ROCHESTER CATHEDRAL

1540 - 1983

A record of maintenance, repair, alteration, restoration, decoration, furnishing and survey of the fabric

> collated and edited by Diana Holbrook, RIBA, Grad Dip (Cons) AA

> > 1994

Arranged in three sections: I: Topics II: Chronological III: Illustrations

For details of Sources, see Section I, volume 1

Section I: Topics

Volume 3

R - Z

TOPICS

Volume 1

Altars

Bell Ringers' Chamber Bell Chamber, Bells and Bell Frame Bishop's Consistory Court Bishop's Throne Burials

Old Chapter House Roof Windows Chapter Room Doorway Floor Lobby Walls Choir North Aisle Pavement South Aisle Stalls Walls Crypt Clock and Sundials Crossing

East End Roofs Windows

Font Furnishings

Volume 2

"Gundulph" Tower

Ironwork

King's Arms

Lady Chapel Lavatories

Minor Canons' Houses

Nave

Interior Arcade and Windows North Aisle North Aisle - North wall Roof North Aisle - Roof South Aisle - Roof South Aisle - South wall South Side and Aisle

Organs

Pavement of the Cathedral

Dramatis Personae Precinct Pulpit Pulpitum/Choir Screen

Volume 3

Roofs (Generally)

Services Steeple

Tower Transepts St John Baptist Chapel (N.E. Transept) North East North West South East South West Treasury Vaulting

Vestry

Walls Generally West End West Front Windows Memorial

ROOFS (GENERALLY)

1674

20 May 1674 DRc/FTv/3 For work about ye Colleg: 1/2 load of lime and load of sand 10s; 1 Maintenance workman 4 days att 2s 4d a day 9s 4d; for labourers work 3 days and a ½ att 1s 6d day 5s 3d; 3 bushels of hare 3s; workmen and labour £1.12. 9d 3s; 6 pantiles and 2 rig tiles 1s 6d:

23 October 1674 DRc/FTb/10 To John Cabo for a year's sallary for looking to ye roof 10s.0d

1675 To Lake, Plumber, in parts of a bill: 6 April-7 June 1675 DRc/FTb/10 £20, £9, and final £5.2.4d. 23 August 1675 DRc/FTb/10

To Hawley for a yeares sallary for cleaning the Leadds £2.0.0d (Every year an item in the Treasurer's Accounts appears as salary paid for this purpose (could possibly refer to leaded lights sometimes windows are referred to as leads)

1676 20 January 1676 DRc/FTv/6 Bill of worke done about the Colleg by me John Taylor (mason) 24 busholls of lime; 1 load sand; 4 bushells haire; 9 rigiles; 12 batton; 50 2" nailes; 100 bricks; 24 lb witing; 6 pantiles; 200 6" nailes for pantiling; 7 days 1 workman, 1 labourer £5. 17s. 2d.

1679

20 July 1679 DRc/FTv/9 Leadwork repair John Huggins : work done upon the leads. 101/2 lbs sodder.

29 November 1679 DRc/FTv/9 To Anthony Hardin for work about the pantile ruff: 13s 5d. 5 whole deales, 3 new rafter 14' long; for half a hundred 10 penney nailes; 13 days work.

1681

1 6 8 2

16 May 1682 DRc/FTb/19 Leadwork repair £1.10.0d Pd John Gamball's bill for mending the leads

Chapter Room roof, general gutters 2 November 1682 DRc/FTb/18 Allowed for Page & Jake work on Chapter Room roufe and general gutters

6 August 1682 DRc/FTv/12 Leadwork £1. 19s Paid J. Huggins plumber for work on leads in rufe.

Tiling 22 November 1684 DRc/Ftv/13 Paid J. Gamball in full £10. 16s. 9d for work done from 18 March 1683 to present: including 1100 plain tiles; 5 ridge tiles; 50 pan tiles; 25 paving tiles; 11 boushell hair.

1685

Leadwork 25 November 1685 DRc/FTv/15 Waite of church Lead: 9 sheets new lead 22 cwt. 3 gr. 29 lb.; old 6 cwt.

1688

ROOFS SURVEY 4 July 1688 DRc/Ac/3/8 Upon a survey this day made of repairs wanting to this Church it is resolved by the Prebendaries at this time that ye Plumber and other workmen of this Church do forthwith make a repair of such things as are absolutely necessary.

1689

14 December 1689 DRc/FTb/25 Pd. Slatter and plumber £15.6s; John Gamboll £17.

Leadwork 19 Dec. 1689 - 12 Nov. 1691 DRc/FTb/27 Plumbers bills: at 17s a cwt £101.13.9d Sodder used 2nd July, 17th, 28th 1691 at 9d a lb. £4. 2. 6d £20. 0. 0d For work Old lead at Aug. 1690, Octob. 1690, June 1691 40 cwt at 14s cwt. £28

7 May 1694 DRc/FTv/22 Maintenance Receipted bill J. Gamball, bricklayer: 9 days my work, 9 days my son; 200 plain tiles; 150 bricks; 12 boushells of haire; 25 pan tiles; 1 load sand; 1 load lime. £3.16s.

1694

1 6 9 7

9 October 1697 DRc/FTv/26

Guttering

4 January 1697: Paid Fran. Slater £22.11s for Cistern and sockett and a Carkin (?caulking) of large round pipe and a leading troff to bring the watter clear of the Pantyle slattes £4.10s; 9 October 1697: new lead for mending the Roof and gutters at 16s per hundred: £5.13s; for 6 days work 3 men to take off ye old lead that was slipt down and Puttin it up again £2.5s; 100 broad headed nailes maide on purpose 2s;

19 October 1697: 2 cwt. 7qtr. $17\frac{1}{2}$ lb. sodder at 9s lb to mend ye roffes and slatts and gutters £9; 6 days work 3 men: £2.5s; Received old lead 2 cwt.2qr. at 10s per hundred £1.5s.

1699

Leadwork 5 November 1699 DRc/FTv/29 Paid F. Slater £15.11s for: new lead: 17cwt.4qt.14 lb.; 10 days work 5 men; use of my tackell roape; refund old lead.

1 6 8 4

1701 4 July 1701 DRc/Ac/4/11 Tiles 15,600 tiles delivered in ye vault on July 21 1699 16 September 1701 DRc/FTv/32 Maintenance J. Gamball's bill of works and stouff in and chinching to the leads don by me: 3 busholls haire 3s; 16 lawth (laths), 150 nayles 7d; 13 day myselfe 3s; 3 days my servant 5s 6d; 3½ day my labourer 5s 3d: £1. 78 11 October 1701 DRc/FTb/35 Leadwork Pd. Slaughter, plummer, £31.9s for 4102 lbs. lead at 15s per 100, allowing for old lead that came off from ye Church at 10s lb and £35.1s0d that from Archdeacon's old house 15 October 1701 DRc/FTv/33 Leadwork Francis Slater, plumber's bill: £15.1s.8d; work at Cathedral: 24 cwt. 2 qr. 12 1b. new lead at 15 pence hundred 10 days work 2 men: £20. 19.1d Received old lead and cuttings at 11d hundred - 8 cwt. £9.0s 7d. 1702 8 October 1702 DRc/FTv/35 Gutters J. Gamball's bill:... cleaning guter ... 11 December 1702 DRc/FTv/35 Maintenance J. Gamball's bill: 50 pan tilles; basket lime and haire; 4 pantill sowth and nayles; 3 days myself and my man. (J. Gamball senior paid in full all bills 19.1.03: £4.6.3d) 1703 Maintenance 21 April 1703 DRc/FTv/35 J. Gamball's bill: for work in severall plaices: work and stouff; day more in leades about the stone walles 2 quarters a lod of lime; 1 lode sand; 35 pan tilles; half a houndred six nayles; 5 days myself, labourer and workman. £2. 12. 6d. 24 November 1703 DRc/FTv/35 Maintenance J. Gamball's bill: more work in ye ledes and pantilles: 59 pantilles 5 bushell hair; quarter of a lode of lime and sand; 1 bushell haire; 4 days myself and labourer. £1.6s.8d. GREAT STORM 26 November 1703 DRc/FTb/37 Violent storm of wind STORM DAMAGE 15 December 1703 Drc/Ac/4/12 Copy of a letter to a Mr. Johnson of Leatherhead, refers to "late great storm and many timber trees blowd down" ... The Dean and.. Chapter desire you to acquaint them about said trees to use to repair this Cathedrall Church so considerably damaged by the said late high winds and wants of such great repayer that they cannot by any means part with ye timber trees and doo hereby desire and empower you to to have ye said trees surveyed by some Carpenter

or able judge who understands ye worth of them and that same be sold for the use of this Church toward ye great repayers of ye same.

Maintenance 21 December 1703 DRc/FTv/35 J. Gamball's bill: more in Church and ledes: 2 days workman, 1 day labourer: 5s 6d.

1704

Carpentry 1704 DRc/FTv/37 Henry Turner's bill: 21 19' hole deales; 12 10' slett deales; 2 payer Aich hinges; 24 rings for Dranes; 9 days worke 2 men; 70' window barrs; 2 bundles of hartt laths; 24 pantille laths; 1 hole deale Ridge board. £11. 6. 3d

1705

Carpentry 10 June 1705 DRc/FTv/39 Carpenter Henry Turner's bill: £11. 10s. 4d: 4 12' hole deales; 2 1b pitch; 2 10' deale...

Leadwork 31 January 1705 DRc/FTv/39 J. Gamball's bill for: chinching the leads after ye Plumer; 4 pantilles; 4 basketts lime, sand; labour 2½ days

1707

Carpentry 24 January 1707 DRc/FTv/40 H. Turner's bill for work at Collige Church: 2: 12' hole deales; 1 slit deale; 6 pounds pitch; 100 10" nailes; 2 days 2 men.

Leadwork 7 February 1707 DRc/FTv/40 Thos. Barker, plumber, bill for work at ye Coledg: £7. 13s 1 qr 31b soder; 1 qr 13 lbs more; 5 days 2 men; 1 qr 8 lb soder; for coles and candells 2 days 2 men; work myself for new castain of guter;

Carpentry 9: 10' hole deales; 6: 10' slit deales; 130' furing; 2 iron spikes; 30' elm bord; nailes; 4 days Will Goodwin; 3 days Danell Wattes. 24 February 1707 DRc/Ftv/40

18' of quarter; 2: 10' hole deale; nailes. 15 March 1707 DRc/FTv/40

Nailes and spikes; 1 day work.

2 April 1707 DRc/FTv/40 17: 10' hole deales; 4: 10' slit deales; 22 payor of small hinges; nails and brads; 9 days Will Goodwin; 8 days Danell Wates; 7 days Tom Dearwood 23 October 1707 DRc/FTv/40

6: 10' slit deales; 3 days 2 men Bill: 1: 10' hole deale; nailes 4: 10' hole deales; 3: 10' slit deales; 3 days 3 men 13 December 1707 DRc/FTv/40 DRc/FTv/40 DRc/FTv/40 Leadwork Thos. Barker, plumber, bill 1 gr 2 lb soder; 4 days work 3 men

RE-USE OF OLD MATERIAL 17 December 1707 DRc/Ac5/13S Resolved that care be taken to have old Materialls for building and Repairations laid up and fresh stores as shall be thought conducive to save expenses.

Carpenter 23 December 1707 DRc/FTv/40 Bill: 13: 10' hole deal; 9 days. (year's bill £15.2s paid 1708)

1708

Plumber 12 January 1708 DRc/FTv/41 Thos. Barker, plumber, bill for 12 lb soder; 2 days 3 men

1711

Ironwork 6 October 1711 DRc/FTv/44 Simon Lambe, smith, bill: 40 large speecks for Carpenters..2 dosing large wallhorks for plummers; 500 sixpenny nayles for pann tile lathes for Church use;

Carpentry 6 October 1711 DRc/FTv/45 H. Turner, carpenter, bill for work about Collige ruffe: 5 leaves ½ of 17ft. inch deal; 3 leaves slit deale; 100 nailes. 13 October 1711 DRc/FTv/45 2: 12' hole deale; 2: 17' slit deales; nailes; 100' Elme bord; 5 days 22 - 28 October 1711 DRc/FTv/45 4: 10' hole deales; 1: 10' slit; nailes. 4 men four half days

+ 3 men 1 day £11.8s.7d.

1712

Gutters 15 October 1712 DRc/FTv/45 Simon Lambe, smith, bill:.. 6 holdfasts for the Spouts for S. side of Church...

1713

Leadwork 10 February 1713 DRc/FTv/48 Rbt. Lawrence, plumber, bill: new lead 10 cwt. 2 qr. 17 lb.; old lead 4 cwt. 3 qr. 3 lb. 9 days work 4 men £13.5s minus old lead £10.7s.9d: total £3. 7s.6d

1 7 1 4Maintenance tiling17 March 1714 DRc/FTv/47J. Gamball, bill for 12 days about the tilling: 45 pantilles, 450plain; lode lime; l of sand; 6 bushell haire; 3 men 6 days.

Maintenance and tiling 21 March 1714 DRc/FTv/48 J. Gamball, bill: chinching all Round the Leades and other work; 4 days myself; 13 days 2 men; 1 lode lime, 1 lode hard sand, 8 bushell haire, 175 plaine tille £3.14s

3 November 1707 DRc/FTv/41 £5. 11s S. side 4 September 1714 DRc/Ftv/48 Rbt. Lawrence, plumber, bill for work don and for formed 1 yd South Lead of ye Colledge; received old lead 27 lb.; for formed, weight 1 cwt. 0qr.7 lb.

SURVEY of fabric by Mr. Dickinson26 June 1716DRc/Emf/14Masons estimate 1716To repair copings .. together with ye coping top east end of ye
freat roofeEnd of ye
filloCarpenters estimateEnd of ye
filloEnd of ye
filloTo repair ye roofe in several parts and ye ridg£70.0.0dPlumbers estimateEnd of ye
filloEnd of ye
filloTo make new pipes and cistern about ye Church£30.0.0d

1717

Carpentry and gutters 9 February 1716 DRc/FTv/50 H. Turner, bill: 2 16' spout; 2 men 2 days; 2 10', 2 12' hole deales; 2 men 2 10' hole deales; 4 lb. pitch; 1 day

1718

Carpentry 3 May 1718 DRc/FTv/51 H. Turner, bill: 63' joyst; 4 10'; 1 12' hole deales; 1000 lathe nailes; 2 days 2 men

Carpentry 20 June 1718 DRc/FTv/52 H. Turner, bill:....tackle rope £2.19s; 130 10'; 60 12' hole deales £13.14s; for ye use of ye ?Mast 5s; nailes and spikes £2.14s; journeys to buy timber £2; use of scaffolding stufe £3.10s; expended at ye Raising of ye Roofs £1.1s; 4 men 54 days. 4' fir Railes; for putting up Railes and Takeing downe ye shores 2s; 2 wainscott bords slit 6s; 24' oke

1719

LEAKS 1719 DRc/Emf/18/2 Report by John Proby: According to your order have taken account of the leads on the south side next the Steepoll and I find that the lead for 50 ft must be tacken down and most of it new cast what parts are sound I can make....

the drops that are most dangerous on the north side of the Church to drops over the tomb, pluss the drops that cum down over the forms going to the altar; the drop that falls over the Alderman's Pew; the drop that falls going out of the North door; the drop that falls down on the top and clock fitting ?... on the south side of the Church; the drop that is going to the Chapter House; the drop that is north of altar.

Leadwork 23 January 1719 DRc/FTv/52 J. Gamball, bill: 2 men in helping the plumer up with the leade 2s6d

6 February 1719 DRc/FTb/54 Leadwork Paid Proby plummer in total £79.2s; year's total £136.16s. Leadwork 12 February 1719 DRc/FTv/52 J. Gamball, bill: for chinching and mending after ye ploumer. 12 bushell lime; ½ lode sand; 20 bricks; 1 bushell haire; 3 men 1 day. 11 August 1719 DRc/FTv/52 Ironwork S. Lambe, bill: 14 lb. spiecks 5s.3d. Plumbers ironwork 21 Aug. - 2 Sept. 1719 DRc/FTv/52 S. Lambe: bill: 600 Plumers Nayls 18s; 31 spickes and cramps: 11s 7d 38 Spiecks and bolts: 14s 74d; 400 Plumers Nayls 12s; 4 Dusen Large Wall hocks 12s; 200 Plumers Nayles 6s; 4 duson wall hooks; 100 3d nailes; 25 Plumers Nayles. ROOF ?RAISING 27 August 1719 DRc/Ftv/54 J. Gamball, bill: in working under the wall plaite and Rasen: 2 men 3 days 100 bricks for ye ploumer 2s; 4 bushell haire, 12 lode hard sand, 1 lime. Pantiles 29 September 1719 DRc/FTv/54 J. Gamball, bill: mending the pantilles: 2 days 2 men 95 Leadwork, chinching and cleaning 21 October 1719 DRc/FTv/54 J. Gamball, bill: in Chinching after the ploumer, 30 days: 10s for chinching and cleaning the Leades ... Carpentry 2 December 1719 DRc/FTb/54 Paid Mr. Harwood carpenter for work done upon the roof of the Church £20 1720 Plain tiles sold 15 March 1720 DRc/FTb/55 Received monies for 800 plain tiles sold. General maintenance 3 November 1720 DRc/FTv/54 J. Gamball, bill: chinching and round the Stipell, mending pantiles and the slate: 200 bricks for ploumers youse 4s; 3 bushell haire, 1/4 lode lime, hard sand 4s 8d; 4 men 1 day 1722 Leadwork 31 Aug. - 1 Oct. 1722 DRc/FTv/60 J. Proby, bill: old lead: 6 tons 2 cwt 0 gr. 2 lb £67.2.23d New lead 6 tons. 19 cwt. 3 gr. 17 lb. £104.14.9d Sodor £1.1.11d; 6 dosen Wallhocks; £5.13.3d 5 men 39 days £66.16.4d Help to hist the lead on the Colledg 19.0d 24 September 1722 DRc/FTv/60 Carpentry T. Harwood, bill: 340' furing £2.2.6d; 16 12' hole Deals £1.6.8d; 36 12' slit Deals; 16 lb spicks; 19 days 2 men £4.8.8d

Carpentry 20 October 1722 DRc/Ftv/1722 T. Harwood, bill: 56' furring and spocket 4s 8d; 70' Evesbord 5s 10d; 1 man 2 days

1723

Tiling 8 January 1723 DRc/FTv/65 D. Jones, bill: 250 plain Tiles, 8 Ridge Tiles; 6 baskits Lyme, 6 sand, 4 hods lyme and hair. 2 men 1 day Tiling 2 March 1723 DRc/Ftv/65 D. Jones, bill: 200 plain Tiles, 12 ridge, 1000 nails; 1 bundel Heart Laths, 8 baskitts Lyme, 8 sand; 2 men 22 days. 30 March 1723 DRc/FTv/65 1 bundel Fur lathes; 500 3" nails 6 hod lyme and hair, 6 mortar; 200 bricks; 150 plain tyles; 2 men 7 days. Tiling 1 - 29 June 1723 DRc/FTv/65 D. Jones, bill: 8 hod lyme and hiare 2 men 1 day 1 load lyme, 1 sand, 1 coal ashes, 2 men 1 day 100 bricks, 2 days 2 men 600 bricks, 2 load sand; 2 men 4 days 6 hod mortar, 100 plain Tyles, 300 3" nails, 30 Heart laths, 2 men 1 day 100 plain tiles, 4 Ridge tiles, 2 men 1 day 100 plain tiles, 2 ridge, 8 hods mortar, 2 men 3 days 1 load Lyme, 1 cole ashes, 2 men 5 days. Tiling 28 October 1723 DRc/FTv/65 D. Jones, bill: 100 plain tiles, lyme, 7 lods haire, 3 morter; 2 men 4 days 1724 PRIMARY VISITATION p.206 18 July 1724 DRc/Arb/2 Three quarters of the whole roofe hath been new leaded within these twenty years ... Cleaning gutters? 8 September 1724 DRc/FTb/58 Paid 8s 4d for Carrying away the rubbish that came off the Church when it was clean'd, viz 10 load. 1726 Pantiles sold 24 January 1726 DRc/FTb/61 Received from bricklayer £2. 17s for 950 pantiles Leadwork 18 July 1726 DRc/FTv/68 J. Proby, bill for plumbing worck done at the Colledg: 30 cwt. 2 qr. 18 lb. ould lead

5 ton. 3 cwt. 3 qr. 11 lb. ould lead New lead 3 ton 2 cwt7 cwt. 3 qr. 14 lb. ould lead Labour from 15 June 1726 - 23 November 1726 2-3 men Final bill paid in full 3 April 1728.

.

Carpentry 5 September 1726 DRc/FTv/70f T. Harwood, bill: 55' Oak wall plate 12 x 8; 66' oak gist, uper plate 6 x 6; 18' firr 8 x 10; 200 Firr Rafter 5 x 7; 166' Firring; 60' 2" Oak plank; 1 large 20' Balk; 1 3' stump?; 96 12' Whole Deals; 56 10' slitt deals; 66 lb. spikes; 4 men 32 days.

Carpentry and gutters T. Harwood, carpenter, bill: 35' wall plate 7 x 8; 20' 3" oak plank; 86' Bearer for Gutter; 94' oak gist 6 x 6; 55 10' whole Deales; 18 1b. spikes; 4 men 12 days

1727

Carpentry to flat top July 1727 DRc/FTv/71 J. Harwood, bill: 30 20' Balk £5.5s; 180' firing; 6' oak 6x6 4s6d; 20' oak 4x4 5s; 56 10' hole deals £3.14.8d; 30 12" slet deals £3; 2 lathers; 26 stafe longs 13s; 24 days 3 men.

Leadwork 4 July - 2 November 1727 DRc/Ftv/70 J. Proby, bill: tacking ye Ould Oaff and turning up the water pipes: 2 men 16 days. 8 August:2 qr. $4\frac{1}{2}$ lb souder; for help to way ye Ould lead 3 men 7s.6d; 1 man 4 days; 30 August: 154 cwt. 1 qr. 17 lb. new Sheatt lead 4 men 27 days laying ye Flatt and Rouff; 1600 lead Naylls 14 October: 6 cwt. 20 lb. sheatt lead £.2.8d; 100 soullder £4.4; soullder tacks for ye pipes 1 cwt. 3 qr. 2 lb. 2 November 2 qr. 20 lb. and 56 lb. soullder; 19 dusin wall Hocks; 33 days 2 men; 29 days labourer; 9 myself: $£199.15.7\frac{1}{2}$ Ould lead £85.13s.5d.

1728

Carpentry 1 August 1728 DRc/FTv/71 T. Harwood, bill: 20' oak 3 x 4; 3 12' slet Deals; 4 days 2 men.

20 August 1728 DRc/FTv/71 T. Harwood, bill: 34' Oak wall plate 7 x 9; 225' Oak rafter and blocks 6 x 6; 382' furings; 4 8' Oak slabs; 25 12' Whole deals; 50 12' slet deals; 36 lb spicks; 3 men 30 days

Leadwork 16 September 1728 DRc/Ftv/71 J. Proby, bill: ould lead 189 cwt. 48 lb. £104.14s; new lead sheatt: £176,15s,7d; 27 days 4 men

1730

Leadwork 6 October 1730 DRc/Ftv/73 J.Proby, plumber, bill: 29 cwt. 29 qr. sheatt lead; 9 cwt. 24 lb. old lead sold; 100 lead headed nayles; 10 dussen 8 wall hooks; 2 men 22 days...

