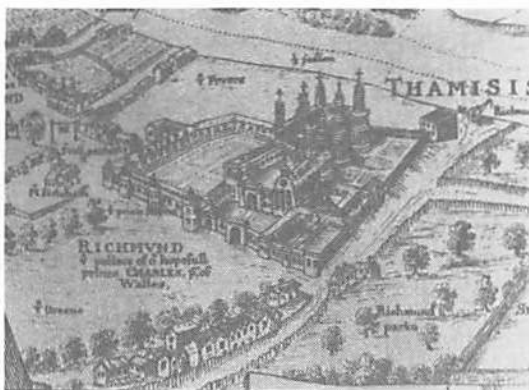


Fig. 3. The Moses Glover Map of Isleworth and Syon House, drawn for the Earl of Northumberland in 1635. The south-west bearing is at the top and Richmond appears at the extreme left. Details of the Palace, the position of the "Fryers", then an open space on the site of the old convent of the Observant Friars, and the crane at the wharf edge, near the present Asgill House, all appear in this bird's-eye sketch of pre-Civil-War Richmond. See V.C.H. *Middlesex*. III (1962) 84.

EXHIBITS AT THE 1975 SYMPOSIUM

Victoria Houghton

The theme for this Symposium was CHANGE UNDER THE TUDORS. For some societies this posed no problems, but some of the smaller societies found themselves unable to produce exhibits strictly in compliance with the theme. However, the result was a happy amalgam and the diversity Mr. James Batley so much enjoyed during his term as Organiser was again very apparent.

To jog the memories of those who were present at the Dorking Halls on Saturday, 18 October 1975, the exhibitors will be listed in the order they arranged their stands around the hall.

The Surrey County Library's exhibit was designed to show the range of information and background material available to the local historian through the local library. The books on display covered many diverse aspects of life in Tudor England.

John Baker, one of the Speakers in the afternoon, brought along a selection of his drawings, many of which were familiar to those present through their publication in 'The Seeing Eye' series in *The Surrey Advertiser*.

The Walton & Weybridge Local History Society sold from their own stand all their numbered papers in print, ten titles in all.

The Shere and Gomshall Local History Society took the buildings of their two villages as their theme, with particular reference to the Bray family. Reginald Bray became Lord of the Manor under the Tudors and the family still hold that position.

Also on display was the Tudor Hat which was found in a secret room at Tudor Cottage, Shere in 1974.

Guildford Museum's exhibit was a group of domestic pottery made on the Surrey and Hampshire borders about 400 years ago. It showed the sort of kitchen and tableware used in an ordinary Tudor household.

The Beddington, Carshalton & Wallington Archaeological Society put on a display of photocopies, prints and models featuring Beddington Park House, usually called today Carew Manor.

The Domestic Buildings Research Group (Surrey) had an illuminated manuscript enlargement which illustrated the theme, based on William Harrison's remark in *Description of England 1577* - "They Have Built Chimneys". Scale models of Surrey mediaeval and smoke-bay farm houses and cottages showed adaptation for chimneys. The centre piece was a photograph of the wing of Unstead near Godalming built with its magnificent chimney stacks.

The Dorking and Leith Hill District Preservation Society's Historical Group entitled its display "Dorking and the Reformation: Changes in the Land Ownership of Religious Houses and Fraternities", and traced the redistribution of ecclesiastical

lands during the Tudor period, with the unexpected discovery that these lands were all eventually linked with one elusive but much married lady, Eleanor (Nee Shirley) Browne/Sackville/Gainsford.

The Surrey Record Office selected documents to illustrate various aspects of change under the Tudors: the dissolution of a religious house, social control especially of recusants, attempts at trade regulation, the poor law, the foundation or refoundation of schools and the general increase in the standard of living.

The Croydon Natural History and Scientific Society Limited joined with the Croydon School of Art and Design and several other local organisations and worked for over a year to mount the Croydon Exhibition 1975. It consisted of more than 1,000 photographs of the town and its surroundings, and set out to show how interesting can be the 'ordinary' in a town, and linked the natural with the man-made (new and historical). It was a resoundingly successful contribution to European Architectural Heritage Year 1975, and was opened by Sir Nikolaus Pevsner. A small section of the illustrations was shown in their exhibit at Dorking.

The Bourne Society display illustrated five features of Change under the Tudors.

1. The passing of power from old feudal families such as the Clares of Blechingley (Seal) to the new bourgeois families like the Greshams of Titsey (Brass).
2. The dispossession of the Old Church (See Farleigh Inventory) and the rise of the new Prayer Book, first used at Warlingham.
3. The emergence of a new class retiring from the city to Surrey (Brock at Farleigh, Ownsted at Sanderstead).
4. The conversion of open-hall buildings into houses with two floors and more rooms (Chaldon Court and Tollsworth Manor).
5. The replacement of mediaeval styles by monuments with Renaissance elements (at Sanderstead and Chaldon).