Parapet wall 3 December 1730 DRc/FTv/76 D. Jones, estimate: a parabet wall to be bult: one rod and a Quarter and 39'; will cum eait poun and Eaittene shilings and 9d £8.18.9d Leadwork 10 August 1732 DRc/FTb/67 For ye men who hoisted ye Lead for Repair of ye Church 1s 6d

1732

Leadwork 10 August 1732 DRc/FTv/112 T. Harwood, bill: 295' lead lath; 12' quarter; 5 12' hole deale; 2 men 6 days

1735

CHAPTER HOUSE tiling 17 April 1735 DRc/FTv/82 J. Cable, bricklayer, bill: 125 plain tiles; 4 Ridg tiles; 5 hods mortar; 2 men 1 day

Carpentry 19 April 1735 DRc/FTv/81 T. Harwood, bill: 36' furings; 13' Evesboard; 1 man 1 day £6.10s.

3 May 1735 DRc/FTv/81 3 12' whole deals; 1 12' leafe deal; 1 man 1 day

S. FLAT 10 November 1735 DRc/FTv/80 T. Harwood, bill: worke done ove ye south flatt: 236' naur fir timber; 600' fir jost 3 x 3; 100 10 deals; 2 Iorn dogs wayen 1 qr 15 1b; 14 Iorn dogs and 30 stapels and dogs nales wayen 2 qr.; 8 lb. spicks; 3700 nales; 8 men 12 days £46.0.6d.

1736

Tiling J. Cable, bill: ½ load lime, sand; 2 baskets haire; 2 men 5 days 29 October 1736 DRc/Ftv/82 29 October 1736 DRc/Ftv/82 400 plain tiles; 20 Ridge; 2 men 6 days 1 November 1736 DRc/Ftv/82 50 plain tiles; 4 Ridge; 2 men 1 day

1737

Tiling 15 February 1737 DRc/FTv/82 J. Cable, bill: 575 plain tile; 4 pan tile; 8 cover tiles; 6 ridge; ½ load lime and sand; 2 men 5½ days.

25 April 1737 DRc/FTv/82 150 plain tiles; 74 pan tiles; ½ bundel hart lathes; 300 3" nailes; 2 bushell hair; 2 men 5 days

Leadwork 10 August 1732 DRc/FTb/67 For ye men who hoisted ye Lead for Repair of ye Church 1s 6d

1732

Leadwork T. Harwood, bill: 295' lead lath; 12' quarter; 5 12' hole deale; 2 men 6 days

1 7 3 5

CHAPTER HOUSE tiling 17 April 1735 DRc/FTv/82 J. Cable, bricklayer, bill: 125 plain tiles; 4 Ridg tiles; 5 hods mortar; 2 men 1 day

Carpentry 19 April 1735 DRc/FTv/81 T. Harwood, bill: 36' furings; 13' Evesboard; 1 man 1 day £6.10s.

3 May 1735 DRc/FTv/81 3 12' whole deals; 1 12' leafe deal; 1 man 1 day

S. FLAT 10 November 1735 DRc/FTv/80 T. Harwood, bill: worke done ove ye south flatt: 236' naur fir timber; 600' fir jost 3 x 3; 100 10 deals; 2 Iorn dogs wayen 1 qr 15 1b; 14 Iorn dogs and 30 stapels and dogs nales wayen 2 qr.; 8 lb. spicks; 3700 nales; 8 men 12 days £46.0.6d.

1736

Tiling J. Cable, bill: ½ load lime, sand; 2 baskets haire; 2 men 29 October 1736 DRc/Ftv/82 29 October 1736 DRc/Ftv/82 400 plain tiles; 20 Ridge; 2 men 6 days 1 November 1736 DRc/Ftv/82 50 plain tiles; 4 Ridge; 2 men 1 day

1737

Tiling 15 February 1737 DRc/FTv/82 J. Cable, bill: 575 plain tile; 4 pan tile; 8 cover tiles; 6 ridge; 1/2 load lime and sand; 2 men 51/2 days.

25 April 1737 DRc/FTv/82 150 plain tiles; 74 pan tiles; ½ bundel hart lathes; 300 3" nailes; 2 bushell hair; 2 men 5 days

Leadwork estimate December 1739 DRc/FTv/88 B. Joyce, estimate: E. End: several places of Top of Roof of E. End to be dressed over in their places and soldered with several cracks in the old lead: £5; Over N. oil about 20 places as appears by the Timbers of the Inside if soldered £3; if the same is new Cast £30; W. middle oil several places to be soldered £1.5s.; S. side of Steeple new Cast £15; soldering work ordered 31.12.1739

.

1740

Leadwork repairs 5 February 1740 DRc/FTV/89 B. Joyce, plumber: work to 5th March: 303 lbs. solder used; 3 cwt. 18 lbs. cast lead: £16.13.6½d;

1741

Pantiles 29 January 1741 DRc/FTv/89 J. Cable, bill: 31 pan tyles; 5 hodds mortar; 2 men 1 day.

Pantiles 13 October 1741 DRc/FTv/89 J. Cable, bill: 18 pann tiles; 3' Pann tiles; 4 hodds morter; 2 men 1 day 9s 10d

1744

Plumber 24 Aug. - 7 Nov. 1744 DRc/FTv/94 J. Harrison, plumber, bill: £57.9s. 6d, minus old lead £26. 6s. 7d: total £31. 2s 10d. 24 August: ;39 lb. soder, 27 lb. lead: 2 men 2 days 9 November: Mr. Bishop house: 10 l b. soder 2 men ½ day 17 September: 15 soder 2 men 1 day 30 September: 29 lb. lead 7 November: 53 cwt. 2 gr. 12 lb. lead. 2 men 16 days. 40 lb. soder.

Drainage 6 August 1744 DRc/FTv/94 Mr. Chubb, bill: work to Drene and Macken of a Trunk and Spout and Centers for Bricklayers. 3' whole deale; 17' slit; 1 man ½ day.

Rainwater pipes 23 November 1745 DRc/FTv/94 A. Scudamore, bill:...; painten ye Spoutes.

Leadwork 9 March 1744 DRc/FTv/95 J. Harrison, plumber: 6 lb. soder 1 day 1 man.

Gutters 6 Nov. - 8 Dec. 1744 DRc/FTv/94 J. Chubb, carpenter, bill: work done to layen of New Gutters and Maken of Spouts to Carrey water from the Church: 40' Elm board; 10' leaves deal; 600 10" nailes; 6 men 2 days. Maken of a Long Gutter: 12' whole deale; 5 10' battens; 12' 5" oke quarter for Joyste; 2 10' whole deale; 3 10' leaves deal; 14' 1½" plank for the Ceston 2-3 men 114 days.

Leadwork 25 February 1745 DRc/FTv/96 G. Harrison, bill: 300 cwt. lead; 44 lb. sodder. 2 men 2 days £8.3s.7d

20 June 1745 DRc/FTv/95 Leadwork J. Harrison, plumber, bill: 25 lb. soder, 1 man 1 day. 9 September 1745 Drc/FTv/95 J. Harrison, bill: new lead 1 cwt. 1 gr. 1 men ½ day.

1746 10 January 1746 DRc/FTv/96 Carpentry J. Chubb, carpenter, bill: work done over the leads over the Spirittall Court: 7' double deales 2 men $\frac{1}{2}$ day; in the Bellfree 1 man 1 day

Lead repairs 15 March 1747 DRc/FTv/99 G. Rowland and A. Scudamore, bill: 3 qr. 12 lb. lead; 3 qr. 21 lb. sodor; 3 bushells coals; 2 men 8 days; minus lead returned £6.14.23d

1747

Leadwork repairs 24 January 1748 DRc/Ftv/98 G. Rowland, bill: 1 cwt. 5 lb. sodder; 5 bushell coal; 5 days 3 men. 21 lb. sheet led 2 me $\frac{1}{2}$ day.

1749

Lead and solder repairs 24 January 1749 DRc/FTv/100 G. Rowland, bill: 109 lb. sodder; 5 bushell coales; 21 lb. new lead. 2 men 10 days.

Leadwork repairs, gutters 27 September 1749 DRc/FTv/100 G. Rowland, bill: clearing ye pipes and mending the leads: 2 qr. 4 lb. soader; 2 men 18 days.

1750

Leadwork 4 September 1750 DRc/FTv/99 G. Rowland & J. Hallam, bill: taking off old lead; to a cart to carry old lead; bring new, hoisting, laying, cleaning gutters, waying of old lead, soldering. 3 men 10 days. New lead 29 cwt. 23 lb. Old lead 26 cwt. 2 gr. 21 lb. Wasten 3 gr. 20 lb. £17.18.6d.

Gutters 3 September 1750 DRc/FTv/99 J. Chubb, bill: helping bricklayers fix their tackle and Sarl; laying the Gutters and helping Plumbers; 30 12' deals for Platforms of the Gutters; 18' 4" oke Joist; 28 lb. old nails; 160' 5" Joist. 3 men 5 days.

1 7 5 1

SOUTH SIDE coping 8 August 1751 DRc/FTv/105 I. Dent, mason, bill: work on the South side: 11'4" Cubicall Portland Coping £1.8.4d; 82'8" superficial workmanship £4.2.8d; crampings runing with lead 9s 9d.

Plumbers 6 April 1752 DRc/FTv/104 G. Rowland & J. Hallam: New lead pipes 1 qr. 16 1b 4 1b. solder; iron staple; 6 hocks; 2 men 1 day. 5 May 1752 DRc/FTv/104 G. Rowland & J. Hallam: sheet lead 20 lb. 6 lb. solder. 2 men 2 days 1753 1753 DRc/FTv/107 G. Rowland, bill: 227 cwt. 2 gr. 22 lb. new cast lead laid on roofe including labour £216.5s.10d; 40 lb. sodder £1.10d; 36 wall hooks; 2 men 3 days soddering cracks on N. flat and Long roof 15s. 4 bushell coals 4s; less old lead: 192 cwt. 3 gr. 15 lb. £135.0.10¹/₃d; £83.19.11d. 1754 ROOFS gutters 7 March 1754 DRc/FTv/109 J. Harrison: for work done to macking off a gutter in order to carry the water from the Cathedral wich has being a nusance to the Decines house: 68' Oke plank; 21 lb pitch; 2 quarts tarr; clairing the gutters and the rubbish from the top of the Church; 2 men £1.11.7d. SURVEY Charles Sloane 5 December 1754 DRc/FTv/110 Report of several needfull Repairs to be don at the Cathedral Church. About 16 cracks or Rents in the Lead at Sundry places sundry of which have been soddered several times therefore it may be expedient to use some other Methods to prevent the use of sodder £4.10s. To take up Cast and relay about 100 sq.ft. of lead and repair defects of the boarding on the S.E. part of the Cross £3. To take up Cast and relay about 40' in the Gutter near the old Tower £1.

To adjust or relay 180' in 2 other places £4.

A gutter 30' long (being confined) in several places is crakt, and several others is soddered, and without dripps therefore should be relaid £2.15s.

The 2 gutters at the W. part of the Church being 120' long each, is in a bad condition, want to be new laid, as also the pipes which brings the water down from them is bad. £25. Carpentry (uncertain) £6....

Observations:

1. The heavy rafters in several places seems to push very hard on the walls, as appears by several rents in the vaulting; it seems to be necessary to tye the Roof in over the vaulting, with some Timber works; to resist that great push, and prevent the bad consequence that may attend the same. G. Rowland, plumber, bill: 2 cwt. 2 qr. cast lead; 1 cwt. 14 lb. sodder; 800 nails; 6 bushell charcole; old lead 1 cwt. 2 qr.£11.4.6d

Gutters N. side 19 October 1756 DRC/FTv/114 I. Dent, mason, bill: 7' Purbeck spout stone under the water trunk on N. side of Cathedral; 5'5" Purbeck Channell at 14d ft.

1 7 5 7

N. SIDE ?parapets 23 January 1757 DRc/FTv/112 J. Harrison, carpenter, to fixing up and tacken down the Cradell in order to take down the lose stones on the N. side of Cathedral etc. 2 men $1\frac{1}{2}$ days.

Leadwork 1757 DRc/FTv/112 G. Rowland, plumber, bill: 72 cwt. 1. qr. 10 lb. new lead to the Church; 2 qr. sodder; old lead 63 cwt. 3 qr. 25 lb. 2 men 21 days

Carpentry and guttering 1 September 1757 DRc/FTv/112 J. Harrison, carpenter, bill: tacken up the gutters and platforms and new laying them againe up on the Roof: 211' oak joist; 88' fir; 60 12' whole deales; 17 10' and 10 14' ditto; 12' 1½" battens; 3 10' feathered battens; spoiling board 1 20' baulk; 5 men 24 days.

£18.5.10d.

ROOFS 10 September 1757 DRc/FTv/112 J. Cable, bricklayer, bill: making good to the Leads of the College: 10 bushell lime, 8 sand, 3 hair; 2 men 4 days

1758

Soldering repairs 19 April 1758 DRc/FTv/114 Griffith Rowland, bill: 1 cwt. 4 lb. sodder used on Differ't Parts of the Church; 6 cwt. New Lead on the Long Roof and the Back Side of the Tower; soddering the Pipes; 9 bushell charcole; 12 walhooke; 2 loads old lead; 2 men 6 days £10.9s.0d.

1759

Leadwork 28 March 1759 DRc/FTv/117 O. Meredith, plumber, bill: 1 qr. 41b. new led 5s 2d; 6 walhooks to the leds 1s; 1 man ½ day 1s 5d.

ROOFS GENERALLY (continued)

Fillets 23 May 1761 DRc/FTv/118 C. Hogsflesh, bill: laying of Fillitts: 6 hods lime/hair; 2 men 1 day 6s. 6d. 1761 DRc/Ftb/92 Payment to J. Harrison, carpenter, for repairs upon the roof in 1760 £32.15s) 1762 Fillets 13 April 1762 DRc/FTv/118 C. Hogsflesh, bill; Laying of Filletts Round the Church: 15 hods lime/hair 25 bricks: 18s 7kd

Fillets 20 August-3 November 1762 DRc/FTv/119 C. Hogsflesh, bricklayer, bill: laying the fillets, 6 hods lime and hair 2 men 1½ day..

1763

E. roof leadwork 19 July -6 August 1763 DRc/FTv/120 J. Pluckwell: plumbing worke done on E. Rufe, taking up 58 sheat of Lead and Making good. 18 cwt.2 qr.5 lb. sheat lead 62 dog Nales; 1 cwt. 3 qr. 27 lb. sheat lead for a cap sheat; old lead deducted 7 cwt. 2 qr. 2 men. £19.5s.5d.

S.W. leadwork J. Pluckwell: done on S.W. Leads: 27 lb. sordor; 3 bushell charcoles; 2 men 2 days. 15 October 1763 DRc/FTv/120 27 lb. sordor; 3 bushell £1.16s.3d.

W. flat J. Pluckwell, bill: 1 cwt. 3 qr. 2 lb. sheat lead; 21 lb. sodor; 2 men 1 day.

1767

Leading to Bells 23 November 1767 DRc/Ftv/126 J. Harrison, carpenter: makeing new water Spout and repairing an old one on roof leading to Bells. 16s

1768

C. Hogsflesh: laying of Fillitts on ye Outside: 4 hods lime/morter; 2 men 1 day

1769

Leadwork 28 February 1769 DRc/FTv/125 J. Pluckwell: N. rufe: 12 cwt.lqr.14 lb. sheat lead; 29 lb. sorder; 3 men 10 days. S. Rufe: 3 cwt. 2 qr. 1 lb. sheet lead 18 lb. soder; 3 men 3 days For Cappin the E. rufe: 2 cwt.3 qr. 3 lb. sheat lead; 24 lb. sorder. 3 men 1½ days.

S. flat leadwork J. Pluckwell: plumbing on S. Flat: 2 qr. 26 lb. sheet lead; 12 sorder. 2 men l day ?Nave 2 December 1769 DRc/FTv/127 J. Pluckwell: top West rufe 24' new leaded;

Nave S. Aisle 18 December 1770 Drc/FTv/128 J. Pluckwell: Long S. Rufe 64' leaded.

1 7 7 1Roof drainage16 July 1771 DRc/FTv/129J. Harrison, capenter: making large Spout on S. Side and fixing

Roof drainage 2 November 1771 DRc/Ftv/128 J. Pluckwell: plumbing on S. Flat: 25' ranewater pipe; 4" Bore; 2 men 1 day 1 cwt. 21 lb. sheet lead for Scurtin

1772

E. roof estimate 13 July 1772 DRc/Ftv/129 C. Pluckwell: plumbers work Done on N. side of E. rufe over the Communum,: 26 cwt. 2qr. 14 lb. sheet lead 28 lb. sorder 3 men 27 days; rec'd old lead 20 cwt. 3 qr. 8 lb. Paid 30.11.72 £23.11.9d.

RWP ?E. End S. Side16 July 1772 DRc/FTv/129J. Harrison, capenter: making large Spout on S. Side and fixingE. End N.side18 July 1772 DRc/FTv/129J. Harrison: new nailing old lathes on N. side of E. roof4s 6d.Firing straight the Rafters; making good the Lathe: 64' firs 10'whole Deal; 5 men 2 days

E. End J. Pluckwell: 10 August: 1 qr. 17 lb. Lead Cramps for masons; 2 qr. 27 lb. for Gutter over E. window 14 August: Plumbing work done to S. side of E. roofe Butting to the Spire: 24 lb sorder: 6 days 3 men 22 August: plumbing work done S. side E. roof over Alter Pece: 10 lb. sorder 3 men 1 day

Repair E. side E. End 24 August 1772 DRc/FTv/129 J. Pluckwell: plumbers worke done N. Rufe over N. door on E. side of ditto. estimate: 26 cwt. 1 qr. 13 lb. sheet lead; 24 lb. sorder; rec'd old lead 18 cwt. 1 qr. 3 men 15 days; paid 30.11.72 £19.9.7d.

Drainage E. End 2-13 October 1772 DRc/FTv/129 J. Harrison: making new spout; repairing 2 other on Roof; a Spout at E. end of Cathedral. Belfry stairs 10 October 1772 DRc/FTv/129 J. Pluckwell: sordering sum Drips over Bellfree and Flat over Tresury: 2 qrs. 4 lb. sheet lead 27 lb. sorder 2 men 3 days; Lyning the Spout on Bellfree stares: 3 gr. 20 lb. sheet lead. Part paid £34.5.2d. for years work of £98.10.6d. on 30.11.77

1773

S.E. 12 June 1773 DRc/FTv/130 J. Pluckwell: 3 qr. sheet lead to make good. 1 cwt.1 qr. sheet lead for ?; sordering drips on same rufe ; 1 qr. sheet lead. West Aisle 1 July 1773 DRc/FTv/130 J. Pluckwell: Repearing Leads over W. Oile: 87 lb. sorder; 2 quarter sheet lead; 2 men 2 days Parapet walls 3 July 1773 DRc/FTv/130 S. Nicholson:... pointing edge of leads against the inside of all parapet walls; 8½ days 2 men Belfry stairs 5 July 1773 DRc/FTv/130 J. Pluckwell: plumbing on top of Bellfree stairs: 12 lbs. sorder; 1 qr. 27 lb. sheet lead: 3 men 1 day

1775

16 October 1775 DRc/FTv/133 J. Pluckwell: flat over the Eareley Prayers: 2 cwt. 2 gr. sheet lead: 2 men 1 day;

1 7 8 1

RWP26 January 1781DRc/FTv/139(I)E. Harrison: work making and fixing Sqr. Oak Trunks to convey the
water from the Roofs; 613'6" sup. 1 1/8th Oak Board.£18.4s.7½d

N.W. roof

1 7 8 2

7 June 1782 DRc/FTv/140 J. Pluckwell: plumbing work done on N.W. Rooff by Order of the Surveyor: 400 Clouts; 199 lb solder; 3 qr. mill lead for flashing; 200 nails; 9 bushell coles; 2 men 16 days. £17.5s.0d.

1788

Leadwork repairs 24 July 1788 DRc/FTv/153 T. Noble: 8 cwt. 3 qr. 14 lb. sheet lead for flat at E. End. sheet lead repairs N. and S. side roofs; taking up lead at E. End; recasting 22 cwt. old lead 12 cwt. new sheet lead E. End. 6 days laying;

SURVEY N. Cross Aisle Alexander survey 1799 DRc/Emf/38 This roof is sharp pitch and leaded. Lead in need of continual repair, better to take it off and slate; recasting gutters and laying with new lead round three sides next the parapet. New stacks of leaden rain pipes from gutters to ground instead of decayed wooden ones. Timbers appear generally sound except a broken purlin and some decayed Rafters' feet require repair. These sharp Roofs of this fabric have been originally rather unskillfully built and

materials and workmanship far from perfect; it is as much as they have been able to do to support the lead so long with so few settlements. The Rafters being very crooked in parts would require furring but with new timber to bring to right build surface to receive slating. All woodwork of gutters in decay and must be new. N. gutter very defective indeed. The lead here will complete in point of expense the repairing the timbers, laying the Slate and new guttering. Stonework of N. Gable of this Roof is in very rough state but sound; has considerably decayed on its outer surface but will last many years.

Parapets and Battlements: gutters in very dangerous state, should be immediately taken down if they are not immediately rebuilt to prevent accidents below. Parapet on west side been rebuilt formerly with bad bricks intermixed with the stone. These are decayed but perhaps might last some years, when must be rebuilt. Low stone parapet and copings on E. side of roof as dangerous as N, and must be rebuilt.

Williams for slating a part of Cathedral

1801 DRc/FTb/132 £61.13s;

New slate roofS Thos. Williams, slater's work Side Aisle of Cathedral: 22 squares 20' Welch rag Slating on battens, copper nails, pointing done by bricklayer. Contract Bill No. 5 £64.12s.9d.

Not in contract: slating done to S.side Isle: 20 sq. 55' on battens Welch Rag slating. £61.13.0d.

Leadwork 23 May 1801 DRc/Ftv/157 J. Francis: work done under Mr. Alexander surveyor: 6 lb. white lead for temporary gutter; taking down lead pipes for cutting away the Projections S. Centre Aisle; taking up lead on S. side Aisle for examining roof, relaying where taken up on account of Rain; taking up lead flat S. Aisle, cutting up and lowering into Church and conveying same to Sir William's Chappell for safety.

ROOFS GENERALLY (continued)

1 8 6 0

26 November 1894 DRc/Ac/17 Attention of Chapter drawn to state of pipes and tiles - matter referred to Messrs. Foord for report and estimate.

12 December 1894 DRc/Ac/17 Messrs. Foord's report received. Estimate £31 - ordered to be done.

Twentieth century

Parapets, pinnacles, etc. 17 December 1909 DRc/Ac/23 Cobb reported defects to gratings, parapets, pinnacles. Agreed Hodgson Fowler to inspect next visit.

SURVEY Forsyth 14 April 1950 Godfrey archives Report prepared for the Pilgrim Trust by E.C. Butler of W.A. Forsyth & Partners

Rain water pipes

Another matter requiring urgent attention is the cracked and broken iron rain water pipes. These allow water to saturate the fabric and will soon cause considerable damage to stonework and internal plaster and timber. It is of the utmost importance, therefore, that this source of trouble should be remedied at the earliest possible moment. Unfortunately it is not practicable to repair these old rectangular pipes at a reasonable cost; they should therefore be removed completely and replaced with new ones in cast lead. These will not require painting or other works of maintenance. Scaffolding is necessary for these replacements owing to heights and weights to be dealt with and therefore such work will prove costly. A schedule then lists defective pipes requiring immediate attention. £679.15.0d

Lead gutters

All necessary repairs should be carried out to lead gutters and flashings. Water penetrates on the N. side of the Nave and in the S. Nave Transept due to faulty flashings. Gutters and flashings should be overhauled and all defects remedied. Approx. £250

Roof coverings Godfrey survey 4 April 1952 DRc/GA You are fortunate in the amount of new roof covering which exists. The lead of the Nave and Lady Chapel was recast and relaid in 1929 and the copper covering the Nave aisles is recent also. There is some deterioration in leadwork elsewhere and in the slating of other roofs, which I have noted here.

Gutters Godfrey survey 4 April 1952 DRc/GA The gutters are kept in a well cleaned condition, an essential precaution. I noticed there were no duckboards. These are usually laid in gutters to prevent leaks in time of snow. There is no need if this trouble does not exist here; but any appreciable traffic on the unprotected material would lead to depreciation.

Slating

Godfrey survey 4 April 1952 DRc/GA There is a bad patch of slipped slating at the East end of the Presbytery roof on the S. slope. This must be put right at once and I understand the builder has it in hand. Generally the replacement of sliped slates should be carried out as a matter of routine. Only if it becomes evident that most of the nails have perished or if the proportion of slates held back in position with clips becomes large, should it be necessary to undertake the reslating of a whole roof There are in addition quite a number of slates suffering slope. from surface spalling. Other places in which routine attention of this kind is needed are

1. N.E. Transept W. slope, a few slips 2. S.E. Transept W. slope near valley - large slate slipped 3. N.W. Transept E. slope, a few slips

Ridge stones Godfrey survey 4 April 1952 DRc/GA On the roof of the Treasury over the E. aisle of the N.E. Transept there is one ridge stone split in half with the one part fallen into the gutter on the N. side and another cracked and ready to do the same on the S. The cross at the apex is nearly all broken away. There are possibly two more ridge stones which are similarly defetive. (B) The lower parts should be removed now, but the ridge needs stripping and renewing soon, using as many of the old stones as are found to be intact. The renewal of the cross is, according to your last report, the subject of a claim to the War Damage Commission (C)

Access doors to the roofs Godfrey survey 4 April 1952 DRc/GA Most of these need some sort of overhaul, but repairs should be undertaken to the door to the S. side of the Choir roof, W. end, and particularly to the main door into the N. side of the Choir roof at its junction with the N.E. Transept roof. The lead is coming away at the plate, the close nailing is coming out and it is failing generally. The frame of the window needs remaking as it is letting in damp, and rot is setting in. It is not dry rot, but the conditions are risky.

Rainwater pipes and stack pipes Godfrey survey 4 April 1952 DRc/GA The present policy of replacing defective cast iron rainwater pipes with lead is I consider an excellent one. Except for the damage of theft, which must be faced nowadays, there are no drawbacks, and the result will be less maintenance cost in the future and less damage to the structure from unsuspected leaks. The serviceable sections of the piping which are taken down should however be retained for use in repairing other pipes which have still some life. A case where an old length should be reused for this purose is on the

(A)

downpipe at the W. side of the N.W. Transept of which the top setion is split. This should be done at once.

ROOFS generally Godfrey report 12 Oct.1978 DRc/GA Structurally they appear sound. I have already mentioned need to watch Nave and Lady Chapel roofs and further investigation of Choir S.Aisle roof (it has a very interesting 14th century soffite in which I take the wooden bosses to be original and the plaster ones later replacements). There is a slight infestation of furniture beetle in all roofs east of Tower, precautionary treatment could be given with advantage.

Godfrey report 12 Oct.1978 DRc/GA Externally you are fortunate in having new lead on Nave and new copper on Nave Aisles (though copper lately, but not yet at Rochester, has given us cause for concern as a flat roofing material, where run-offs from other materials or of acid laden water exist).

Godfrey report 12 Oct.1978 DRc/GA Large slates of eastern arm are assisted by shallow slope, but nonetheless have to be watched regularly for slips. Steep roofs of greater Transept will at some point have to be reslated. Provided at least two inspections a year there is no reason why this should be looked on as an emergency. Gutters and lead flats of eastern arm cause concern. Usually one gives each sheet of lead a chance by repairing its defects once or twice, but if it persistently splits needs renewal. Suggest programme of gradual replacement. Main point about roofs of eastern arm, is that they are too shallow and do not stand up with their gables to show that the Cathedral is a major church. In 1874 they were looking for £2,000 to reconstruct them; in 1963 I was looking for £20,000, and in 1974 £70,000. Now this might have to be doubled.

Godfrey report 12 Oct.1978 DRc/GA Connected with this is the cracking of the high vaults of the eastern arm where they have not the support of a side wall. We have to devise a system by which we can restrain these delicate structures.

Gable finials 5 July 1979 DRc/DE/209/X(a) Clerk to Godfrey: cost of inspecting gable finials accepted by Friends £4500

SERVICES

Seventeenth Century Heating July 1682 DRc/FTb/19 Pd. for 20 sacks of charcoal (an annual item of expense) occasionally supplemented with logs

Heating 23 May 1683 DRc/FTb/19 Pd. 20 sacks of coal (annual expense for many years)

Lighting l January 1690 DRc/FTb/17 To Jos. Baker for an Open Globe Lanthorne to hang at the Quire doore 5s

Eighteenth century

Lighting 11 December 1705 DRc/FTb/39 Pd. Mr. Creswell brazier for six brass sconces for the Body of the Church £1.1s Heating 2 August 1708 DRc/FTv/41 Paid Sarah Long for all billets and ..? faggets delivered this year for use of Dean and Chapter £8. 6s Chapter house fireplace 30 June 1730 DRc/Ftb/65 For sweeping Chapter House chimney 2s 6d. Chauldrons of coal delivered. Lamp repair 16 November 1731 DRc/FTv/76 J. Shepherd, bill: ... 1 Crowne square in the lamp; Lighting 7 February 1732 DRc/Ftv/76 J. Shepherd, bill: ... 1 square for Lampes.. 2 new lampes; for painting the 3 postes. Lighting 25 November 1732 DRc/FTv/112 T. Harwood, bill: 1 12' Lampe post, made, set up. 8s 6d. Lighting 28 November 1732 DRc/FTv/77 J. Shepard, bill: new glass lamp and mendeing the others; for an oyl lamp. Heating 21 August 1734 DRc/FTv/78 Bill: a chaulder Sunderland coals 85 Lighting 20 November 1735 DRc/FTv/81 T. Harwood, bill: 1 iorn Crane to hang a lamp in 16 November 1743 DRc/Ftv/93 M. Renwick, mason, bill: putting oup Lamps 18 November 1743 DRc/Ftv/93

J. Brown, smith, bill: 7 lamp Irons; 7 hooks for them; hist and liting lamps; screws to 5 candlesticks. 2 December 1743 DRc/Ftv/93 J. Wacklin, bill: painting Iron frames of lamps 7s 20 November 1746 DRc/FTv/96 J.Chubb, carpenter, bill: putten up of the Conces.. 17 November 1747 DRc/FTv/97 R. Dixon, bill: fixing 2 glass globular lamps. £12 20 November 1765 DRc/Ftv/123 J. Pluckwell, plumber: repearing the Tyn work of Lamps and 5 sq. Crown Glass. 27 November 1765 DRc/FTb/97 Globe lamps £1. 1s Receipt: W. Procter: 2 glass lamps fitted up. DRc/FTv/123 3 December 1765 DRc/Ftv/123 J. Harrison, carpenter: work done at lamp posts... 27 November 1769 DRc/FTv/124 Lighting J. Fellowes: 12 Globe lamps Heads and Burners. £3.6s. 28 November 1769 DRc/Ftb/100 Paid for twelve globe lamps £3. 6s Chandelier 1 January 1773 DRc/Ftv/130 J. Pluckwell: 2 half Hundred waights for the Branch. Oil for lamps For many years invoices are recorded for best Greenland whale oil for use in the Cathedral's lamps Nineteenth Century Lighting 27 August 1814 DRc/FTv/169 E. Collinson: 12 11" Globe lamps; mounting 6 do. with Painted heads and Rims. £5. 8s. 10d. Lighting 5 January 1856 DRc/FTv/211 R. Penn: 2 2-light best jointed brass sconces with glass shades; brass pillar do. with square box plinths and glass shades .. Lighting 31 August 1860 DRc/FTV/215 G.H. Penn, 29 High St. Rochester: time, fix'g lines and chains to pillars, hang ?campline, lamps and sconces Heating 27 November 1861 p. 768 DRc/Ac 13 Mr. Woodcock's letter suggesting a mode for warming this Cathedral, having been read, it was ordered that he be informed that the Dean and Chapter are not prepared to undertake the warming of the Cathedral. Heating 26 June 1863 p. 855 DRc/Ac 13 The question of the propriety of warming and lighting the Cathedral

having been brought before the Chapter - it was unanimously resolved that consideration be deferred.

Heating and lighting 7 March 1866 p. 100 DRc/Ac 14 Having considered the question resolved that steps be forthwith taken for carrying such objects into effect.

29 June 1866 p. 111 DRc/Ac 14 Ordered that Mr. Scott be employed to inspect this Cathedral Church and report to the Dean and Chapter thereon, particularly as to the best mode as to carrying out the Works for Warming the building.

29 June 1866 p. 111 DRc/Ac 14 Resolved that the Tender presented to the Dean by Mr. Woodcock on behalf of the London Warming and Ventilating Company for warming the Cathedral for the sum of £350 be accepted and that it be referred to the Dean for carrying the same into effect.

Chapter to Scott 30 June 1866 DRc/Emf/136 ...be obliged if you..would take opportunity inspecting the Cathedral and giving us your opinion... Immediate object is to have the benefit of your judgement upon the position of some stoves which the Chapter desires to introduce under the direction of Mr. Woodcock (London Warming and Ventilation Company) so as to guard against injury to the Fabric, and to carry up the pipes from the stoves in the least unsightly way...

Heating stoves T. Clements: bricks and mortar, 15 days. 18 October 1866 DRc/FTv/220 London Warming and Ventilating Co. received £75. G.H. Penn: repairing 6 Gurney stoves

Water supply 28 November 1870 p.298 DRc/Ac 14 Termination of contract with Troy Town Water Works; plan by C.R. Foord for supply of water and hydrants laid before Chapter; decision adjourned. Amended estimate and modifications sought.

Precinct lighting p. 312 4 January 1871 DRc/Ac/14 Letter from Rochester District Light Co. of 6th December last stating Directors intend reducing price of gas to consumers by meter, and consumers by contract to enable to have an equal advantage 'are willing to cancel the clause in their contract...by which the public lamps left unlighted four nights during each full moon and to light the lamps every night throughout the year at the same price'...accepted.

8 February 1871 p. 315 DRc/Ac 14 New arrangement should be made for supply of Gas to lamps belonging to the Dean and Chapter. Ordered to affix Chapter Seal to contract with Rochester District Gas Light Company.

Water 8 February 1871 p.314 DRc/Ac 14 Ordered contract be signed with Brompton Water Works Co. Lighting p. 362 28 November 1871 DRc/Ac/14 Plan submitted by Mr. Scott for lighting Nave with Gas (with certain modifications) be adopted.

ĸ

Gas supply to Choir 16 December 1875 DRc/Ac/15 Pipes for supplying gas to interior of Choir to be laid down in connexion with the existing gas pipes in N. Aisle and S. Transept, and completed up to point at which pendants may be added in Choir. Mr. Foord supply estimate under supervision of Mr. Irvine, the underground pipes being laid in field drain pipes.

Fire protection 23 Oct. 1890 - 27 Feb. 1891 DRc/Emf/66/5-13 Correspondence regarding inspection by Rochester Fire Brigade of appliances. Report and recommendations. Quotation for works.

GAS LIGHTING Oct. 1890 to Dec.1891 DRc/Emf/66/5-Emf/67/19 Correspondence regarding designs and types of fittings, with sketches and manufacturers specifications etc.

Gas lighting design T.G.Jackson 7 November 1890 DRc/Emf/67/5 I am sorry to seem to disoblige the Dean and Chapter, but I cannot think the brass pendants I designed for so small a Church as St. Peter's in the East would have a good effect in so much larger a building as Rochester Cathedral, and I should not like any design of mine to be associated with a failure. The proper thing would...to design pendants specially...

Gas and water pipes plan of February 1891 DRc/Emf/66/16 Rough plan of gas and water pipes for hydrants and fire hose laid down February 1891. Measured and drawn G.M. Livett

Heating- Stove in N.W. Transept 26 November 1894 DRc/Ac/17 Estimate for moving N.W. stove £3. Accepted.

Gas 24 June 1895 DRc/Ac/17 Chapter agreed to installation of a Stott's patent gas regulator.

Crypt lighting and warming 21 November 1898 DRc/Ac/18 Mr. Friend's lighting and warming proposals to be carried out.

Report: A plan and specification submitted of proposals for lighting and warming the Crypt, Canon Vestry, Minor Canon Vestry, Choir Vestry and Lay Clerks Vestry. Supply of gas proposed to be taken from the main at head of Crypt stairs, from where a main pipe is carried through the Crypt and from this main a branch carried through under each Vestry floor to the window seat, and there attached to Clark's No. 3 patent syphon stove with polished copper column - £3 - intended for warming purposes. A gas light is provided in each Vestry. A wrought iron bracket on the pier in Lay Clerks Vestry, and a short standard over the head of the three other Vestry doors - lighting not only each vestry but the open part of Crypt and one bracket on the pier of the Crypt near foot of Crypt stairs. Crypt 17 June 1899 DRc/Ac/18 Bills paid for concreting floors, lighting and warming the Crypt. £55.10s. Messrs. West.

Twentieth Century

Fire fighting appliances 23 July 1903 DRc/Ac/20 Rochester Fire Brigade reported 'dreadful condition appliances and gear found - considered little use; fireman should be paid to service the gear'. 12 October 1903 DRc/AC/20 Chapter Clerk reported new canvas hose purchased; periodical inspection of equipment arranged fee £4 p.a.

Gas lighting 17 February 1905 DRc/Emf/72/3/2 Jas. Stott & Co. 138 Queen Victoria Street, E.C. Reported found gas burners in bad condition; system very old fashioned and wasteful suggest incandescent lighting. Pendants suspended in Nave - light nearly all dispersed above instead of downwards...enclose designs. Advisable to fit a governor on the rising main.

Gas lighting Hodgson Fowler 16 June 1905 DRc/Emf/72/7 ...agree with Stott's use of gas governor...object to rest of their scheme...would only remove present somewhat objectionable fittings for others equally out of character, and objectionable position...to suspend twelve pendants from centre of Nave arches is an idea might have been entertained thirty years ago, but not now...wrong architecturally and constructionally. Projection of heavy pendants in Choir seriously detrimental to architectural features.

Any scheme should have two principles - effective lighting and design of fittings to interfere as little as possible with architecture of building. Gas fittings should be kept simple and light to be seen as little as possible during day...would it not be well to consider electric lighting before spending large amounts on new gas pipes...assured it would be cheaper to make your own than buy it..by using a 'Crossleys Suction Plant', an engine which produces its own gas to work electric motor.

Gas lighting 27 July 1905 DRc/Ac/21 Report dated 15 June from Hodgson Fower received. Ordered he prepare specification obtain estimate and work be done after his advice. Additional lights be placed in Crypt and its passage.

Gas lighting Hodgson Fowler 5 August 1905 DRc/Emf/72/12 ...did not measure as thought the work was to be done by Stotts, whose drawings you sent me (and which I returned), and that my suggestions would be carried out by them. I can make a drawing of the pendant I propose for the Nave enough for them to estimate from.

Gas lighting Drawings DRc/Emf/72/51/2-3 Pencil sketches of Nave and Choir light fittings.

Gas lighting Hodgson Fowler 16 October 1905 DRc/Emf/72/16 Enclose spec. for alteration of gas in Cathedral, together with FS drawings of one of proposed pendants. Suggest one chandelier in Choir and one of the pendants over Choir seats at E. end of Nave altered according to spec. before anything else is done so that they may see effect before order the whole.

.

Gas lighting Hodgson Fowler to Chapter 23 October 1905 DRc/Ac/21 Specification and FS drawing of proposed pendant accepted, but requested preparation design new standard for gas burners in Transepts and Lady Chapel and estimate. Ordered gas burner at once be fixed separately at head of steps leading to Crypt on left side.

Gas fitting 31 October 1905 DRc/FTv/236 R.I. Oram: cutting up floor for gas pipe, making good. Fitting gas pipe etc. cutting away concrete under step for pipe...

Gas lighting 20 November 1905 DRc/Ac/21 Organist reported light from gas for Choir at times inadequate, choirmen constantly complaining impossibility singing off the small print...

Gas lighting 22 January 1906 DRc/Ac/22 Experiment by Stotts at Hodgson Fowler instigation. 4 inverted lights on one pendant on 1 side Choir, 4 upright lights on pendant on other side, 1 in Nave to H.F. design. Transepts to be lighted by side brackets at each corner of junction with Nave 4 incandescent lights each.

Gas lighting 5 February 1906 DRc/Ac/22 Stotts gas already supplied to Pulpit; small matter to fix incandescent burner. Agreed Stotts be paid and not further employed. E.F. Cobb to take up lighting experiments with Mr. Parks, get satisfactory estimate and complete.

Gas lighting 26 March 1906 DRc/Ac/22 Special Chapter: tenders scrutinised of work to Hodgson Fowler specification and plans. Lights in Lady Chapel omitted. Work commence forthwith.

Gas lighting E.F. Cobb 10 February 1906 DRc/Emf/72/35 Agree much better if work superintended by Mr. Cobb and nothing a local firm could not do as well as Stotts...Stotts making new fittings for trial in Nave and then handing spec. and drawings to Mr. Cobb.

Gas lighting General correspondence 1905-06 DRc/Emf/72/6/1,Emf/72/26,27,33,38,44,48,50

Gas lighting 30 June 1906 DRc/FTv/236 J. Collis: to incandescent light insallation £73. Extra for cup and ball joints in pendants over nave stalls. E.F.Cobb: to preparation drawings, spec., superintendence alteration gas lighting £8.8s. C. Hodgson Fowler: preparation drawings, spec., visits alterations gas fittings £6.

Gas lighting 24 September 1906 DRc/FTV/240 Completion installation incandescent light in Cathedral. Total £108 Gaslight to Crypt 22 February 1910 DRc/FTv/240 W.Benrose: laying on gas, making, fixing iron gas bracket Heating 4 October 1912 DRc/Ac/24 Rochester Gas Co. had fixed in Oct.1910 2 eight tube iron radiators on loan; Chapter agreed to purchase. £15.15s. Lighting 21 December 1912 DRc/Ac/24 Agreed Kent Electricity Power Co. prepare estimate for lighting Cathedral, in four sections: Sanctuary, Choir, Nave, Crypt. Heating 25 November 1914 DRc/Ac/25 Estimates for hot water pipes instead gas radiators requested. Heating 21 June 1915 DRc/Ac/25 Decision postponed due to desirability employing every man available on Government work. Heating/Lighting 29 January 1921 DRc/Ac/26 Cobb submitted designs for new gas fittings in Nave. Approved by Lethaby who had intimated that hoped nothing would defer installation electric light throughout Cathedral. New design be substituted for those above Stalls. Nave south aisle 19 March 1923 DRc/Ac/27 Cobb reported iron smoke pipes from stove worn out needed renewal including portion wall. Recommended removal stove few feet eastwards, building brick flue finishing with small chimney stack behind parapet gutter; agreed by Lethaby. Second hand one purchased. Choir stove 19 March 1923 DRc/Ac/27 Cobb suggested removal stove in S. Transept into N. Transept and removal entirely gas radiators. Electric lighting Cobb 19 June 1924 CCC Electric light installed in Chapter Room and its approaches, Slype under, Crypt Vestries, lamp ouside S. door, King's School Vestry, ringing chamnber in Tower, and approach to it through roof over Presbytery and staircase leading to roof of N. Choir Aisle. Preparations made for supply from main to enter through Gundulph's Tower instead of through Crypt, enabling future lighting of whole building to be controlled from one convenient accessible point. Preparations for lighting N. Transept. Heating Cobb 19 June 1924 CCC Brick chimney built for stove in S. Aisle. Choir stove removed from S. to N. Transept and fitted with straight iron flue pipe upon a brick base. N. Aisle stove practically worn out, should be replaced.

Heating 27 October 1925 DRc/Ac/27 Use of anthracite cobbles considered; Cobb to ascertain whether suitable for Gurney stoves. 28 September 1928 DRc/Ac/28 Heating Forsyth to investigatee automatic heating of Cathedral by means of petrol. 11 April 1929 DRc/Ac/28 Heating Forsyth's proposals for low pressure hot water heating considered. Lighting 11 April 1929 DRc/Ac/28 Forsyth's proposals for local lighting by electricity favoured. Lighting 23 June 1931 DRc/Ac/28 Tender be obtained for wiring whole Cathedral. Central heating advice June 1931 DRc/FTv/246 Dolby & Williamson: for professional services advising installation hot water heating installation £32. J. Brooker: repairing stoves, etc. October 1931 DRc/FTv/247 Heating 20 October 1932 DRc/Ac/28 Ordered 20 tons coke for next 12 months. 34s.2d. per ton. 29 April 1939 DRc/FTv/249 Sound amplification N.W. McLachlan: installation, design, etc. £36.12s. 23 June 1939 DRc/Ac/30 To proceed with contractors and installation 1 July 1939 DRc/FTv/249 Pamphonic Reproductions Ltd. installation loudspeakers £265 29 December 1944 DRc/Ac/30 Central heating Preliminary scheme for hot water radiators prepared by Forsyth & J.Jeffreys & Co. 18 December 1946 DRc/Ac/31 Electricity St.J.Baptist Chapel Authorised installation electric light Electricity in Crypt 29 April 1946 DRc/Ac/31 Electricity wires in Crypt be removed; switch board be retained. Electricity in N. Transept 29 April 1948 DRc/Ac/31 Question of installation while scaffolding up (during war damage repairs) Drains Forsyth 14 April 1950 DRc/DE/209 All rain water and other drains should be tested for leaks and repaired if faulty Approx. £100 Heating 24 February 1950 DRc/Ac/31 Agreed with Mr. Butler that 3 existing Gurney stoves be replaced.