The Holmesdale Natural History Club – Local History Group had:

1. Display of the Reigate Town Trail for European Architectural Heritage Year, showing the original drawings and aerial map.
2. The Club's genuine old Post Cards of Reigate as it was until 1920, including views of West Street, High Street, and Bell Street which are on the trail.
3. A copy of the Tudor symbol used in the Wool Trade for Fulling, lent by Laporte Industries of Nutfield.
4. The Club's picture of the Tudor Fireplace in the Great Hall of Reigate Priory.

The Minet Library displayed a general exhibit of the different facets in the material which is at the Library in Camberwell. There were references to horticulture, rural Lambeth, the old music halls and theatres as well as Workhouse and apprenticeship records. They hope their exhibit will promote further interest in the South London area.

The Chiddingfold Historical Society had exhibits showing their village featured on maps of the 15th and 16th centuries – and items from the industry that made

the name Chiddingfold famous – glass-making. Also shown was a product of their lesser known industry – iron-making.

The John Evelyn Society display included:

1. Henry Winstanley's two engravings of the 1588 Wimbledon Manor House.
2. Photographs and other material relating to the Old Rectory House, the oldest house in Wimbledon (c.1500) and where Henry VIII stayed in 1546 on his way back to London during his last illness.

The Sutton Library displayed photographs in connection with the main Tudor buildings in the district – Nonsuch and Beddington Manor House. Among other things they showed a Deed signed by Barbara Villiers and four of her sons, the Dukes of Hampton, Grafton, Grandisson and Northampton in connection with the Conveyance of Nonsuch to Topham and Bebbington.

The Leatherhead and District Local History Society had a general display to illustrate the activities of the Society – lectures, visits, publications, exhibitions, etc. During 1975 they staged an exhibition for European Architectural Heritage Year 1975, and the Memory Lane section of this exhibition was also set up at this Symposium.

The Nonsuch Antiquarian Society exhibited photographs of Nonsuch Palace provided by Bourne Hall Reference Library and some exhibits from Bourne Hall Museum. Nonsuch Palace, built in 1538-1547, was demolished c.1675. An excavation took place in 1959 and the Society was founded in 1960 from The Association of Nonsuch Diggers by members who worked on both the Nonsuch Palace and the Banqueting House digs in Ewell.

The Mayford History Society's stand contrasted architectural renovation and innovation in Woking during Tudor times, as demonstrated in Palace, Mansion and Farmhouse.

The Bookshop again did good business, and the helpers were delighted to find their accounts balanced to the last ½p, no mean feat when there were three tables three layers deep in publications.

This was my first year of organising the Symposium's exhibits, which was made so very simple by all the groundwork done on the past nine Symposia by Mr. James Batley, to whom my grateful thanks are given. The exhibitors too must be thanked for their patience and tolerance of the 'new girl'.

THE BASIC BOOK FOR EVERY SURREY HISTORIAN

DOMESDAY BOOK

THE SURREY VOLUME (No. 3 in this important series edited by Dr. John Morris), as one distinguished reviewer has said . . . "is not only welcome, it is to be greeted with glad cries of joy". Published in 1975 at the remarkably low prices of £2.50 for the well-bound library edition and £1.25 for the paper-back, it is still available in 1976 at those prices although the next printing, in 1977, is certain to be at a considerably increased price. Providing both the original Latin text and the crisp new translation, in parallel, it is an essential purchase for every local historian in the county and excellent value . . . to quote another reviewer "ridiculously cheap".

ANOTHER PURCHASE TO MAKE WHILE STOCKS LAST

SURREY HISTORY

THERE IS NOTHING EPHEMERAL in any of the back issues of the annual journal of the Surrey Local History Council. The first issue is already out of print, but limited stocks remain of No. 2 (at 35p) and No. 3 (at 50p) and if you have found No. 4 of interest you will certainly wish to obtain its predecessors while you still can do so . . . from your local history society secretary, or bookseller, or (adding 15p towards postage) direct from the publisher . . .

No. 2 includes: P.H. Grevatt on "Surbiton - the Queen of the Suburbs", Sir Jack Sutherland-Harris on "History of Old Village Properties in Gomshall", and Uvedale Lambert on "The Pattern of Surrey Villages".

No. 3 includes: Paul W. Sowan on "Stone Mining in East Surrey", D.W. Warner on "The Early History of Gunpowder Manufacture at Chilworth" and E.R. Turner on "The Rev. John Flamsteed, 1646-1719: The first Astronomer Royal, and Rector of Burstow".

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