Lighting 24 February 1950 DRc/Ac/31 Decided electric lighting be installed in Choir if funds available. 24 March 1950 DRc/Ac/31 Heating Cost of purchase 3 Gurney stoves £742. Agreed buy two: One for N. Choir Transept, one N. side Nave, and request whether a third could be made from three existing stoves for S. side Nave. Electricity 6 July 1951 DRc/Ac/31 Estimate re-wiring whole Cathedral from S.E.E.B. £4566; only £1000 available could not proceed. Architect to cost renewal defective and temporary wiring and plugs. Mr. Butler to meet S.E.E.B. and obtain estimate for 8 points in Choir with 4 pendant fittings; first aid repairs £25 agreed. Lighting Crypt 11 January 1954 DRc/DE/209/IB(f) Richards & Bright: estimates, plans, etc. correspondence. Light fittings 8 May 1954 DRc/DE/209/IB(ij) Troughton & Young Lighting Ltd. Light fittings and plan, sketches. 13 December 1954 DRc/DE/209/IB(da) Lighting Nave Godfrey notes: attended Chapter; presented bracket drawings; generally approved. To proceed with working out proposal showing more contrast.. Dean to Godfrey 24 January 1955 DRc/DE/209/IB(a) Heating ?smoke stack - is this which carries fumes from stove in N. Quire transept; if so, fumes still bad, stove cannot be used in certain weather; discussion to convert to oil; use of 3 stoves all week round great difference to general warmth. Electric lighting scheme 24 November 1955 DRc/Ac/31 Tender accepted and scheme as put forward including lighting triforium in Nave and its transepts. Heating conversion 24 March 1955 DRc/Ac/31 Architect be asked advise converting Gurney stoves to oil firing, one first as experiment. Electricity 21 January 1957 DRc/Ac/31 Infra red heating in Crypt chapel satisfactory Agreed standard sockets throughout Cathedral be used Electric fittings design for Choir approved. Lighting 7 October 1957 DRc/Ac/31 Electric lighting installed Lighting installations 21 March 1958 DRc/DE/209/Ia(m) Report and correspondence consulting engineers Richards & Bright. Heating 2 April 1958 DRc/DE/209/Ia(m) Report and correspondence on conversion Gurney stoves; drawings. Richards & Bright consulting engineers.

Switchboard shutter 13 April 1958 DRc/DE/209/I(a)k Supplying 1 Messrs. Haskins No. 0 section 24 gauge miniature aluminium alloy interlocking steel rolling shutter, push up operation etc. Making wooden frame for do. selected oak, fitting roller into frame, cutting through walling, fixing switchboard in A.G. Webb & Sons. £63.5s.9d. stonework, etc. Heating 15 December 1958 DRc/Ac/31 Discussed hot air; ducts in Choir considered and curtain to separate from Nave. Lavatories 19 January 1959 DRc/Ac/31 Estimates required for accommodation men and women; unless more suitable place found, to be sited present place where shed stood outside Gundulph Tower. 11 February 1959 DRc/Ac/31 A.G. Webb estimate accepted £791, including £97 for retiling roof. If possible 3rd w.c. be installed womens' side. Heating Specification 25 May 1959 DRc/DE/209/I(a)d Chas. P. Kinnell & Co. Ltd. Oil fired Thermobloc air heaters for N. Aisle, S. Aisle, Choir Aisle, N.E. Transept, High Altar, Crypt. Pipes and storage, but excluding builders' work: £7,120. To be painted stone colour. Heating 24 June 1959 DRc/Ac/31 Two schemes considered: hot air circulation Grundy Ltd., and six thermoblock units by C.P. Kinnell & Co. Heating 20 July 1959 DRc/Ac/32 Two schemes considered; received estimate for £328 for humidifier. Meeting arranged with Haydens Ltd. for advice on hot air heating. Sound amplification 20 July 1959 DRc/Ac/32 Tannoy Ltd. had made all necessary modifications to recently installed equipment. Heating August 1959 DRc/DE/209/Ia(e) Arrangement by Wanson Co. for architect to visit thermo block heaters in action in churches on continent. 10 August 1959 DRc/DE/209/IA(d) Heating Tender from Wansons...heating and ventilating 5 thermobloc heating and ventilating units £6887. 1 heater in S.Nave Aisle with fresh air direct passing through wall to external centrifugal fan situated via it below ground outside Cathedral. Heating 11 August 1959 DRc/Ac/32 Wansons scheme approved; order to be placed £10,592. Higher grade of oil for less maintenance and smell recommended by Mr. Godfrey. Lighting 11 August 1959 DRc/Ac/32 Agreed remaining two strip lights be fitted above Presbytery,

existing Pulpit light be adjusted, experimental light fitted in Clerestory opposite.

Heating Godfrey to Clerk 18 August 1959 DRc/DE/209/Ia Dean has written 'I suppose incoming air has to be filtered - would an ordinary filter be effective against the enormous amount of very fine cement dust which fills this part of Rochester by the river'. As air is re-circulated and does not draw from outside does not really arise. It is not air conditioning.

Heating 12 October 1959 DRc/Ac/32 Preparations made for installation 5 thermobloc heaters: 1 in recess between Crypt and Slype with ducts both into Sanctuary and into Crypt; 1 in old King's School Vestry; 1 in S.W. corner of Nave, and 1 in building to be erected on N. side of Nave and 1 in Vergers lobby at W. end N. Choir Transept. Not previously used for Church heating in England.

Heating 15 October 1959 DRc/DE/209/Ia(d) Godfrey to Baldwin: Wansons agree using 9" for S. Aisle heater but want bottom of opening for flue to be 13' high from Cathedral floor.

Heating 21 October 1959 DRc/Ac/32 Work on chimney stacks for new Cathedral heating commenced.

Heating 18 November 1959 DRc/DE/209/IA(d) Kentish Church Builders.new heater installation..as soon as completed rebuilding chimney stack in S. Nave Aisle..are you prepared do all builders work installation thermobloc heaters, oil storage tank, circulating mains

Heating 19 November 1959 DRc/DE/209/Ia(g) Message: S. Aisle heater: Mr. Baldwin under impression you want old flue first 40' rebuilt instead of a new flue beside it? (good idea). Trouble of using flue for two different types of heaters is connection for new boiler is at 12' and old boiler 5': instruction renew flue; have two inlets. Sketches plan section r.w. gulley across roof.

Presbytery heater: Baldwin told you wanted 3" Clipsham stone for flue and not Clipsham quoins and random rubble taken from Cathedral grounds (if rubble would have to be more than 3").

Do you want brick with Clipsham stone facing for bottom 20' of flue, even though going to be a boiler house. Clipsham might be better because of fine random rubble walls (bricks OK).

Mr. Baldwin though might be better to take liners right up flue and not just 6' as would have to have a weak mortar anyway. (I did suggest liner with fossilised aggregate).

Mr. Webb is going to take up grating as there might be a soakaway underneath (sketch) proposed flue.

S. Aisle heater 7 December 1959 DRc/DE/209/Ia(g) Baldwin rang to say that in digging fan chamber had come across projections from Cathedral wall; chamber would have to be moved out; sketch. 19 December 1959 DRc/DE/209/Ia(g) Could you do sketch how affects existing underpinning and sent to civil engineer; he seems happy can make r.c. box provide we don't cut concrete; will also advise on back fill against turret.(sketch).

Heating 31 December 1959 DRc/DE/209/IA(d) Installation: Wansons altering size of excavation.. regarding foundation of turret, appears to have been underpinned in brickwork similar to wall but brickwork goes down to lower level and no doubt mass of concrete underneath but do not think fan chamber excavation will affect turret in any way.

Heating installation 4 Jan. - 21 Nov. 1960 DRc/DE/209/II(0) Wanson & Co. correspondence, etc.

Heating installation30 January 1960 DRc/DE/209/II(f)Webb & Son: diversion rain water drain and foundation to chimney in
yard S. side Crypt, new flue S.W. Nave£209

Heating installation 10 February 1960 DRc/DE/209/II(d) Structural engineer's drawings S1/2 for S. Aisle and N. Aisle chambers, Presbytery heater, concrete beam in window cill over new grille S3/4

Heating installation 5 Mar.- 26 Nov.1960 DRc/DE/209/(1) Kentish Church Builders: materials, labour, invoices and certificates.

Television 14 March 1960 DRc/Ac/32 Whit Sunday morning service to be televised.

Heating 14 March 1960 DRc/Ac/32 For first year ducts leading from W. End Choir to Crypt be omitted. 25 March 1960 DRc/Ac/32 Agreed that as experiment ducting should be ommitted from under Choir floor to see whether the return air to Presbytery heater through Crypt would find its way back if Crypt door left open.

Heating 23 November 1960 DRc/DE/II(a) Wansons system not proving satisfactory; fans noisy.

Heating 1500 gallons mobilheat £83.

20 November 1961 DRc/Ac/32

1 December 1960 DRc/Ac/31

Heating Installation by Wansons completed.

Heating 21 April 1962 DRc/DE/209/IV(a) Total bill to Kent Church Builders for installation: £5,749

Heating 31 December 1962 DRc/Ac/32 Turned off each night to save money

31 December 1962 DRc/Ac/32 Fire precautions Heaters in Vestries be replaced with infra red. Fire precautions 21 January 1963 DRc/Ac/32 Carbon dioxide extinguishers to be obtained. 21 January 1963 DRc/Ac/32 Heating Result of experiments thermostats set at 53° switched off at nights. Heating 23 March 1964 DRc/Ac/32 6' heating tubes from St. Nicholas' fixed in lay clerks and canons vestries. Obsolete gas pipes removed 11 January 1965 DRc/DE/209/V(m) Invoice G.E. Wallis: N. and S. Aisles. Humidifying 26 August 1968 DRc/Ac/32 Humidifying air from existing heaters to be investigated. Future desirable projects Godfrey survey 21 April 1971 DRc/DE/209 That the electric lighting should receive further attention (from appearance).. . includes two temporary lights hung over the Nave Choir stalls at time of centenary festivities, and temporary shades provided for the Crypt lights on the same occasion. Also that the reflectors should be cleaned and reset to give Clerestory and Triforium lighting the effect it was intended to have. Finally that substitute be found for the present lighting of the S.E. Transept. Heating correspondence March-May 1971 DRc/DE/209/VII(d,e,f) Electricity Godfrey survey 21 April 1971 DRc/DE/209 A test of installation not made; this should be done periodically. At E. end, externally, of N. Nave Aisle roof, the wiring emerges from the Nave Clerestory onto a perforated galvanized tray which is rusting. To prevent reaction between the iron and copper a new tray should be provided. Provide new bronze or other approved tray. Lighting 20 March 1972 DRc/Ac/ Shades to be put on lights in Quire Transepts to Architect's specification Chandeliers 12 November 1973 DRc/DE/209/VIII(Mc) Estimate: size and gild outer edge rims 8 no. in Nave, 2 no. N. Aisle Heating: correspondence re humidifiers 1973 DRc/DE/209/VII(n,p.g) Sound aplification 26 November 1973 DRc/Ac/ £1200 expended on improvement Chandeliers 20 April 1974 DRc/DE/209/IX(1d) Mr. Grantham, blacksmith: fashion rings out of aluminium alloy channel. Mr. Norman making fitting; 2 ordered.

Lighting Godfrey report 12 Oct.1978 DRc/DE/209 Two new chandeliers were made for the Gt. Transepts for Christmas 1975.

Electric lighting Godfrey report 12 Oct.1978 DRc/DE/209 Await Mr. Bright's report on extent of overhaul which may be necessary. He will feel disappointment at falling into disuse of Clerestory and Triforium lighting of our original scheme. Also I reiterate my desire that donors come forward for (a) chandeliers in lesser transept (b) substitution of new for my very temporary chandeliers, which were rushed up in time for 1350th year festival when Cathedral was changing from gas to electricity (c) real gilding of edges of Nave chandelier rings (d) improvement in Crypt, where some very temporary but well placed lighting has managed to serve ever since the 1350th year festival.

Electric lighting 22 February 1979 DRc/DE/209/X(1) Installations overhaul. Richard Bright, Cons. Eng.: impression installation excellent condition possible exception wiring beneath floor of Crypt. Thorn Lighting: report. Other correspondence re disuse of fluorescent lighting.

Safety equipment 20 June 1979 DRc/DE/209/X(o) Installation harnesses and anchor rails in clerestories

Alarm systems: increased areas covered 23 July 1979 DRc/Ac/

Disabled access 27 June 1980 DRc/DE/209/XI(b) Clerk to Godfrey: consider provision ramp

Safety equipment 20 November 1980 DRc/DE/209/XI(d) Correspondence re drilling, bolts, etc.

Disabled access 31 December 1980 DRc/DE/209/XI(b) Architect's proposals for 1981: .. might be through a re-opened Peoples' Door with ramp outside est. £20,700. (Chapter welcomed idea but later abandoned project until a benefactor to meet expense could be found.

Architect's proposals 1981 31 December 1980 DRc/DE/209/XI(b) Conversion to gas heating £1500 Lighting N. & S. Quire Transepts on completion other projects

Safety harness installations 6 July 1981 DRc/DE/209/XII(c) Inspector's recommendations and reply; installations completed, or Health & Safety legislation. Design loads, calculations, correspondence with R.W. Burch, engineer all in DE/209/XII(g)

Heating 26 October 1981 DRc/DE/209/XII(c) Wansons report on conversion to gas.

STEEPLE

History: "The spire was raised in 1343, of wood covered with lead. Height 156 ft. Authorities for its form do not at all agree..it is given a very uncommon shape in the N. prospect by Daniel King ... This seems to be followed by many engravings which, however, bring no additional testimony, for they do not correct great faults in the drawing of the rest of the Cathedral. N.W. view from Harris's History of Kent 1719 makes the spire octagonal, and appears as such in many small sketches. Other engravings, as another view in Harris's own book, show it square, but without the peculiar treatment of the middle of each side and with something simpler and plainer than the pairs of dormer windows in the plate by King. .. the latter's version of the spire may be correct.. (1) its abundant detail, perhaps too abundant, as others do not support his dormer windows, (2) the fact that Browne Willis in his 'Mitred Abbies' refers to this 'draught' when used to illustrate Dugdale's 'Monasticon' in preference to attempting a description himself, and (3) that the tiny view shown on the portrait engraving of Dr. Thorpe that forms the frontispiece to his 'Registrum Roffense' agrees with it well when its smallness of scale is considered.

p.39 Rochester The Cathedral and See: Bell's Cathedral Series, G.H. Palmer, BA; 1897.

HAMO DE HYTHE'S STEEPLE

1 3 4 3

Seventeenth century

Survey of work necessary14 August 1660DRc/Emf/5/2The repairs of the steeple above the Church,..- Masons,Bricklayers, Plaisterers£45Repairing the spire - carpenter£60

21 April 1670 Chapter Minutes Agreed at a Chapter with Mr. Browne about extending of ye life span of ye steeple by taking away of ye old and putting in new for 20 pounds.

16 June 1670 p.7a DRc/2/4 Ordered that Mr. Guy goo with the Verger this afternoon to see the repairs and working about the Cathedrall Chyrch and also of ye steple.

17 June 1670 DRc/2/4/8a Memorandum: Mr. Gregory Fry of the City of Westminster Carpenter, having taken a survey of the Steeple of this Cathedrall today declared that the mending of one mid of a Bressumer att the lower third end of the eastern side of the spire will be sufficient to save this from falling.

Mr. Guy Architect 22 June 1670 DRc/2/4 Mr. Guy appeared in Chapter this day and desires satisfaction for his pains in taking a survey of the Church and steeple. Ordered that Mr. Guy be paid for satisfaction for pains in the survey above mentioned. The repairs of ye steple and to wall ordered to be done forthwith. 9 December 1671 DRc/2/5

Mr. Dean desires to know ... toward ye payment of ye works done about ye steple and to know if aforementioned is unpaid.

29 August 1677 DRc/FTv/6 For mending Colleg Clocke, ye Barr of ye steeple and cock 2s

6 December 1679 DRc/2/3/14a Memorandum that Mr. Guy appeared this day in the Chapter House and give of his account concerning ye steple, viz that he finds aforementioned in a very ruinous condition, ready to sinke down into ye Church and to carry all below it by reason of ye rottenness of ye plates and that ye great Girders are rotted quite through so that a stick may be safely thrust through ye same and yet all ye load is so thinn that there is no mending of it. That it is thought that the spire hath not been snow loaded since it was first set up, and that three corners of ye stone worke of ye tower west of it all are soft and crooked and must be taken down. And that to support that by making good of the stone courses by taking down of ye old spire and the putting upp of new one and sufficiently to cover ye same with lead may amount unto ye some of 1600 le about.

17 January 1680DRc/FTb/16To Henry Fry who survey ye Repayres of the Steeple£1.10.0d

1680 22 November 1682 DRc/FTb/18 Paid J. Gamball and Walter Knele carpenter for their time and expence in goeing up to London anno 1680 when they were sworne about the survey of ye Church £1

29 February 1680 DRc/FTb/17 To Wm. Grimmott, Plumber for lead and workmenshipp done about ye Steeple £10.0.0d

2 December 1680 DRc/FTb/16 For guilding and painting ye vane, spindle and cross and for painting ye doore in ye upper part of ye steeple 14s

TIMBER for repairs 27 August 1681 DRc/FTb/17 Paid Mr. Cant for 60 10' deals and carrying and laying them in the Church £2.13.0d

> 30 August 1681 DRc/FTb/17 7 tons 3 cwts 20 lbs

23 June 1670 DRc/2/4

Lead received for Steeple

1 September 1681 DRc/FTv/12 Work from 10 August to date completed: Mr. Grimmill, plumber: £19.12s. New lead £30.3s.5d; ould lead £12.5s.9d.(paid 22 November 1682)

19 November 1681 DRc/FTb/17 3 tons 0 cwt 10 lbs Old lead returned 2 November 1681 DRc/FTb/17 To Antho. Hardin the Church Carpenter for work and materialls done and used in the Steeple £3.17.0d 2 October 1682 DRc/FTb/18 £10.0s 0d Paid Plumber in part for work on Steeple 28 October 1682 DRc/FTb/18 Paid debts for lead and works done for ye steple £17. 0. 0d 11 December 1699 DRc/FTb/33 To Mr. Slaughter plummer for lead work done about the steeple £15 Eighteenth century 15 February 1703 DRc/FTv/36 Leadwork Thos. Barker, plumber, started work, with 2 men. (Receipted bill when work completed 6 Oct. 1704) 14 March 1703 DRc/FTv/35 J. Gamball's bill for: more about the Stipell and other worke: myself 3½ days; 5 days a workman; 5½ days my labourer: £7. 1s 3d. 26 November 1703 DRc/FTb/37 GREAT STORM Violent storm of wind February 1704 DRc/FTv/230/152 Ironwork S. Lambe repairs: .. 8 cramps for Stepell for to key ye stone worke waying 20 pounds.. Carpentry 17 February 1704 DRc/FTv/37 Henry Turner's bill: 25 10' hole deales; 13 10' slitt deales; 5' elm planck; 10' elm board; 1000 nails for plumbers; 16 days work 2 men; a long ladder; 5 long spars; for ye scaffolds: 26 yew furs; 90 10' hole deales; 25 halfe deales; for takeing down ye Spindle and puttingup ye Vane: £26. 10s 16 June 1704 DRc/FTv/37 Carpentry Henry Turner's carpenters bill: a girder 16' long; 66 pantile laths; 3 days 4 men. 6 July 1704 DRc/Ac/4/12 Bells Ordered likewise that the bells be not rung in peace on any occasion until ye steeple be finished and ye work settled soo that there be noo danger of damage to ye same 5 August 1704 DRc/FTb/38 Vane Paid Woolgate Painter 5s for painting the Vane 6 October 1704 DRc/FTv/36 Leadwork Thos. Barker, plumber, bills: 8 cwt. 1 grt. 22 lb. new lead.

Details of days and man hours of work done from 15 February 1703 to 11 March 1704 Old vane 20 November 1704 DRc/FTb/38 Rec'd. Simon Lambe 7s 8d for old Vane weighing 6 lbs. at 12d per lb., and for old spindle weighing 20 lbs. at ld a lb. 7 December 1705 DRc/FTv/39 Leadwork Plumber Thos. Barker's bill: for new lead for the stepell; 3 days 3 men; 7s 10d; Repair 22 April 1708 DRc/FTv/230/155 J.Gamball: stoping a hole in ye ould stipell, sand, lime ... Smith's bill: Simon Lambe 2 April 1711 DRc/FTv/44 Repairs of door to Stepell: 2 men 4 days 9 April 1711 DRc/FTv/45 J. Gamball, bricklayer, bill, for worke and stouff don at the Stipell and mending of ye other stone walles and other repairs: 4 lodes lime; 6 drift sand; 4 bushell haire, nayles, ?slarses, ropes and tubes £1. 1700 bricks; 150 pantilles; carridge 17 lodes of roubidge; 56 days myself; 60 days workman; 34 days workman; 66 days labourer; 16 paveing tilles yoused in ye passage. £33.19.6d. 2 May 1711 DRc/FTv/44 Smith's bill: 100 flatt headed nayles for ye plummers waying 2 pounds; 7 May 1711 DRc/FTv/44 100 flatt headed nayles waying 4 pound; 18 large Holdfast for Mr. Gamball to use upon the stonework of the Stepell Leadwork 8 May 1711 DRc/FTv/44 4 large iron speeks for Church Ruff for the Carpenters to use when the Plummers are at work Wayin Ironwork 10 May 1711 DRc/FTv/44 Ironwork for steepel Waying 600 att 5 score to the Houndred at 4 pence. Hapenny a pound. Regg bolts for ye iron work waying 8 pounds; 6 large stappels for ye iron work; 8 large hold fasts for stonework of steeple. Ironwork to hold Barrs fast waying 4 pound; 3 pound flatt headed Nayles for plummer; 8 large speeks for ironwork waying 6 pound; 2 large holdfast for iron work; 6 large forelox for same iron work. Brickwork 19 May to 21 July 1711 DRc/Ftv/44 Bill: J. Gamball bricklayer £10. 3s Ironwork 14th June 1711 DRc/FTv/44 150 flatt headed Nayles for plummers; 2 dosing large Holdfast for plummer. 2 dosing and half wallhorks to fasten edges of the lead to

of Walle.

Vane 11 April 1712 DRc/FTv/46 For putting a new ?.... to a Vaine, wt. 12 pound, and rectifiing itt. Received old copper wt. 6 lb.14 £1. 9s 9d. 22 May 1712 DRc/FTb/46 Vane Pd. Mr. Stanley for carrying the Church's vane to London to be mended 2s. Pd. Dick Clarke for taking down and setting up the said Church's vane 15s. 16 June 1712 DRc/FTb/46 Pd. Turner's men for putting up the weather cock. 7 July 1720 DRc/Ac5/15 Resolved that N.W. corner of the steeple be Repaired in its timber and leadwork this summer and with also some stonework on ye S.E. corner of ye said steeple Vane 1727 DRc/FTv/70 J. Proby, bill: ... Painting ye Vayne 5s. 28 October 1727 DRc/FTb/61 Vane Gave the 4 fellows that assisted in putting up the Church vane 2s to drink. 28 October 1727 DRc/Ftv/71 Vane J. Harwood, bill: for taken down ye vane and puten of it up a gain £1.1.0d. 3 November 1727 DRc/Ftb/61 Paid Honess (smith) for work done about the Church and Steeple. 12s 24 May 1747 DRc/FTv/97 Survey J. Chubb, bill: myself 3 day work Helpin of the Survey and Measure the Steple £15. Helping Mr. Sloan Measure the Church... Dudley Ransome 27 November 1747 DRc/FTv/99 Estimate Upon Viewing ye Steeple of ye Cathedral at Rochester..it appeared ye Main Timbers which should support ye Spire were So Much decay'd as to be of Very Little use, and ye N. and S. walls for Want of a proper Security by Timber work and Irons were forced out somewhat considerable from their original Perpendicular - that ye floor on which ye Bells Now hang was greatly over loaded and ye great weight thereof which ought to have laid perpendicular upon Ye walls, lay proping against ye sides of ye Same, and must in time force them out, also ye floor of ye Belfrey was a great deal too weak being Chiefly kept up by two very old beams Much too slender for such a purpose. In order to Strengthen and Sufficiently Support ye Whole affair, ye Plan of a Timber frame is hereto anexed, and ye use of it hereunder explained. A is ye old Belfry floor which, tho' Very Weak may Now, or at any time hereafter be hung up to ye Truss B, as by ye doted lines from A-B. B is a frame of Trus Work which might be fixt in ye walls about 9 feet above ye belfrey floor (ye walls being very Sound there) and continued up into ye old floor where ye Bells hang at C, and

efectualy support that great weight, so that it will no longer prop against ye sides of ye walls, but bear perpendicular upon them. C is a frame of Timber work on which may stand an other frame as D which will entirely support either ye old Spire (for a number of years, so long as it shall be thought proper from time to time to Repair ye Same) or any New one which might now or sixty years hence be set up. The Cross frame F will not be sufficient to support ye Spire E but by having irons at ye end of every piece of Timber to go thro' ye Walls, will so confine them that they can never be forced out from their Perpendicular. the Cross frame G may be placed up ye head of ye Truss at C and by having irons to go thro' ye walls, from ye end of each piece of Timber will will be a further Security to ye walls of ye Steeple an other of ye Cross frames: G may be fixt at ye Bottom of ye Truss B and lye 2 feet in ye walls, but will want No Irons to go thro' ye walls, they being at ye place very Sound - all ye Timbers fill'd with black are supposed to be new, those ye are otherwise are old ye Spire E may be properly strengthened by ye piece of Timber fill's up with black and marked 2.

If this scheme is put into execution, and done with oak timber, according to ye scantlings in ye plan, and ye walls banded on every side with iron, ye stone work mended, ye Gutters new laid, and ye spire supported (but not new leaded) will cost in all £289 - if new leaded and lath'd and ye old lead us'd in ye work, and done at ye same time (takeing ye advantage of ye lower scaffolding and for erecting a New upper one) will cost £150 more; if a new Spire at ye Same time be built of timber and of ye same bigness with ye old one Will cost £125 more besides the weathercock and iron work to it: £564.

Drawings 27 November 1747 DRc/FTv/99 Two drawings, plans and sections of timberwork of spire. Condition good. Undated but attached to D. Ransome's survey and writing is in his hand.

Survey 2 December 1747 DRc/FTv/97 Received £8.8s for surveying ye Spire of ye Cathedral. D. Ransom.

Surveys 4 December 1747 p. 35 DRc/Ac7/21 Whereas two separate surveys have been taken by Mr. Hoare and Mr. Ransome of the Steeple and Spire of this Church whereby it appears that the said are in so bad a condition that they must be either thoroughly repaired or rebuilt and whereas somewhat must be done thereon before the next General Chapter. Resolved power to do whatever they shall judge most advisable thereon.

10 December 1747 DRC/FTb/82Paid to Mr. Ransom for surveying the Steeple£8.8s

'The steeple had at last to be re-built in 1749. Mr. Sloane's model of its woodwork was for many years preserved in St. William's Chapel and was then kept in the crypt, where it remained but in a very delapidated condition...' p.30 Bell's Cathedral Series 1897

SLOANE STEEPLE 1748

12 July 1748 DRc/Ac7/21 Ordered repair according to plan of Mr. Charles Sloane, Surveyor

REBUILDING - timber frame 1748 DRc/FTv/99 J. Chubb, bill, for rebuilding the Spire of he Cathedral Church: 70' cubed wrought fir timber £56.1s; 55' cubed oak £7.12.7d; 8 12' Deales 12" wide 16s; 40 other deales £3; 72 3" Deales £14.8s; labour to frame and putting up £48.7s.1d; nails and spicks £7.0.11d; labour and stuff to Model 17s.6d; 12' supercial in Lead door 8s; large ladder to Spire 9s; dayes works in scafolding £13.8.8d; nails and spicks £1.16s.; use of Deales and Uphirs £8.8.6d; cords and spun yarn £1.19.4½d bloks, white Ropes and Strapings £4.17.6d. Total: £169.10s.5½d.

Old lead 20 May 1749 DRc/FTv/99 Mr. James account of old lead from the old spire delivered to the Plumbers: 7 tons. 3 qr. 10 lb. 29 June: sent to London: 7 ton 18 cwt. 3 qr. 24 lb. 30th June:____

cwt. and 72 cwt. 3 gr.

.

Door 11 August 1750 DRc/FTv/99 J. Chubb, bill: putting of a Large Cross garnett on the Spire door ls.

Architect's bill 30 November 1750 DRc/FTb/83 Paid Mr. Sloan his bill for repairing the Steeple

Bills 3 December 1750 DRc/FTv/99 Mr. Sloane's Bill for repairing or rather rebuilding the Spire on the Steeple and repairing the Tower £419 besides ye exchange of Lead and ye sale of old Timber:

To: Carpenter £169.10.1d; Penn and Hood smiths £8.5s; copper vane and Gilding and ball £10; bricklayers £1.11.1d; 386 cwt. 3 qr. 11 1b laid lead £348.3s.4d; 30 1b sodder £1.2.6d; labour 9s; carriage, waterage, messengers £3.14.6d; the Scafold man and other for extra care £2.5s; masons bill for coping the Tower £43.15.8d; bricklayers 2nd bill at the Tower £4.8s.10d; plumbers 2nd bill at the Tower $1\frac{1}{2}$ cwt. old lead £5.5.; surveying and executing £29. By old timber sold to Chubb carpenter £3.5.6d; cash to ditto £166.4.7d; 321:2:14 old lead £200.12s.6d; cash to Sloane £200; to Dent mason £40; ballance £12.15s. Plumbers 16 March 1752 DRc/FTv/104 G. Rowland & J. Hallam: nailes and stays. 2 men 1 day. Mason's accounts 11 July 1752 DRc/FTv/105 ...on second thought there was a former small bill or else the remains of that bill for the Steeple, the Archdeacon paid the £40 on account...and left the rest untill you had examined the bill..

4 January 1757 DRc/FTv/112 J. Harrison, carpenter, bill: to puting up scaffolding to the Spire for the plumbers. 19 days. £3.15.4d.

Leadwork repairs 1757 DRc/FTv/112 G. Rowland, bill: 12 cwt. 2 qr. new lead; 2 qr. 22 lb. sodder; 4 bushell charcoal; 6 cwt. 24 lb. old lead

Drainage and door J. Harrison, macken 4 large square trunks to bring the water from the top of the Spier. Macken a new door for ye top of the Spier

ScaffoldingE 17 August 1763 DRc/FTv/120 J. Harrison: to puting up the scaffold to the Spier for the plumbers and taking of it down agane. 5 men 3 days. £1.15s.6d.

Leadwork repair 18 August-1 September 1763 DRc/FTv/120 J. Pluckwell: Plumbing work done at S.E. Quarter of the Spire: 16 cwt. 3 qr. 12 lb. sheat lead; 29 lb. sordor; old lead 14 cwt. 1 lb. 3 men. £10.8.10d.

Carpentry repair 5 March 1764 DRc/FTb/95 Paid J. Harrison for scaffolding and repair of the Spire £1.15s 6d.

Drawings undated DRc/Emf/36 Two drawings of Cathedral spire "by Lawford - not approved". Plan, elevation, in good condition.

Weathercock 13 April 1764 DRc/Ftv/121 J. Pluckwell, bill: ... Sementing the Cock in

Leadwork 8 May 1768 DRc/FTv/126 J. Pluckwell: on the spire to sequare the lead. 12 lb. sheat lead. 18 lb. sorder; 4 men 1 day.

Leadwork repair 10 April 1769 DRc/Ftv/124 J. Pluckwell: 18 lb. sorder. 3 men 1 day.

Leadwork repair 23 June 1773 DRc/FTv/130 J. Pluckwell: 3 cwt. 2qr. 25 lb. sheet lead 4' 4" pipe for socketts; dog Nales; sorder; sheet lead making good.

SURVEY 29 March 1780 Mylne Diaries Went to Rochester. Surveyed great tower and Spire of Cathedral. 3 April 1780 Mylne Diaries Sent Dean of Rochester a Report on the State of the Cathedral, particularly Great Tower and Spire. £5. 23 June 1780 DRc/Emf/36/3 James Lawford of Dartford to Dean Cust I am sorry I had not an Opportunity when you came through Our Town Late of Communicating to you the farther thoughts I had had of your Cathedral, but your saying you had no Money thought it of little Purpose; As to the Steeple which you Dislike, I had Drawen one which I thought might please better, and have enclosed in this and as the present would be a foundation and suport the expence would not be Enormous, but as you say, you have no Money to pull it down.... as to the Gutters and Parapet is Absolute Necessary, but hop you will do it Similar to the Building on which it is and not with Red Brick and Portland Stone Coping ... Drawing included in letter of 23 June 1780 DRc/Emf/36/4 Elevation of proposed steeple by Lawford. Condition good. Vane 25 August 1780 DRc/FTv/139/I T. Howard: one Hamdsome Double gilt Copper Vane and Pedestal with Points, Spindle, compleat for Cathedral £43.12.6d. By old copper 36 lb.; old iron 69 lb. £1.6.9d. Note on bill: No.11 South side of St. Paul's churchyard; Bill to be paid only £42. Vane 24 February 1781 DRc/FTb/112 Paid Mr. Howard's bill for double gilt Copper Vane (9) £42 Survey and estimate 12 November 1781 DRc/FTv/139(I) Jas. Lawford, Dartford: Rec'd of Mr. Twopenny (Treasurer) £5.5s. for my trouble in surveying the Spire of their Cathedral and making an Estimate for the Repair thereof and Journeys on that Occasion by me. Leadwork repairs 6 January 1787 DRc/FTv/139(III)

16 lb. lead on Spire; sheet lead on S. side of Spire; soder in Sundry places; 5 cwt. on Flatt; 3 qr. sheet lead in peices on Spire; dressing lead all round; 1 qr. sheet lead on N. side; 51' on S. side;

Leadwork repair 9 August 1794 DRc/FTv/147 9 cwt. sheet lead; 97 lb. solder; white lead; 4 men

SURVEY Alexander 1799 DRc/Emf/38 After a very accurate inspection of its parts. the lead is in a a very tolerable state of repair and is not likely to require much annual expense to keep it so. It had first struck me if this lead were much out of repair, to have suggested the taking the Spire part of this Tower down; but I am of the opinion that the timbers, although very good would hardly more than pay for their time in taking down and that the lead would not pay for a new roof, or new turrets at the four corners, which it would be adviseable there to erect. The unornamental state too of the external walls of the Tower, perhaps is as well suited to this leaden spire as any other top, although the figure is certainly as ugly as can well be conceived.

....Repairs required to Parapets and copings round the flat at foot of leaden spire. £133

Nineteenth century

Leadwork repair 25 January 1802 DRc/FTv/157 J. Francis: 1 cwt. 3qr. milled lead for spire; 36 1b. solder

Gale damage repaired July 1820 DRc/FTv/175 W. Blenkinsopp: repairing Spire after Gale: 12 cwt. mill'd lead £14.19.10d

Re-leaded 4 February 1822 DRc/FTv/177 W. Blenkinsopp: repairing spire, relaying all the lead, nailing, cementing, pointing seams, soldering laps.

SURVEY Smirke 1825 DRc/Emf/135 Upon examining the state of the Spire raised about 40 or 50 years ago upon the walls of the Tower, it appears that the lead which covers it is in so defective a condition as to to admit the wet in many places; the woodwork at the base of the Spire is already in a decaying state and will soon be unequal to its support. At the time of my examination, the greater part of these timbers next to the angles of the Tower and of the floor below it, exhibited every appearance of having been wet for a considerable time. The lead appears to have been originally fixed in an imperfect manner also, as I am informed that parts of it are frequently loosened by the action of the wind.

I am of the opinion that there can be no doubt of the necessity of taking down this Spire, unless it is substantially repaired and wholly covered with new lead.

Tower and Spire Jan. 1825 to Feb. 1829 DRc/Emf/135 Old Spire of the Tower taken down, the old Tower repaired with strong masonry and elevated to its present height; the timbers were found very much decayed. Elevation entirely new. A new stone battlement with a pinnacle at each corner has been placed upon the Tower, together with an entirely new roof. Lower Belfry floor entirely new. Upper one and bell frame repaired. Bells cleaned and re-set.

REPAIRS under Mr. Cottingham 1825-6 7 December 1826 DRc/Emf/150 Summary of artificers' works : g) taking down old spire.. HODGSON FOWLER TOWER AND STEEPLE

23 December 1891 DRc/Emf/65/41/1 Letter from Joseph Ball, York Castle, Oldham Seeing that you are having a spire affixed to your Cathedral I should be pleased to know if it will require a lightning conductor.

Hodgson Fowler 4 June 1898 DRc/Emf/144 The old spire...is stated to have been of broach without any parapet, but I do not feel at all sure that it was so, the engravings giving me the impression that there was a low parapet with the spire springing from within it. This plan I have adopted..all ways more desirable.

Hodgson Fowler 18 August 1903 DRc/Emf/144 ...will think over Mr. Foord's suggestion of steel rolled joists etc. and will consider if they will help us. But it is not lateral pressure that is any difficulty but dead weight. Cottingham's tower has stood very well and therefore if I keep to the same weight, or close on it, there should be no danger of crushing the four main piers which carry the Tower, but to increase the weight might affect them, as they do not appear to be specially well built, being cased with Caen stone with - I suppose - a core of rubble. This necessity of keeping the weight of the Tower and Spire about the same as the present Tower will of course prevent any additional height to the Tower shewn in my sketch, but the spire shewn is 6' higher than that of Hamo de Hythe's, being 160' from the Nave floor, while his is said to have been 154'. I think I will be able to raise the Spire still another 10'..

Hodgson Fowler 8 October 1903 DRc/Emf/144

I am sending :

1

- 1) A perspective of the Tower and Spire
- 2) Plans, elevations and sections, 1/4" scale
- 3. Report and estimate
- 4) Summary of cost estimate prepared by my Quantity Surveyor
- 5) Letter from my Surveyor

Hodgson Fowler 8 October 1903 DRc/Emf/144 Send herewith revised design for reconstruction of Central Tower with proposed spire. Previous design of 1898 was made somewhat severely simple in order to keep cost as low as possible, but revised design, while keeping to the same general features is improved and somewhat more costly....

Spire is made 11' higher than first design and would be nearly 20' higher than that of Hamo de Hythe, covered with lead as before, framing of deal like Choir and Transepts. Always danger of fire in wooden spire...have therefore obtained drawing and price for a spire framed in steel and with its boarding covered in 'Uralite' - a fire proof material made at Higham, Steel spire would also have advantage of being so thoroughly braced together it would be a dead weight on the walls; disadvantage - steel framing ought to be kept painted to protect from rust.

Mr. Savage's report of 1826 of exactly what was done to the Tower and his examination of piers extremely helpful...it shows clearly that there has been no movement or settlement in the piers since Mr. Cottingham raised the Tower, and as the weight of proposed new work will be less than the present work, there can be no danger in raising the Spire.

Tower drawing undated DRc/Emf/144 Section through central Tower looking E, showing 'timber framework to carry the bells, so as to get weight low down, all apparently of fifteenth century' and stonework. Coloured pencil and wash on tracing. Good condition.

The steel spire as proposed has the boarding covered with Uralite, and I send two samples. It is fire proof, and protects from heat in summer and cold in winter. It is made at Higham near Rochester and can be seen on the roofs of the works where it is used instead of slating.

Tower with deal spire covered with lead (original design £4,200) £6,100 Tower with steel spire covered with lead on Uralite £6,270 Tower with oak spire covered with lead on Uralite £6.600 Estimate of of weights 1903 design in redwood 264 tons 16 cwts. " " oak 257 " 2 " " " steel 265 " 6 "

all would bear reduction of 20 tons due to wind pressure.

NEW SPIRE Work began

14 January 1904 DRc/Ac/20

Comment Hodgson Fowler to Chapter Clerk 25 Oct.1904 DRc/Emf/143 ...I am not surprised at Mr. Foord being disappointed with the Spire ("I could have stamped my foot when I first saw it" THF). I know all along he has wanted a high spire and the comparatively short one and covered with lead would not meet his ideas, but one has to remember that the old tower piers were not built for a high heavy spire.

DEDICATION

30 November 1904 Drc/Ac/21

Lightning conductor 25 May 1909 DRc/Ac/23 Tender £121 accepted. Steeplejack and Engineering Co. Nottingham; plans to be submitted first to Hodgson Fowler for approval. 21 September 1909 DRc/Ac/23

Work completed. Sale of stock agreed to meet costs £32.

Lightning conductor erected12 October 1909DRc/FTv/239Steeplejack & Engineering Co.£21

REPAIRS leadwork 29 January 1926 DRc/Ac/27 Cobb reported lead covering eastern face stretched and slipped, sheet bulged outwards, recurring problem. Arrange repairs.

23 March 1926 DRc/Ac/27

Estimated repairs £200; most economical method be sought. Archdeacon given authority give orders.

23 June 1926 DRc/Ac/27

Cobb's proposed procedure approved.

SURVEY 12 December 1935 DRc/Ac/29 Received Mr. Forsyth's report on condition of fabric and expressed satisfaction with condition of Cathedral as indicated in Report. Repairs to be undertaken forthwith: Spire leadwork £20..

SURVEY leadwork Forsyth 14 April 1950 DRc/DE/209 Report for Pilgrim Trust by E.C. Butler of W.A. Forsyth & Partners The sheets are laid diagonally, as is customary; but many are torn due to their weight and perforations have been made by the introduction of wrot iron clips which are bolted through to the timber beneath. All defects which allow the penetration of water should be dealt with. Approx. £450

SURVEY leadwork Godfrey 4 April 1952 DRc/DE/209 The lead rolls have been fixed right through from the outside to the inner side of the boarding with rustless metal clips. These seem to be doing the job they were intended to do of stopping the creeping of the lead and at the same time do not appear to be making the covering less weatherproof, unorthodox though the method is.

The whole spire - or as much of it as can be reached without scaffolding - does however need to be examined in detail by a plumber soon. Some repairs which are easily accessible and do not require scaffolding are urgently needed:

(a) On S. side two cracks at points where water flows most

(b) On E. side, one crack

1

(c) On N.W. angle, one crack

I hope these are not indicative of the general condition of the spire. I do not think they are, but advise complete examination and marking of any repairs that are needed before the work is put in hand.

Copper 9 June 1953 DRc/Ac/31 Architect asked to consider replacing lead with copper.

Repair Godfrey to Dean 27 March 1954 DRc/DE/209/IB(a) Past year..remedial leadwork on spire;

REPAIRS ordered 17 September 1954 DRc/Ac/31 Architect instructed to commence work next spring repair to spire est. £1535

Finances Dean to Godfrey 18 January 1955 DRc/DE/209/IB(a) Spire £1535

25 February 1955 DRc/DE/209/IB(g) Repair work J.W. Gray & Son, quotations, drawings, correspondence. Report to Friends Godfrey 11 April 1955 DRc/DE/209/IB(a) During past year ..Steeple: overhauled this year; many bolts supporting lead sheared - to repair and increase number bolts; lead fractures to be repaired.

Damp patch 11 October 1968 DRc/DE/209/VI(A) Clerk to architect: damp patch showing on boardidng on inside of steeple; as not more than ten years since steeple was done can't think... Godfrey: last time inspected agreeably surprised; methods of repair we used been so successful the additional fixings were to stop movement of lead to avoid starting afresh; hope trouble is isolated instance Clerk: inspected; could find no fault but W. side boarding very wet; must be crack somewhere. SURVEY 25 August 1970 DRc/DE/209/VI(g)

J.W. Gray: wrought iron cross slightly corroded; could be wire brushed and treated bitumastic solution. Lightning conductor down main is unsecured over upper 10' of spire; recommend remaining clips be removed fixing holes sweated, new tinned fold-over clips fitted, etc.

100 small rents occur to lead sheeting mainly at lower 30' levels in vicinity older clamps; vary between 1" to 3" long. Require to be cleaned and sweated. The 16 no. large clout nails to apex apron are loose, copper nails securing the lead over four spire vents are withdrawn, whilst a l_2^{1} " rent has occurred to side of S. vent; would recommend refixing this leadwork with new screws to suit. Estimate A £248 accepted.

Repair 13 November 1970 DRc/DE/209/VI(a) J.W. Gray estimate £390; includes repairs to 100 small rents, renewing clips of lightning conductor; refixing apron at apex; painting cross; Architect recommends should be overhauled every 10-15 years. Work to start 30.11.70. Painting of inside iron work ordered.

Ironwork and timber 9 December 1970 DRc/DE/209/VI(g) Painting of interior iron work is to be completed. Order to Grays.

J.W. Gray & Son: account: £511.17.5d. wire brushing all ironwork internal spire, rafters, plates, king post.

Leaking Message: leaking badly 23 December 1970 DRc/DE/209/VII(a)

SURVEY Godfrey 21 April 1971 DRc/DE/209 As a result of steeplejack assistance to me during my inspection it was possible also to repair the spire before the recommendations had time to apear in this Report. I will not do more than refer again now to the unorthodox method and the attendant risks of securing this steep lead work by means of external clips to the rolls. On the whole our original economy of increasing their number, instead of renewing the leadwork when it was failing, seems to have been justified.

Leaking 3 March 1975 DRc/Ac Leaks reported by bellringers to be investigated. 13 March 1975 DRc/DE/209/IX(1) Clerk to Arch.: leak somewhere above clock face s. side; water

getting into ringing chamber ..

29 August 1978 DRc/DE/209/X(h) Architect to J.W. Gray: some 25 years ago you overhauled leadwork by trebling number bronze clips securing rolls to structure. Though unorthodox it worked; insepcted 1970, repaired. Subsequently leaks of some magnitude

Leaks, provision stair eyes 29 August 1978 DRc/DE/209/X(a) Have arranged J.W. Gray steeplejacks to inspect leadwork. Lot of leaks; new defects small. Instructing Gray to ladder interior to mark points of penetration. Repaint weathervane and ironwork inside; will estimate for permanent eyes facilitate future erection ladders. Instructed proceed with eyes. 11 October: Correspondence with Friends on accounts for work done.

Repairs 8 September 1978 DRc/DE/209/X(h) Confirm you are to ladder interior of spire to locate leaks during rain and proceed to remedy them. Repair will include renewal 2 rows of screws which succeeded the covered clout nails in double apron weathering. Renewal of clouts formed part of last overhaul and fixing needs to be improved, most of screws worked loose; ironwork of vane 2 coats paint; ironwork timber structure of spire rust spots cleaned back, brought forward, 1 coat.

REPORT Godfrey 12 Oct.1978 DRc/DE/209 Result of inspection in 1970 repairs put in hand. Though extra fixing clips put on to leadwork appear to be saving it from further serious movement, would have to be inspected every 10 or 15 years. Have just had to institute another inspection because of new leaks. Points of entry for water almost impossible to detect and to await wet weather to locate them from inside.

Repair

*

leadwork forwith

18 June 1979 DRc/Ac/

Agreed work repairing leaks proceed 14 January 1980 DRc/DE/209/XI(b) Clerk to Godfrey: authority to Grays to spend £2000 remedy defects

17 January 1980 DRc/DE/209/XI(g) J.W. Gray: est. remove 50% straps to S.E. south and S.W. facets, 50% overall to remaining 5 facets as necessary, repair and sealing. Work await discussions Lead Development Association re relative merits polysulphide mastics etc.

J.W. Gray : steeplejacks report 28 January 1980 DRc/DE/209/XII ..generally agreed method of repair beneath securing brackets was

right approach, using rather larger 6 code lead patches under, with fillings of lead bedded in grey mastic to positions where original leadwork been punctured only. Number of straps originally intended for removal would be greatly reduced. Considered more appropriate to lift overcloaking to base of flat rolls to angles to lower half of spire, particularly facets where water ingress apparent, seal off with mastic over open undercloaking. These proposed repairs ..temporary nature..consideration must be given to renewing leadwork completely.

31 January 1980DRc/DE/209/XI(h)Final accounts: spire laddering eyes£112Dressing leadwork, applying Secomastic£4,700

Note from Messrs.Carden & Godfrey (30.7.87 DRc/DE/209/XI(h) Ian Stewart has letter Jan. 1977 report from Lead Development Association condemning original layout of leadwork and recommending mastic repairs holding operation. Grays glued it all up with (as it turned out) wrong sort of mastic.

Leaking again 12 June 1981 DRc/DE/209/XII(c) Water influx during heavy rain; timber inside clock s. face soaked, water onto bells; appears efforts to make spire waterproof failed or lead slipped.

Gale 21 October 1981 DRc/DE/209/XII(Dc) Clerk to architect: severe ingress water following N.W gale yesterday. ?bring forward re-covering spire

Re-leading required 11 December 1981 DRc/DE/209/XII(c) Architect to Clerk: always looming necessity to re-lead; major operation. An appeal may be necessary to finance. Another temporary attack on it with steeplejacks £2000. Clerk reply: no monies available.

TOWER

History:

Repair

'In 1343 during episcopate Hamo of Hythe 'the bishop caused the new steeple of the church of Rochester to be carried up higher with stones and timbers..'. From old prints and engravings the tower had already been carried up high enough to receive the four main roofs against it, and this stage seems to have been ornamented with an arcade of tall trefoiled arches. Bishop Hamo now added an upper p.j277 Arch.Cant.XXIII 1898 story, capped by a wooden spire .. '

Seventeenth century

24 November 1699 DRc/FTv/29 Paid J. Gamball £1.13.10d

4 boushells of lime and 60 sand; work about stopeing ye Cracks in ye Tower..

Eighteenth century

9 May 1750 DRc/FTv/99 Repair J. Cable, work don about the Tower: 1/2 load sand; load lime; 175 plain tiles, 50 bricks, 4 men 8 days. £4.8.103.

25 May 1750 DRc/FTv/99 Coping I. Dent, mason, bill: for coping the Gt. Tower: 142'3" cube Portland copings; 470'10" super. plane workmanship; cramps let in and run with lead; coales to melt and lead; fixing, taking down the Tackle, hoysting the copings and lowering down the rubidge: 1 mason and labourers 4 days £43.15s.8½d.

8 August 1750 DRc/FTv/99 Leadwork I. Dent, bill: cuting way for Plummer to secure the lead. Mason 1/2 day.

Rainwater disposal 13 September 1760 DRc/FTv/117 Unattributed: estimate of macken of 4 new Square trunks to bring down water from off the Spire to tops of other roofs: 27', 33', 39', 39': workmanship, material including pitching and Tarring £4.12s 6d. (I do appoint this work to be forwith done for the security of the Tower of the Spire; J. Denne).

13 October 1760 DRc/FTv/117 J. Harrison, macken 4 large square trunks to bring the water from the top of the Spier. £4.12s.

Keene 10 October 1760 DRc/Emf/34 SURVEY The angles of that part which appear above the Roof want new Coinstones and the facing on the Sides above the Roof want repairing. The outside facing in General wants many and considerable repairs, which is much decay'd and moultered away; this lets in and harbours the wet and is very prejudicial to the Walls, the inner parts of which being compos'd for the most part of very soft and perishable materials; if not Secur'd from the wet and frost go soon to decay and the strength of the walls are lost. It is therefore (especially where such is the nature of the materials) greatly to the preservation of the solid parts of the building to keep the outer casing whole and entire. But this has at this

Cathedral been very negligently perform'd and where it has been done it has been in a very (in my opinion) injudicious manner, bricks have been us'd for patching and stopping up the decay'd places; in other places the moultering stones have been plaistered over; this is a very improper and transient method of hiding the real defects, for altho that coat of plaistering is composed of ever so good materials, the bad Ground on which it is put, viz the mouldering stone, will in a very short time let it fall from it. Jambs and muntins of windows have been also repair'd with bricks and plaister'd over, which is not only a very weak but a paltry method, for the Plaistering, falling off it has a most shabby appearance with a motley face of brick, stone and plaister.

Another great reason of decay is the want of care from time to time to make good and reinstate the copings and weathering stones, these decaying, moultering and falling off, suffers the wet to penetrate into the body of the walls and greatly damages the whole building. These therefore should be carefully examine'd and made good with such stone as will stand the weather, and not be liable to the effects of Wet and Frost; for the purpose therefore Portland stone is the most Eligible, as best capable of resisting those effets. And thro' the whole and evr'y part of this repair I would advise that the muntins of the windows, Heads, Cills, Copings in General, weather stones, top finishings of Pinnacles, etc. and all top beds and tender parts, should be reinstated with Portland stone.

The facings and other parts not so liable to perish by being not so expos'd to the wet, may be of some sort of stone that will be procured at a more reasonable Price; as I presume to think the Expence of doing the whole with Portland stone cannot be defray'd by the Fund appropriated for those purposes.

I before mentioned slightly and take this place as proper to repeat more fully that, during the course of these repairs, the old building call'd Five Bell Tower may be very properly applied for all solid walls, cores, buttresses ... some Freestone will be found in the same, that may be used as new Coinstones to repair facing, stop holes made by scaffolding and such like purposes. And this may be taken down by degrees, as the uses to which it will be proper to apply it may call for it.

Repair 22 June 1776 DRc/FTv/132 J. Nicholson: mending a Hole in wall of the Tower; morter, work 3s

SURVEY Went to Rochester. Surveyed great tower and Spire of Cathedral. 3 April 1780 Mylne Diaries Sent Dean of Rochester a Report on the State of the Cathedral, particularly Great Tower and Spire. £5.

Doorcase August 1781 DRc/FTv/139(I) E. Harrison, carpenter: preparing and fixing Door and case in Tower. fir; oak; deal. 2 men 3 days.

Brick and stone repair

S. Nicholson: repairing and new facing S. and E. sides of Gt. Tower: 900 bricks; 7850 hard clinker burnt; 9 loads Headed stones; lime, hair, mortar, plain tiles; 10 loads rubbish; 268 days bricklayers £90. 10s. 3d. and labourer

SURVEY

Alexander 1799 DRc/Emf/38

.... As the E. and S. sides are faced with brickwork from the bottom to the top of the leaden Roofs, so the W. and N. sides had better be continued so, in order to save further mouldering of the face of the stonework. Fill in an opening which has been broken through the wall of the Tower on the W. side so as to make it as sound as the rest. New frame and lubber boarding in the opening on this side as also those in the N. Repairs required to Parapets and copings round the flat at foot of leaden spire. £133

Nineteenth century

SURVEY

Smirke 1825 DRc/Emf/135 Upon examining the state of the walls of the Tower with reference to the question whether it will admit of there being raised a few feet higher with safety if the Spire should be taken down, it is to be observed that there is an irregularity in the construction and form of the piers which support this Tower on the side next to the Nave; as the effect of this irregularity is obviously to give additional strength to the piers and there are some peculiarities in its construction which afford strong grounds for believing it to have been built since the erection of the Tower, though at a remote period, I am induced to believe there were indications of weakness which it was intended to counteract, and I would not therefore advise the charging of much additional weight upon these piers.

The walls for a considerable height above the piers and arches appear to be in a good condition; there are no fractures seen in them except one next to the North East angle and that is neither considerable nor recent. The walls are well relieved by a strong framing of oak timber from all partial effects that might be occasioned at the ringing of the bells and it would be extremely advisable to repair in an effectual manner this framing, the upper part of which has suffered to decay.

The walls at the upper part of the Tower (above the level of the Belfry floor) are in a less secure state than those below it, they have been repaired at the angles with brickwork and are upon each side rather bulged forward in the centre. I would therefore recommend that these walls should be taken down to the level of the Belfry floor and rebuilt with compact and cemented masonry, first laying a connected chain of strong Yorkshire stone landings in large sizes upon the surface of the walls below. The new wall, if worked a solid manner may be reduced to a thickness of two and a half in feet and it should be secured by strong diagonal inside ties at the angles at the level of its present height and also at that of the new roof; the diminution of weight (upwards of 50 tons) occasioned by reducing the thickness of the wall added to the weight of the

25 May 1790 DRc/FTv/153

present Spire with its covering, will give weight of Masonry that may be added to increase the height of the Tower above its present level without any addition to the weight now charged upon the arches and piers supporting it and therefore without risking the stability of the fabric.

A. 14

ALTERATION to tower - tenders 26 November, 1825 p.73 DRc/Acz 1 Messrs. Brown & Atkinson, masons in London, and Mr. Brisley, mason in Chatham, put in their contracts for finishing the Tower. The amount of the former's contract was £1800, of the latter's £2549. Mr. Brisley when he found that he had not succeeded, and not before, complained that he was hardly used not being allowed to finish the work, charging as before the prime cost, and receiving his profit upon it. He objected, most strongly, to the principle of competition, and thought that the Contracts should be withdrawn, and that he ought to have the completion of the work, tho' his Contract was more expensive than the other by no less a sum than £749. The Chapter could not admit the validity or the justice of his arguments. Messrs. Brown and Atkinson's contract was accepted.

Brickwork 25 April - 18 June 1825 DRc/FTv/180 Wm. Nicholson: bricklayers work perf'md... building stone wall gable end of new Roof over Staircase to the Tower... Leadwork 25 June 1825 DRc/FTv/180 J.O. Cottingham: 34 cwt. mill'd lead; 18 sheets do. for Tower: 143 £46. 17. 10d. cwt.; old lead 15 tons 8 cwt. 15 October 1825 DRc/FTv/180 Ties J. Ulright: 69 Princes Gate, Leicester Sq.: 20 strong wrought iron Bolts each screwed down 6" with right and left hand thread; 10 strong wrot. Iron double coupling Irons with a deep nut at each end and right and left screw for Bolts made of best Iron in short lengths to be connected to long Iron in the Centre for bracing the Tower of Rochester Cathedral. 3 cwt.lqr.l lb. £33.9.2d. 3 December 1825-25 June 1826 DRc/FTv/180 Stonework W. Brisley: masons time, lodgings, travel, materials: 446' Farley Downstone best quality; Firestone; taking casts of Heads in and about Cathedral, plaster of Paris, clay. £144.2.9d.

Availability of stone 27 December 1825 DRc/FTv/181 L.N. Cottingham, 56 Gt. Meen St. London: '...indecision of Dean and Chapter left Messrs. Browne & Atkinson but little hope of obtaining the contract for finishing the tower, which induced them to part with a quantity of stone that would otherwise have been appropriated to that purpose. The demand for Bath stone in London is beyond all precedent and the time of year exceedingly unfavourable to procure it but Mr. Browne hopes to obtain a cargo in a few days...regard to agreement for execution of the work...parties are ready to sign...will bring secifiction.. Masons 1825 DRc/Ftv/180

Browne & Atkinson, masons: taking down scaffold from top of Tower; ... preparing stone Corbels for Belfry and Bell Chamber. Drawing defective stone in spandrels of Tower; making good do. with Portland... Record of work done Jan. 1825 to Feb. 1829 DRc/Emf/135 Old Spire of the Tower taken down, the old Tower repaired with strong masonry and elevated to its present height; the timbers were found very much decayed. Elevation entirely new. A new stone battlement with a pinnacle at each corner has been placed upon the Tower, together with an entirely new roof. Lower Belfry floor entirely new. Upper one and bell frame repaired. Bells cleaned and re-set.

Record of work done 1825 DRc/Emf/135 The old Tower has been substantially repaired and elevated feet. The main timbers of the Tower, which perforated its walls were so entirely decayed, especially at the ends, that the probability is they would ere long have given way and if so the Tower and Spire must have fallen down.

Stone available for completion 5 April-20 Sept. 1826 DRc/FTv/180 W. Freeman: 5188' Combe Down stone; Roman cement £385.6s. L.N. Cottingham to Dean and Chapter 5 July 1826 DRc/FTv/181 '..will deliver sufficient quantity to finish the Tower at same price...'

Masons work undated DRc/FTv/180 J. Hooper:ashlering, windows and pinnacles, etc. of Tower£519.5s.7d. W. Maggs: to casing and setting Masonry of Tower £400

Summary of artificers' works: 7 December 1826 DRc/Emf/150 g) .. repairing angles of Tower down to tops of great piers, rebuilding ringers' floor ... making good walls of tower to ditto,repairing bottoms of main piers £1070.17s.2d. h) building new roof to Tower and raising the walls at top including smiths work, new stone battlement and cornice £1247.2s.7¼d. i) casing the Tower with Bath stone, inserting four large and eight small windows with door on the Nave, and four pinnacles including luffer boarding £1851.5s.11 d.

Disquiet voiced

'...an apologist for Mr. Cottingham says that he was not altogether responsible for its faults, since he was compelled to modify his design, through a strong conviction among the townspeople, especially among local builders, that he was overloading the supporting piers. He obtained expert opinion that they were capable of bearing twice the weight, but at last yielded, though he complained that by his so doing his work was spoiled'.

p.40 Bell's Cathedral Series 1897.

Advice sought by Dean and Chapter 1826 DRc/Emf/135 Apprehensions have been entertained by some that the Architect, in raising the Tower, was charging the piers with a weight which they were unable to bear; it was thought right to have the opinion of another Architect upon this point; Mr. Wyattville was applied to for this purpose; but owing to his pressing engagements at this time, he could not favour us with the benefit of his opinion. Mr. Savage, the gentleman who built the new Gothic Church at Chelsea was sent

for. He came down to Rochester on 23rd March 1826 and surveyed the Tower.

SURVEY

Savage 1826 DRc/Emf/135 Having received your instruction to minutely and to roughly survey the Tower of Rochester Cathedral and to learn the intentions of Mr. Cottingham, your Architect, respecting it, and to report in writing my opinion on the following particulars. First, whether the piers are equal to bearing the weight that is now upon them. If so, then secondly, whether they are equal to bearing the additional weight with which the Architect proposes to charge them; thirdly, whether the casing of the Tower with stone and the erecting of a Pinnacle at each of the four corners, are calculated to give strength and stability to the whole. And further, that should my opinion, as to these points be in the negative, I am requested to state what I conceive would be the best and safest way of proceeding with a view to the completion of the Tower. Having surveyed the Tower accordingly and examined Mr. Cottingham's plans and conferred with him on his mode of proceeding, I have the honour to report, in reply to the first and second questions:

That I am perfectly satisfied that the piers are fully equal to bear the weight that is now upon them and the additional weight with which your Architect proposes to charge them. So decided is my conviction on this point, that I should not hesitate to raise the Tower fifty feet higher upon the same piers if required.

Whether the casing of the Tower with stone or the erecting of a Pinnacle at each of the four corners are calculated to give strength and stability to the whole, I beg to state that a mere casing of stone can scarcely be said to add to the strength of the wall; on the contrary, it adds to the wall, the further duty of carrying the weight of such casing, this additional weight however in the present instance is too trifling to have any injurious effect. In another point of view, the casing will marginally add to the stability of the Tower by preserving the wall from the injurious effect of the weather and further more by bringing the surface (which is at present very irregular) into a uniform plane. And thus casing will increase the permanent stability of the fabric, although it cannot be said to add to its immediate strength. As to the effect of the Pinnacles at the four angles. I beg to state that they will unquestionably add to the strength as well as the stability of the Tower; in as much as they add a considerable perpendicular weight over the piers and thereby increase their strength and capacity to resist the lateral pressure of the four large arches upon which the Tower stands.

As my opinion on the above points is in the affirmative, it follows that it is quite unnecessary for me to suggest any other mode of proceeding than that already devised by your Architect and which appears to me to be throughout perfectly good and safe.

In order to enable the Dean and Chapter to judge of the relevance of the opinions above submitted, I shall take leave to state the most material facts which appeared upon my survey, with such observations as occur to me to be useful, in forming a conclusion thereon.

Upon minutely examining the four piers upon which the Tower stands, I find them to be perfectly sound from to bottom, and without any crack or fissure or bulge or anything to denote weakness from lateral strain or perpendicular pressure. Upon plumbing them, I find but little deviation from the perpendicular, viz: from half an inch to two inches. This deviation was doubtless in the original construction and is much less than usually found in similar edifices and is not material to the stability. The piers are faced with Caen stone; and the smaller columns thereon are some of Caen stone and some of Purbeck marble. The repairs thereto are of Portland stone.

The piers having been cut into in two places prove be built internally with rubble work and flint and mortar of extraordinary excellence as appears from the testimony of the Clerk of Works and Masons separately examined and confirmed by mine own observation of it at various parts of the Church where it is exposed to view, and where a part of the pavement was taken up in my presence to examine the foundation of the South West pier, the work proves to be of the same construction, viz: rubble work as hard as rock itself. The base of this pier appears to be spread in the most ample manner and the general soil of the neighbourhood (being a chalk rock (than which there can be no better) the foundation of the building is unquestionable.

The excellence of the rubble work is further proved in the Castle (built at the same time by Gundulph) where exposed to the elements for so many years without any protection, it still stands and appears to bid defiance to time. Many instances may there be seen where the Caen stone has perished and mouldered away, while the Mortar of the Rubble work immediately ajoining stands out as hard and sharp as ever.

Example of this strength and tenacity of this rubble work is seen in the arch of the grand staircase of the Castle which is as firm as if cut out of solid rock. Among circumstances that contribute to the strength of the legs of the Tower may be noticed that their height is considerably less than in many examples while their area is greater. Indeed the two eastern piers are built up with the solid walls of the Choir, which walls being 6 ft thick renders it utterly impossible to affect their stability by any weight whatever; of the other two piers it may be remarked that a similar construction has been adopted by attaching to each of the piers a portion of the wall which although abrupt in appearance materially adds to their strength. These two piers, having been built subsequently, it is probable the builders took the hint from observing the beneficial effect of the connection of the walls of the choir with the Eastern piers.

The above circumstances, together with the judicious position of the various arches abutting from the piers fwill fully account for the

superior stability apparent in Rochester Cathedral, making it a gratifying exception to the censure of Sir Christopher Wren who remarks "There is scarce any Gothic Cathedral that I have seen at home or abroad I have not observed the Pillars to yield and bend inwards from the weight of the vaults of the aisle".

Mr. Cottingham, by way of equalizing the strength of the Tower has filled in the two apertures in the Triforium immediately behind the two Eastern piers. The two western piers having been so done at some former time.

In proceeding up the Tower, the next thing worthy of observation is that the wall immediately on the said main arches is 4'1" broad for a height of about 5'; the Tower walls are then diminished to a thickness of 2'9" leaving an off set outside of 2'4". This is very favourable to strength and stability. The buttresses at the angles also contribute greatly to the strength of the Tower and are themselves amply supported on the said offset.

I understand from Mr. Cottingham that the angles of the Tower, having been of rubblework as well as the rest of the walls had become fractured and cracked all the way down; all the connection on the inside of the said walls was thereby gone and the buttresses on the outside were the only union. This was very likely to be occasioned by the ill contrived wood frame which was inside the Tower and from the iron stays connecting the bell frame with the walls of the Tower, so that every vibration of the bell frame communicated a drag on the walls in the way best adapted to shake them down.

Mr. Cottingham has very judiciously repaired these angles by cutting out the defective parts and introducing regular courses of Ashlar stone which are lapped and bonded over each other, the whole height of the Masonry of the Tower, in all the four angles thereof. This has been very carefully performed and is now perfectly sound and will take the weight of the super structure and of the pinnacles and carry the same down to the main piers in the most solid manner.

The brickwork in the raising of the Tower, has been very well executed and stands remarkably well, although so immediately and severely tried by frost. The corbelling over at the angles is well contrived to strengthen the work generally as well as to receive the pinnacles in the favourable manner.

The intention of putting up the pinnacles before Ashlaring the body of the Tower, I also consider to be the best mode of proceeding, because it is desirable to give the brickwork all the opportunity of settling before the Ashlar is affixed thereto.

Among other alterations proposed to be made by your Architect, is the taking out a large portion of Rubble work for the insertion of a double window in the centre of each face of the Tower. This will considerably lighten the weight, where alone it can do no harm, viz: over the centre of the Arch. Nor will any lateral tie or connection be thereby destroyed because the present narrow Lancet window as effectually divides the mass as a larger opening.

Another improvement made by Mr. Cottingham is the Tower has been by taking out the thirteen beams of the Belfry floor which were totally decayed and whose ends, 12 or 14 inches square went quite through the whole of the walls, occupying fully one third of the bearing part of the Tower. These spaces have now been filled in with solid masonry of Portland stone.

The present floor (in lieu of the above 13 beams) is supported by four trusses, the ends of which are sustained by strong iron sockets let into the Masonry in a wedge like form so as to avoid the chance of future decay of the timber, having large stones provided to receive them into which they are cogged down. They therefore act as ties without the chance of the evil which results from the usual timber floors.

For the purpose of further tying the building together, Mr. Cottingham has inserted on the inside of the Tower and laying on stone corbels a very substantial straining sill of fir below which are double chain bolts which pass through the angles of the Tower to a stout iron strap which clips on the outside. The walls of the Tower thus both tied and strutted in a very effectual manner. The trusses of the roof as well as those the Belfry floor also tie the buildings together and the iron chain ties are repeated under the roof.

Although from the perpendicularity of the walls and the goodness of the work, these ties might not be absolutely necessary, still their appliclation is judicious as a precautionary measure and is fully justified by the Authority of Salisbury Cathedral and many other eminent examples. The arrangement of these ties connects the Tower together very as one integral mass. The total strength of which is thereby combined to resist any occasional extraneous power such as wind, vibration from ringing and furthermore when so connected, it has obviously less tendency to produce lateral pressure on the Arches and piers which support it. The bell frame is now so managed that the vibration will be spent upon the floor without any avoidable effect upon the walls of the Tower. The removal of the Old Spire I consider to be very beneficial to the Tower, not so much by the diminution of weight as by the powerful effect it had on the walls when acted upon by the wind, for which it presented a large surface thereby shaking the masonry with the energy of great leverage.

By an estimate furnished to me by Mr. Cottingham and which I have examined, I find that when the alterations to the Tower are completed, the weight that has been removed therefrom will be about 300 tons being a net addition of about 90 tons. Now when it is considered that the greater part of this weight so removed has been taken from over the middle of the arches and the whole of the addition has been placed over the piers, it follows that although there is more perpendicular pressure on the piers, there is a great diminution of lateral thrust with increased competency to resist it; therefore even in that point of view the improvement in strength and stability is great and important. But when, in addition thereto, the various improvements detailed above are considered, I think it will be obvious that the repairs and alterations now going on at Rochester Cathedral will place it in a better state than it has ever been heretofore and are well calculated to give highest satisfaction to all who take an interest in that beautiful and venerable pile. James Savage.

?work on tower 11 July 1829 DRc/FTv/184 W. Obee: time, compoing, nailing and tortwiring cornice and moulding and running the Moulds. Roman cement; $2\frac{1}{2}$ lb. tortwire; to running Mouldings and Miters. Finniching Returns and Miters and pinting and culloring the comp and Mouldings and Culloring stonework outside the top of the old tower. 1 lb green coperis; 3 papers of Lamblack for outside stone work..

Pinnacles damaged 30 July 1851 DRc/FTv/208 L. Vulliamy, Argyll St.; journey to Rochester to inspect the state of Pinnacles of Tower after being damaged by a storm and advising as to mode of reinstatement of same. £5.5s.

Repair pinnacle 23 August 1851 DRc/FTv/206 S. Sidden: erecting scaffolding for pinnacle; heightening scaffold to Fix Pinnacle; cutting off defaced stone finial; 56 lb. old lead. Bath stone for finial; modelling and making good deficiency in fragment of Finial; recarving same and drilling holes in Pinnacle, fixing, securing same, striking scaffold £44.8s.9d.

Repair pinnacle 10 July 1852 DRc/FTv/207 S. Sidden: br'layers 13 days erect and take down scaffolding to Pinnacle, cut off iron spindle, drill hole and run same with lead.

New roof 21 February 1857 DRc/FTv/214 S. Sidden: putting roof on Tower, assisting to put in Rafters; take down staging from Tower; clear away

Architect's work 20 November 1861 DRc/FTv/215 L.& G. Vulliamy, archts.: To all necessay Drawings, Specifications, Instructions and personal Attendances on and for the Works connected with ... restoration of W. Tower of Cathedral, Clock of do. Nov. '60-Nov.'61 £21.

1861 DRc/FTv/215

T. Clements: amount of account for labour and materials on W. Tower after last Audit sanctioned by Mr. Vulliamy £25.

Pearson 7 December 1891 DRc/Emf/65/32 I will send you the drawings you mention for your meeting and they were made a long time ago, and were before the Dean and Chapter. On reading over the printed paper you only mention a spire as being the addition to make at the intersection, but the fact is that the tower will have to be considerably altered and improved. It is the tower which is so poor and mean, and no spire added to it would in the slightest degree remove these effects. The circular should say something more than it does otherwise it will be misunderstood.

TOWER Pearson 7 December 1891 DRc/Emf/65/35 ...in addition to the erection of a spire, some very material TOWER modifications would be necessary to the existing tower...will write again shortly.

TOWER

Pearson 15 December 1891 DRc/Emf/65/36 I very much regret that it will be quite impossible to give you even a very rough idea of the cost of the Tower and Spire before Thursday. I have no drawing of the existing Tower or of its supports and do not know its size. Before I can do anything I must make drawings of the existing work and then a study of what might take its place. (note written on back of letter: Priority to be given to the work on the W. front and the high pitched roofs).

The Tower Restoration Comm. Appeal 17 December 1891 DRc/Emf/65/47/2 It has been said that this has not been included in the estimates. It is very generally felt that the architect Cottingham made a mistake in judgement and taste in the early part of the century when he replaced the spire by a tower which always seems to enter into a hopeless rivalry with the grand massive keep or castle of Archbishop William de Corbeuil. Mr. Pearson's opinion only echoes a feeling which is universal when in his report he says: 'It is much to be regretted that it was necessary to rebuild the upper part of the central tower at a time when mediaeval architecture was only beginning to be studied, and, judging from the work of the period, so little understood. In its present state it is miserably poor and mean and so much so as to lower the character of the whole building to that of an unimportant parish church built during the early part of this century, especially when it is seen from a little distance. I trust it may be possible er long to reform its external appearance, and make it somewhat worthy of the noble church it surmounts.

TOWER Hodgson Fowler 4 June 1898 DRc/Emf/144 ... it is generally stated to have been all built by Cottingham in 1827 and its exterior is certainly all his work, but main body of walls and inner facing up to height of 33' above the ringing chamber floor are mediaeval work, I venture to think, of the same date as the E. arch of the crossing underneath. It is stated in some accounts that although the great arches of the crossing were completed in 1255, yet the tower was not raised above the roofs

TOWER

until the Episcopate of Hamo de Hythe. Cannot help thinking it was carried up to ridge level of the then high pitched roofs, when the arches were completed, and that Hamo de Hythe only added the upper storey and the lead covered spire. If that is so, the body of the walls is Early English.

Cottingham took down Hamo's work and the wood and lead spire then existing, refaced the lower (the E.E. work) and added the upper part as we see it now, painful in its smoothness and shallowness of moulding, and with its four dreadfully disproportionate pinnacles.

To alter Cottingham's work by new mouldings or reduction of the pinnacles or in any other partial way, would be expensive and still leave it unsatisfactory, and I therefore suggest the entire removal of his work and its replacement by new facing to the lower part and an entirely new storey above, with a short spire of wood and lead reproducing its main outline something of Hamo de Hythe's work, which is shown on several engravings...all agree in showing certain features.

Engravings also show an arcading on the lower part of the tower, which has of course entirely disappeared.. it seems to me probably E.E. Possibly if Cottingham's facing is removed some traces of it may remain which would settle its date.

In the design enclosed...I have not endeavoured to keep exactly to his work...but one which while in keeping with the old design is adapted to the altered conditions of today. One of the main features of the original belfry was the somewhat small single window in each face, but I have put two of rather larger size as I consider the four small openings would not be sufficient to give free vent to the sound of the bells. In Bishop Hdamo's time there were but three bells, and they would not be rung, while now there is a peal of six.

TOWER PIERS Hodgson Fowler 4 June 1898 DRc/Emf/144 Evident from lightness of piers...a tall central tower or spire could not be built safely, but as Cottingham's work shows no signs of cracks or shrinkage, we may take it for certain that any weight not exceeding the present tower may be safely retained. There are some traces of slight movement in the N.W. pier which should be tested before any work is done.

SPIRE Hodgson Fowler 18 August 1903 DRc/Emf/144 ...will think over Mr. Foord's suggestion of steel rolled joists etc. and will consider if they will help us. But it is not lateral pressure that is any difficulty but dead weight. Cottingham's tower has stood very well and therefore if I keep to the same weight, or close on it, there should be no danger of crushing the four main piers which carry the Tower, but to increase the weight might affect them, as they do not appear to be specially well built, being cased with Caen stone with - I suppose - a core of rubble. This necessity of keeping the weight of the Tower and Spire about the same as the present Tower will of course prevent any additional height to the Tower shewn in my sketch, but the spire shewn is 6' higher than that of Hamo de Hythe's, being 160' from the Nave floor, while his is said to have been 154'. I think I will be able to raise the Spire still another 10'...Cottingham did not pull down all the old work and entirely rebuild, but only faced the lower stage of the Tower, leaving the walls only 2'9" thick. I hope in our new facing to add a little to this.

TOWER AND SPIREHodgson Fowler 8 October 1903 DRc/Emf/144I am sending :1) A perspective of the Tower and Spire2) Plans, elevations and sections, ¼" scale3. Report and estimate4) Summary of cost estimate prepared by my Quantity Surveyor

5) Letter from my Surveyor

TOWER & SPIRE Hodgson Fowler 8 October 1903 DRc/emf/144 Send herewith revised design for reconstruction of Central Tower with proposed spire. Previous design of 1898 was made somewhat severely simple in order to keep cost as low as possible, but revised design, while keeping to the same general features is improved and somewhat more costly.

All the old engravings of the Cathedral show an arcade round the lower storey of the Tower, and although they all vary in detail, mostly innacurately drawn, yet they show fairly well the general character of the work; this seems to have been Early English of same date as E. arch of Tower over present organ, and agrees with the lancet windows still remaining in three sides of Tower behind the oak framing that supports the bell chamber floor. Have therefore shown E.E. arcade with trefoil headed arches as indicated in one of clearest of the engravings. Belfry stage much as first designed but with extra richness in the window mouldings and carvings of cornice etc. Coats of arms rough indications only. The stone I propose using is Weldon - same as used in restoration of W. Front by Mr. Pearson.

Spire is made 11' higher than first design and would be nearly 20' higher than that of Hamo de Hythe, covered with lead as before, framing of deal like Choir and Transepts. Always danger of fire in wooden spire...have therefore obtained drawing and price for a spire framed in steel and with its boarding covered in 'Uralite' - a fire proof material made at Higham, Steel spire would also have advantage of being so thoroughly braced together it would be a dead weight on the walls; disadvantage - steel framing ought to be kept painted to protect from rust.

Mr. Savage's report of 1826 of exactly what was done to the Tower and his examination of piers extremely helpful...it shows clearly that there has been no movement or settlement in the piers since Mr. Cottingham raised the Tower, and as the weight of proposed new work will be less than the present work, there can be no danger in raising the Spire.

TOWER drawing undated DRc/Emf/144 Section through central Tower looking E, showing 'timber framework to carry the bells, so as to get weight low down, all apparently of fifteenth century' and stonework. Coloured pencil and wash on tracing. Good condition. TOWER weights 5 October 1903 DRc/Emf/144 from G.R. Boreham, Surveyor, 24, John Street, Sunderland to Architect. Herewith estimate of cost and statements of weights of present Tower and of what you propose The drawings of your last design have enabled me to make a better calculation of the weight and the present and proposed work is measured above the roof lines of the Nave, Choir and Transepts on the assumption that the work below will not be meddled with and the statement of weights shews it to be unnecessary. Cost: Have been extremely anxious to be on safe side and think have considered all exceptional circumstances likely to increase cost over ordinary work. The prices of stone in the schedules average about 11/-d per ft. cube, but since they were moneyed out, information came from builders at Wellingboro' which led me to modify and have deducted at end of bill 15% - to 1/6d per ft.....confident 9/6d average... The steel spire as proposed has the boarding covered with Uralite, and I send two samples. It is fire proof, and protects from heat in summer and cold in winter. It is made at Higham near Rochester and can be seen on the roofs of the works where it is used instead of slating. Tower with deal spire covered with lead (original design £4,200) £6,100 Tower with steel spire covered with lead on Uralite £6,270 Tower with oak spire covered with lead on Uralite £6.600

Estimate of of weights 1903 design in redwood 264 tons 16 cwts. """ oak 257 " 2 " """ steel 265 " 6 " all would bear reduction of 20 tons due to wind pressure.

TOWER 12 October 1903 DRc/Ac/20 Dean produced plan for proposed Tower and Spire prepared by Mr. Hodgson Fowler; Chapter agreed - to be forwarded to Mr. Foord with estimate.

FOORD BEQUEST 29 October 1903 DRc/Ac/20 Special Chapter Meeting: Dean had suggested to Mr. Foord that his donation be expended on erection new tower to design Mr. Hodgson Fowler; Mr. Foord approved, offered to defray any additional expense.

Design agreed 25 November 1903 DRc/Ac/20 Mr. Foord had fully approved designs; undertaken to pay full amount; Mr. Hodgson Fowler advertising for tenders for completion of work;

open space adjoining High Street to be used as builders yard during work; Corporation to be approached for sanction. Builders tendering 1 December 1903 DRc/Emf/71/10 List of builders to see plans of Tower view to tendering. Tenders 14 December 1903 DRc/Emf/144 List of tenders opened. S.F. Halliday £5,292, lowest of ten. Tenders Hodgson Fowler 16 December 1903 DRc/Emf/144 ... the Tenders well within limit; Mr. Foord (benefactor) accepts the lowest; W. Halliday of Stamford, a very good builder who, I feel will carry out the work well .. Tenders 17 December 1903 DRc/Ac/20 Lowest of tenders had been accepted by Mr. Foord: Halliday of Stamford £5292. Letter read from S.P.A.B. 'opinion of Society ... risky proceeding to re-weight ancient arches of wide span'. Letter to be forwarded to Mr. Fowler. Contract arrangements Chapter Clerk 4 January 1904 DRc/Emf/144 ... best that Dean and Chapter alone should be participants to the Contract and Mr. Foord's name should not appear. We already have his £5,000 and we may rely on him for the balance in accordance with his undertaking ... Contract 7 January 1904 DRc/Emf/71/12 Agreement between Dean & Chapter and Builder - S.F. Halliday of Stamford, for £5292; all works to be under direction of Hodgson Fowler; to be completed by 7 December 1904 or forfeit £5 per week thereafter ... Agreement Thomas Foord 11 January 1904 DRc/Emf/71/13 of Botley Grange - I hereby agree to pay the expense of the erection of a new Tower. Accounts 23 June 1904 DRc/Ac/21 Reported £2000 paid to Mr. Halliday, contractor, on account, for eretion Cathedral Tower; certified by Mr. Hodgson Fowler. Spire Hodgson Fowler to Chapter Clerk 25 Oct.1904 DRc/Emf/143 ... I am not surprised at Mr. Foord being disappointed with the Spire ("I could have stamped my foot when I first saw it" THF). I know all along he has wanted a high spire and the comparatively short one and covered with lead would not meet his ideas, but one has to remember that the old tower piers were not built for a high heavy spire. DEDICATION 30 November 1904 DRc/Ac/21 Dedication new Tower and Spire.

Payment contractor 3 February 1905 DRc/Ac/21 Letter received from Hodgson Fowler for expenses .. Intended inspecting Tower when balance would be due to contractor Halliday. Accounts settled 10 April 1905 DRc/Ac/21 Hodgson Fowler's account: £291.17.9d. paid; Builder F.S. Halliday £474.11s.8d. by T.H. Foord to whom sincere thanks extended. Survey Forsyth 14 April 1950 DRc/De/209 Report prepared for the Pilgrim Trust by E.C. Butler of W.A. Forsyth & Partners Above roof level some movement has taken place causing failure of the stone, the same is repeated to a lesser extent on the N.W. corner. Repairs are necessary to this stonework. Approx. £300 Survey Godfrey 4 April 1952 DRc/DE/209 In a previous report which you showed me the point was made that, when Cottingham refashioned the Tower he did so with very thin walls in order to keep the weight on the piers below to a minimum. It is important therefore that this part of the structure should be watched for signs of movement. Some small repairs were advised in the last report which you had from Messrs. W.A. Forsyth & Partners. The defects which I noted were some small cracks and spalling on the N.W. and S.W. buttresses. Survey Godfrey 4 June 1958 DRc/DE/209/IA(c) Cracks, spalling NE NW SW buttresses due rusting buried plates at end of tie rods. Unlikely to be overloading; stress from bell ringing or war damage. Non ferrous anchorage rods should be inserted. Godfrey to Dean 23 June 1962 DRc/DE/209/IV(b) Tie rods Before I took over in 1952 Dove Bros. had been doing stonework in Cathedral. Found Webb however to be conscientious builder..now to be no local choice, should be happy return Doves..know them well, prefer Norman & Burt of Burgess Hill. Heard work placed with Kentish Church Builders... Stone repair 25 June 1962 DRc/Ac/32 Estimates for stonework repair agreed be obtained. Tie rods 31 August 1962 DRc/209/IV(h) Structural engineer's notes on construction sequence below ringing chamber and all correspondence. Also all correspondence on costings. Tie rods 29 October 1962 DRc/Ac/32 Proposed shortly to take out iron tie rods and replace with non ferrous metal. Tie rods Work deferred for time being. 31 December 1962 DRc/Ac/32 Appointment of builder 24 March 1964 DRc/209/IV(t) Kentish Church Builders instructed to undertake work; acceptance, terms.

Stone to be identified 23 May 1964 DRc/DE/209/IV(e) Minimum stone to be used in replacement; takes time to become grey from yellow; not been able identify what stone used for refacing tower, looks one of Cotswolds not now quarried; seems to have surrisingly good weathering qualities. Nearest match Clipsham, eventually goes rather dull grey.

Stone identified 27 May 1964 DRc/DE/209/IV(e) Wilks, Gravesend stonemasons, say tower stone is Clipsham and from colour and texture of an exposed stone. They may be right. They have in stock.

Priority of work 21 October 1963 DRc/Ac/32 Architect regarded as priority removal of iron ties: estimate £2000.

Grant 2 December 1963 DRc/Ac/32 As result Architect's report Pilgrim Trust granted £3000 for repair of Tower. Instructed work put in hand immediately.

Builders 23 March 1964 DRc/Ac/32 Agreed Kentish Church Builders undertake work.

Damage to stonework 24 June 1964 DRc/DE/209/IV(e) Remember stonework NE corner cut away some time ago to allow installation fire hydrant; causing difficulty with bronze work; just enough room to get two bronze channels in, bolt together at corner, but unless remove and refix hydrant elsewhere not be possible build jointed corner of two pieces of bronze. Metal would project beyond stonework covered by hydrant casing. Let me know whether remove hydrant and build up corner stonework or rely on hydrant covering to protect metal.

Tie rods removed 26 October 1964 DRc/Ac/32 Iron tie rods, inserted about 150 years ago, which had started to rust, had been cut out and replaced with non ferrous ties. Pilgrim Trust donated £3000.

Survey Godfrey 21 April 1971 DRc/DE/209 Much work of repair has been undertaken since my Report of 1963. ... and externally the stonework of the Tower has been repaired and freed from the damaging buried irons of its tie rods which made the repair necessary.

Crossing ceiling Godfrey survey 21 April 1971 DRc/DE/209 The ceiling of the Crossing has still not been examined, access being difficult. History:

E. end: 1212-1215: 'As soon as the new work was sufficiently completed to carry its wooden roofs, the first two bays of the old presbytery were taken down and the transepts and crossing provided with floors by vaulting the crypt. The tomb of St. William was no doubt then set up in the north east transept (fixed by the record of bishop Walter of Merton's burial in 1278) where it seems to have remained until the destruction of the shrines by order of Henry VIII. There are differences of treatment in the upper parts of the walls of this transept which may indicate that the place of the tomb was covered in before the other parts' p.242 Arch.Cant.XXIII 1898

'..a similar window (to those in S.E. Transept with flowing tracery)(c.1342) seems once to have existed in the corresonding aisle of the north east transept, where John of Sheppey, who was prior under bishop Hamo of Hythe, afterwards founded a chantry at the altar there.'

'Hubert de Burgh, judiciary of England, reign Henry III, gave "the middle window at the shrine of saint William". The window here described, it is apprehended, is not either of the central windows now extant, but a window that was under them, the stone frame of which is to be seen in the wall without the church. It seldom happens that an inaccuracy can be pointed out in any delineation of Mr. Grose;..small mistake in his view of the "Tower of Gundulph" for upon the wall of St William's chapel..sketched the arches of three windows whereas it was a single window divided by two munnions. To the west of the window is a nich in which might be placed the statue of this imaginary saint. Considering the illustrious rank of donor, Presume window ornamented with coloured glass...'

p. 171 Memorials of Cathedral Church of Rochester Rev.S. Denne 1788

'the north-east transept was formerly separated from the choir by a screen of wood with Gothic arches...' p.331 W.H.Ireland A New and Complete History of the County of Kent Vol.IV. 1830

N.E. CROSS N. end Keene survey 10 October 1760 DRc/Emf/34 The Gable very ruinous, and tore to peices, must be a great part taken down, re work'd, fac'd with new Stone and new Cop'd. The Battlements want new working and Coping. The coinstones and facing of the two Towers at the Angles of this Cross want repairing and making good, and the tops reinstated as those at the East End. And the windows want new Jambs, moldings and Muntins, the present ones being decay'd and moultered away.

N E.CROSS Keene survey 10 October 1760 DRc/Emf/34 The sides of the N.E. and N.W. crosses and the N. side of the Body of the Cathedral behind this last mentioned Tower, want several parts of the facing to be repair'd but as great part of it is now not easily to be got at by reason of this Tower, it cannot be compleatly repair'd till the Tower is. But care should be taken to repair those parts that can be got at, where the stone is so decay'd as to admit and lodge the wet and thereby greatly encrease the decay of the Fabrick; Care should be also taken to Convey away the Water that falls between the tower and the Cathedral, which by being so confin'd between the buildings must greatly damage those parts where it is Suffer'd to lay. The battlements round in this part want also repairing and some new Coping.

N.E. & S.E. CROSSES ROOFS Keene survey 10 October 1760 DRc/Emf/34 The whole roof of the N.E. and S.E. Crosses was rack't and inclin'd considerably to the south, along with the south end of the S.E. Cross; those in the S.E. Cross were in all probability rackt so far out of their due place, that it was found necessary to take them down and reframe them - those over the Centre and over the N.E. Cross still continue in that inclin'd Situation, but by the Assistance of some braces may continue as they are till in some future repair it shall be found necessary to take off the Rafters, repair and frame them and restore 'em to their original and proper position.

On the East side of the N.E. Cross several sheets of Lead have Broke their Bands and slipt down out of their places; these should be immediately taken off; the Timbers examin'd and repair'd if found decay'd, the decay'd battins made good with new ones of good Sound Oak free from sap as Originally (not white deal as is the Practice of the present Carpenter employ'd), the Lead recast of the same thickness as before, relaid and well banded to the Battins. The rest of the Lead should be carefully look't over, and if any defective sheets are found, should be chang'd; tho in general it appears to be in tolerable condition and here I cannot help observing that the water conveyances in general have been most shamefully neglected in the care and attention that ought always to be paid to them, as on the keeping dry the building, greatly depends the Duration of its Materials. For the pipes and Gutters have been stop't, the water has overflow'd the Lead and run down the walls for a considerable time in many places, which has undoubtedly very much decay'd the Gutter boards, plates and rafters feet and some of the Principal Timbers appear by the Inspection that can at present be made, to be much decay'd at the Ends.

St. William's Tomb as reported in 1788

'The tomb, which consists of a large stone coffin of Petworth marble, adjoins to the north wall of the transept, and makes so mean an appearance as not to have merited the burin. Whatever decorations it may have had, these have been long since defaced, or pillaged; all that remains is a bar of iron upon the cover, which, being in the form of a palmer's staff, serves to denote the class of person here deposited...is loose, as if an attempt made to wrench off..would probably have been sold to John Wyld, a shoe maker in Rochester, who purchased all the ironwork torn from the monuments in this cathedral by the church refomers of the last century' (Dean and Chapter's answer to Bishop Warner's Articles of Enquiry, Sept.12 1662).p.170 Memorials of Cathedral Church Rochester.Rev.S.Denne 1788

'(in the crypt) Under the chapel of St. William may yet be traced a hole in the ceiling through which the monks worked the machinery of the miracles performed at the shrine of that saint'

p.19 C. Spence A Walk Through Rochester Cathedral London 1840

Staircase in Gundulph Tower 1788 '...regarding winding staircase, it might ultimately lead to upper works of the Tower but doubtless for apartments adjoining St. Williams Chapel in two stories of which chimneys still to be seen..' Memorials of Cathedral Church Rochester, Rev.S. Denne, 1788, p. 173

Transepts to eastern extremity Alexander survey 1799 DRc/Emf/38 This roof subject to same observations as other part of Choir ... A great many of the Quoins of the Buttresses of this N. and E. aspect have been repaired with grey bricks, which has not added to their strength but given a bad affect; they would be better if the Angles were taken off upon a splay like the stone work below them; E. end is in tolerable condition except stucco in the three blanked windows, which had better be recast. £194.

Choir N. Transept Alexander survey 1799 DRc/Emf/39 Roof of this part is same as over the Choir, and I have estimated accordingly. The N. gable end is in very good condition but wants a new door and frame. The Parapet requires nothing to be done to it; re lay the Coping. This N. end below the cornice of the This N. end below the cornice of the Battlements is of the same rag and flint stonework as the rest, and admits of no repair. Rebuild and raise the Parapet on the W. side with new Coping. There requires no parapet on the E. side as that adjoins the lead flat. The Parapet and Battlements round the little lead flat which adjoins this Transept at its N.E. corner are dangerous and should be rebuilt. The buttress tops are in tolerable condition. The work below is of a bad soft stone which has been stucco'd and has failed in its effect to prevent decay on the surface; indeed, when the materials of a Wall are soft in themselves, and have once been exposed to the action of the atmosphere, no Stucco will prevent decay; nothing can be done but to let it take its own course

Roof of Chapel east of this Transept is a lead flat under the upper windows of the Chancel; although this lead flat is not very good, there does not appear to be any necessity for re-casting; as to altering the form of the Roof from a flat to a sharp pitch, that would be very expensive. New lead flashings should be put into the parapets where they adjoin the flat, and the several gutters repaired. The windows below here have been quoined up with Brick; when repaired should be renewed with stone.

Stonework of the windows of the E. front here are in a very rough state and nothing can be done, but at a future period, when they are

...

should be repaired and painted.

more decayed, to rebuilt them. The leaded glass and iron work

The leadwork of the flat roof over Entrance, or Chapel west of N. Transept is in very bad state. The floor of this appears to me to be rotten, it should be new and lead re-cast and relaid. This Roof lying lower down between Choir and the Keep gets very little air, the consequence of which is, it is perpetually in a damp state; this decays the Timber more than any other cause. There is not height enough for this Roof to be raised and slated, else this in the end would be the cheapest way. £317

CHOIR TRANSEPTS Alexander survey 1799 DRc/Emf/39 Those parts of the Transepts adjoining and of the same nature as the Choir require no internal decorating until the Choir is done; at that time also all that can be done to Chapel adjoining N. Transept is simply whitewash, and that part forming the Entrance to the S. Transept, towards Chapter House, will admit of some decoration also.

Nineteenth century

N.E. Transept Jan. 1825 to Feb. 1829 DRc/Emf/135 Roofs repaired, gutters renewed and releaded; coping stones put on where there are none. Some new windows opened in the roof of the Choir.

The wall built up over the gateway leading to St. William's Chapel and reaching to the ceiling of the roof taken down.

St. William's Chapel 30 June 1829 DRc/FTv/184 J. Jarvis: building up doorway and making good plastering in St. William Chapel. mortar, lime, hair: 2 men 2 days

St.William's Chapel - glass screen 10 Dec. 1867 p.162 DRc/Ac14 Ordered that a new glass screen be affixed in this Cathedral Church for £67 according to Plans and Spec. (No.1) of Messrs. Foord & Sons.

Proposals letter from Scott 26 June 1867 DRc/Emf/136 I would not throw these Transepts so completely open to the Choir as they now are ... ancient landmarks must be respected, and as the Choir with Presbytery eastwards should be clearly defined in their boundary lines..should draw these by means of a light iron screen or grille across the arches leading into the Transepts. Would require no seats but chairs should be placed in Presbytery to E. of stalls. In Transepts, however, benches might be used if preferred.

SURVEY Scott 20 April 1871 DRc/Emf/65/1 ... Eastern portions including N. and E. Transepts, Choir and Presbytery with their aisles and chapels are, throughout, of fine Early pointed architecture, and though sadly mutilated and decayed, their design is in the main intelligible. I propose that these parts shall be completely restored retaining all old work which is sufficiently sound following old design in every detail which remains, and using one's best judgement in restoring those parts which are hopelessly lost.

'Externally the work consisted in the first place of the restoration of the north sidethis part was terribly decayed...'

'The design of the gabled roof which formerly existed over the east side of the eastern transepts, was discovered by my son Gilbert, and has been restored to the north transept. There is a confusion of design in the windows of this transept, owing to my having left the jambs of some later windows which had been inserted there'.

p.350 Personal and Professional Recollections of the late Sir G.G. Scott, G.G.Scott (ed). 1977

Scott drawings Undated, uncatalogued at Kent Archives, Strood N.E. Transept, external elevation. Traces of window N.E. Crypt marked 'open out, restore windows side of Presbytery Crypt'. ¼" scale; pencil and wash; torn but good condition. No.4. Also 1½ scale jamb and arch windows in 3rd stage. applying also to window in Transept aisle and Presbytery. Purbeck cap.; clerestory windows at E. Transept plan and section; Crypt windows of Transept and Presbytery, plan; Presbytery windows E. end and N.E. Transept. Drawn G.PL. White; signed G. Scott.

N.E. Transept Chapel: E. elevation exterior. Interior elevation and section of gable window. N. elevation; plan showing roof and gutter; sections showing gutter detail. $\frac{1}{2}$ "; pencil and wash; signed G. Scott

Presbytery N. side external elevation: buttress B between two pairs of windows, plan. E. side N.E. Transept aisle. 4' to 1". Pencil and wash. Numbered 3.

Roofs Hodgson Fowler 4 June 1898 DRc/Emf/144 Next work should certainly be the raising of the roofs of the Choir and E. Transepts to levels of gables shown by gables erected by Sir Gilbert Scott. Present roofs appear quite sound and of good quality timber, so might all be retained and merely raised in same manner as those of main transepts have been. S. gable of E. Transept would require raising to same pitch as others.

Twentieth century

Stair turret 31 March 1907 DRc/FTv/237 G. Baker: repairing steps N.W. Turret of N. Choir Transept £2.1s.

?Treasury October 1909 DRc/FTv/240 West Bros: removing cupboards from lobby, repairing, colouring walls yellow, repairing floor, converting cup'd into glass case for Cromwellian relics, internal fitting

Roof 1914 Temple Moore Emf/135 The upstanding gables built by Gilbert Scott are suffering considerably from being exposed on both faces for so long, and present low pitch roofs require repair without delay. At same time alteration will be necessary to lines of high gables at east end and north end of north choir transept as when tower was rebuilt (Cottinghan) the water table on its eastern face was set at a lower angle than the later Scott gables.

Survey 1914 Temple Moore DRc/Emf/135 Good deal of settlement generally, effects of which evident in piers in Crypt beneath, but appear old and no movement going on now. In this and other parts of Church, intend placing cement straps across fractures, and to examine from time to time to tell us whether still active and to what extent.

Roof E.F. Cobb June 1921 DRc/Emf/135 Existing low pitched roofs are in such need of repair as could only be done effectively by stripping and relaying the slating and the lead work in valleys, ridges etc. The time is at hand when the long delayed raising of the roofs to the pitch of the high gables ought to be carried out and the opportunity taken to renew decaying timbers. The raising of these roofs will produce a structural improvement in addition to the aesthetic, since the lofts will become better lighted and ventilated and timbers less likely to injury from leakings, often discovered due to driving rains on the low pitched slate roof. Suggest new covering of slates in graduated courses either green Westmoreland or grey from the Delabole quarries.

Roof 5 November 1931 DRc/FTv/247 Repairing leak lead gutter to roof E. side

Vaulting repaired 15 July 1948 DRc/FTv/258 A.G. Webb: repairs vaulting. Certificate: £150 18 December 1948 DRc/FTv/258 A.G. Webb: repairs to vaulting; certificate. £160.11s.2d.

Stair turret Godfrey Survey 4 April 1952 DRc/DE/209 Angle of N.W. staircase turret. Quoin stones are spalling and losing their bond with the ragstone walling, close to the base. This work should be done.

N.E. transept walls Godfrey Survey 4 April 1952 DRc/DE/209 Joints in coping of eastern parapet (N. of Treasury roof). W. wall of this Transept, N. Choir Clerestory wall and E. wall of N.W. Transept all have hard strap jointing in good order.

Smoke stack Godfrey survey Sept. 1963 DRc/DE/209 The smoke stack on the W. wall of the N.E. Transept is badly cracked in its top section and in the third length from the top. This is not going to damage the structure, but it will have to be renewed and such periodical reneweal is costly. Before it is done the question of an alternative material to iron should be considered.

N.E transept N.W. turret Godfrey survey Sept. 1963 DRc/DE/209 This is main access to roof and ringing chamber. Considerable

cracks in its walls. Advisable to point up these cracks deeply and observe whether they become affected by any further movement. N.E. transept N.E. turret Godfrey survey Sept. 1963 DRc/DE/209 Also contains cracks (quite normal in turrets) Point up cracks 24 July 1964 DRc/DE/209/IV(e) Treasury Agreed by Chapter to use as Lapidarium; Plan: 12"-1" External stonework 2 March 1967 DRc/Ac/32 Friends agreed to clean and repair N. face. 27 November 1967 DRc/Ac/32 Cleaning continued with N. Transept N. and W. walls 21 November 1968 DRc/DE/209/(b) Kentish Church Builders: repair and washing faces, raking out deep pointing, removal rusting ironwork, tipping with bronze saddle bars not iron or non ferrous, painting them. Stonework washing and repair estimates 27 January 1969 DRc/Ac/ N. face of N.E. Transept £2210 E. face of N.E. Transept £1170 Friends be asked to undertake work on the N. face of N.E. Transept. Agreed total of this could be carried out in one year N.E. transept high roof Godfrey survey 21 April 1971 DRc/DE/209 E. parapet - vertical joint open. Fill joint N.E. transept windows Godfrey survey 21 April 1971 DRc/DE/209 W. window. Glazing contains dozen cracked panes and 2 holes Renew Treasury window 1 December 1977 DRc/DE/209/IX(k) Goddard & Gibbs: Remove from stone 1 leaded light, supply & fix new tie wires, refix 1" bronze saddle bar No.6 section. Analysis ancient woodwork 23 November 1980 DRc/DE/209/XII(c) Cecil Hewett: .. Norman door leaf is at N.E. of N.E. Transept; it was Romanesque (wrong shape for E.E.) and was used to form a 'foundation' for the E.E. leaf; go inside and close door and you are in presence of a complete one - possibly Gundulph's E. end? Treasury - return of Pall chest 26 April 1982 DRc/Ac/ Architect confirmed practicable for it to be returned to Treasury: agreed work be undertaken 26 April 1982 DRc/Ac/ Public access: architect accepts that could be provided and a window opened to give a view of Cathedral Quire ... Pall chest removal to Treasury 25 May 1982 DRc/Ac/ Estimate £750 received from Architect. Second quotation be obtained local firm 30 June 1982 DRc/Ac/ Estimate £310 from T.M. Pattenden accepted: work to be put in hand

ST. JOHN BAPTIST CHAPEL (N.E. Transept)

Contemporary comment

'The pavement of this chapel is curiously tesselated in several places, particularly towards the east...we must not quit this chapel without noticing the beautiful figure of Moses standing under a croketted canopy, holding the tables of the law in one hand, rod in other, which, with the fragments lying near, were taken from above the figure of John de Shepy in 1825. Once elaborately painted and gilt, and probably formed part of ancient tomb of Walter de Merton ..' p.17 C.Spence W Walk Through Rochester Cathedral London 1840

Irvine 8 January 1876 DRc/Emf/77/14 Sketches of old ironwork and iron railing in arch on E. side of N. Transept.

7 June 1958 DRc/DE/209/Ia(k) Taking up loose slabs in floor and relaying

Estimate 28 October 1966 DRc/DE/209/V(g) Proposed alteration: take up tile paving, cut away existing wrought iron railings and stone cill and re-position in line at rear of two columns; construct new 9" thick brick wall beneath in stock bricks plastered on front, lime plaster filled behind with hardcore and 4" thick concrete; re assemble tile paving..to new raised floor level...between front new wall and back existing stone curb cut and lay York stone slabs. £300.

Proposals 26 December 1966 DRc/DE/209/V(g) Canon to Godfrey: Chapter decided recently to effect certain repairs, same time make more useable; ancient tiling in front of rails very bad condition, no doubt with assistance of stiletto heels of lady visitors..agreed tiles should be lifted..those in good repair to put down again..

11 February 1967 DRc/DE/209/V(g) Godfrey to Canon: re proposals for repair of ancient tiled floor and increasing accommodation.in seventeenth century floor of Chapel raised, presumably to give room for Warner family burials between it and vault of Crypt below; memorials now leave little room for aisle to be used as chapel; suggest reduction height of altar to display console brackets on monument. Proposal Chapter wishes to adopt is to lift mediaeval tiling and raise..if the sixteenth century rail and gate (moved to that position in 1681) were taken out and reerected on Transept side of archway, there would be space for two or four chairs. Examples of these tiles are illustrated in colour plate IV St.John Hope, also drawing. Tiles piece of valuable evidence of original floor level and being still in place add intrinsic interest; nomal archaeological practice retain exact position; however enclose sketch if Church decide improved accommodation necessary.

1840

16 February 1967 DRc/DE/209/V(g) Canon to Godfrey:..definitely want to proceed with proposal, modified in accordance with last four paragraphs of your letter..feel question of tiles remaining at present level rather academic compared with bringing chapel into use bearing in mind another section of tiles in next alcove to north which remain to give evidence of original floor level.

ARCHAEOLOGY C.A. Ralegh Radford 12 April 1967 DRc/DE/209/V Steps under arches leading to chapel. retain original paving. Must originally have extended over whole of chapel, but main part destroyed in 17th century when floor level of chapel itself raised to accommodate burials of Warner family.

This surviving original paving consists of small carpets of tiles divided by strips running e. and w. and formed of larger tiles. The carpets are formed of mosaics of small tiles fitted together in geometrical patterns. The small tiles forming the mosaics were originally glazed black and yellow possibly with occasional use of red ground colour of the tiles to provide contrast. Traces of colour remain but appearance is much disguised by wear and probably dirt. Tiles also loose and suffering damage need urgently be reset. This form of polychrome floor decoration was in use only for a short period. Is very vulnerable to wear and usually replaced in later Middle Ages or after. In earlier 12th century polychrome effects on floor of a great church were obtained by use of contrasting stone, as for instance of white Chilmark and green Hurdcote in eastern extension of Cathedral of Old Sarum carried out by Bishop Roger (c.1120). Use of polychrome tiles arranged in geometrical patterns in small carpes was an attempt to imitate the polychrome marble pavements of Italian churches. Became normal in churches of Rome early 12th century. Best preserved example at Byland in Yorkshire where dates from last twenty years 12th century and formed original paving...Surviving examples at Rochester are original paving of this part of novum opus which was completed for use before 1214. A few fragments have been reformed and reset in S. transept of Rochester, not in their original position and no guarantee that but rearrangement follows original pattern.this form of tiling gradually displaced by ordinary slip tiles with figures and geometic patterns. Foreign workers in new methods recorded at Westminster 1237 on.

Most desirable these two stretches of pavement at Rochester be preserved in original position. Probably only example of this form of paving still in situ in a mediaeval church in use. Involve resetting and best if done at same time for both patches. Arguable patch in front present entry to chapel be further protected by glass floor. Possible resetting and cleaning of tiles will bring out colour and glass would protect this.

CATHEDRALS ADVISORY COMMITTEE report 17 April 1967 DRc/DE/209/V ..very little thirteenth century paving remains intact and undisturbed in England - while tiling in St. John's chapel has lost its glaze and most of original applied colour, continues to reprodue scale and arrangement derived from even earlier mosaic pavements. Danger loose tiles being stolen or dangerous. Removal to higher

level would associate them with seventeenth century mortuary arrangements inevitable also chairs would be placed on them. Recommend tiles re-laid present position but free stone nosing to edge of raised floor be removed and new substituted at expense of removing the band half diamonds of black and white floor .. proposed that sixteenth century ironwork, placed here 1681, be moved new position westward of tiled threshold; could be re-set here without risk of doing damage...Ministry of Public Building and Works great experience re-laying early tiled floors; technicians oportunity re-lay adjoining similar section in NE arch here probably further section concealed beneath monument to Bishop John Lowe, moved to this site by Gilbert Scott centre of S. arch of N. Choir Transept...not thought lowering black and white marble floor would be costly..gain to utility and appearance considerable..hoped overlarge altar could be reduced in width as in fact interesting eighteenth century table could more appropriately be substituted. Further suggestion..very damaged Purbeck marble slab taken up from floor in centre of transept by Scott and believed by St. John Hope to have formed part of table of shrine of St. William, is not happily placed..occupies space in Chapel which could be used. Monument here been moved many times..now Merton monument restored to original site suggest remains of St.William slab might be placed in recess to west of Merton where possible custodian of shrine formerly sat.

22 May 1967 DRc/209/V(g) Canon to Godfrey: please send estimate cost of repairing tiles (in both sections) including re setting iron railings for submission Pilgrim Trust; also cost of making step into Chapel and lowering upper platform black and white marble; also removing Purbeck marble slab behind to be part of shrine of St. William to a place in recess west of Bish W. de Merton on some decent simple supports.

23 May 1967 DRc/DE/209/V(g) Godfrey: seeing chief architect of Ancient Monuments branch of Ministry of Public Buildings and Works re cost of re-laying.

Estimate 22 September 1967 DRc/DE/209/V(k) Kentish Church Builders £350.

Godfrey to Canon 20 October 1967 DRc/DE/209/V(g) Seen Min. Building & Public Works slides of repair of mediaeval tiled paving at King's Lynn; suggest bringing Foreman to Rochester.

16 January 1968 DRc/DE/209/VI(a) Canon Gripper..agree..removing stone dais and relaying at level of rest of floor. Railings should be removed and fixed in new position probably removing front row of tiles which are not ancient as was suggested..suggest cover tiles with firm thin wooden flooring which could be polished and covered with carpet preserving tiles in situ.

24 January 1968 DRc/DE/209/VI(b) Godfrey to builders: work is to commence on lowering the central platform. Take careful rubbing of existing paving stones, number before lifting for exact replacement at lower level. Nosing of stone border will have to be cut back so border can fit. Platform on which memorial stands on e. wall will not be lowered. Mediaeval tiles to be well protected; railings to be removed carefully prior to re-erection in new position. Ascertain whether medieval tiling coninues under present floor of Chapel. Stone table of shrine to be removed and re-erected in western recess at n. end of lesser transept.

Coffins 2 February 1968 DRc/DE/209/VI(a) Phone call from Canon Grippe..found coffins, digging round them at present.

8 February 1968 DRc/DE/209/VI(j) Godfrey to Bailey, M.P.B.W.: mosaic tiling continues apparently to about 5'3" from present step up and then there was a raised platform pretty well completely destroyed..to investigate further.

5 March 1968 DRc/DE/209/VI(j) Message: Cathedrals Advisory Committee strongly recommends chapel floor should be reduced to medieval paving level now that most of it been found.

15 March 1968 DRc/DE/209/VI(x) Cathedrals Advisory Committee advice: eighteenth century floor level be retained N. end: approximately to line of present excavation. Treatment of coffins and human remains discovered beneath seventeenth century floor would be to reduce to fine particles and re-bury within this raised area; inscribed lead coffin plates be preserved elsewhere on southern end, floor level masked by tiles could be re-covered back to e. wall, retaining sufficient projection to form plinth to 1698 monument to Lee Warner; black and white marble slabs could be re-used to pave that part of floor in which no thirteenth century tiles. Thirteenth century tiles would have to be re-laid but not re-surfaced. Carpet with underfelt sufficient protection at entrance...

22 April 1968 DRc/DE/209/VI(b) Chapter's instructions: carry out as quickly as possible setting in area of this chapel, filling in and restoring the floor to original level throughout, making step as arranged and putting the iron railings forward by the outer pillars.

27 April 1968 DRc/DE/209/VI(j) Godfrey to Min.Public Building & Works: had hoped Dean and Chapter might have waited for offers finance to restore medieval level their interest does not exceed their desire to get Chapel back into use; have had to accept instructions to have floor put in at the level midway between first floor and last one.

Washing tiles Godfrey to builder 27 April 1968 DRc/DE/209/VI(b) Confirm instructions..wash off carefuly medieval mosaic tile pavement at present uncovered..photograph obliquely and square all of it before covering with polythene and carrying on with filling in of floor. Reinstatement of floor in accordance with Canon Gripper's letter of 22 April should follow immediately. Also confirm that marble paving is to be cut back for the half of one more piece at the entry, so that upper step may be a stone border to the paving and form a better tread than the cramped-back riser or edge which was previously intended. The intermediate tread will divide height of present step equally and its riser will be on line of present riser. Base of Lee Warner Memorial on east wall to be made in manner discussed and as sketch left with Mr. Dartnell. Repair of medieval tiling in entry and refixing of railings will be postoned till this work is done by the Ministry or on their advice. Until that time tiling should be very thoroughly protected.

27 May 1968 DRc/DE/209/VI(b) Portland stone base to the Lee Warner monument may be ordered.

Dean to Godfrey 31 May 1968 DRc/DE/209/VI(a) Have heard from C.A.C., will be happy when we are able to do full job.

4 June 1968 DRc/DE/209/VI(b) Kentish Church Builders: instructed better photos should be taken of exposed medieval tiling under floor, particularly in northern half of trench to be done before covering with polythene and filling back. (Medway Picture Agency 2 sets enclosed and transparencies).

D. & C. to C.A.C. 25 June 1968 DRc/DE/209/VI(x) After serious thought following reasons for not accepting advice...our architect is very disappointed that we feel this is the only line of action at present, but he is comforted by fact that we hope to do the work eventually.

4 July 1968 DRc/DE/209/VI(b) Norman & Burt: supplying 2 rubbed York stone steps; two course rubbed Portland stone plinth.

Figure in Chapel 16 August 1968 DRc/DE/209/VI(a) Remove stone effigy, spray wash and return. It was proposed to resite in eastern most recess s. wall Presbytery; stood originally in N. turret w. front - consider should be in a standing rather than recumbent position

Dean to Godfrey 30 August 1968 DRc/DE/209/VI(a) Have written to Cathedral Advisory Committee explaining why we feel we cannot do as they suggest at this moment.

FLOOD 20 August 1969 DRC/DE/209/VI(a) Cathedral flooded this a.m. Jesus Chapel completely. Chapter Clerk phoned - has been on roof; thinks most of water came down fire main pipe, but quite a few places where water could get in if it is left on all night again. Godfrey to Clerk: relieved to hear flooding of St. John's Chapel did not do damage.

NORTH WEST TRANSEPT

History: Walls: 'Builders Richard of Eastgate..and Thomas of Meopham, estimated dates of construction between 1240 and 1255 work shows marked advance on presbytery.. Transept divided into two bays by vaulting shafts which rise from floor. On east space south of vaulting shaft taken up by William of Hoo's arch into quire aisle, plainness relieved by bold dog tooth ornament of soffit...space north of vaulting shaft filled by wide pointed arch opening into space between transept and Gundulf's north tower, which has been vaulted over and converted into recess for an altar...recess has a Purbeck marble step at entrance on which formerly stood a screen, probably of stone. In east wall is a drain and cruet shelf. Eastern clerestory has no windows owing to presence Gundulph tower outside, blind wall is plainly arcaded. North wall: contains doorway, pointed segmental rear arch with

marble jamb shafts..above three lancet windows ..marble shafts. West wall: N.W. pier of crossing, bases of which alread laid was included in building west side of transept. Clerestory four lancet windows, open screen in front of wall passage.'

..p.255-259 Arch.Cant.XIII 1898

'the two northern bays of the east wall occupied by a wide and deep recess, arched ceiling of which rises to within 3-4 ft. of clerestory level. Outside shafts and those from which central ribs of the ceiling used to spring have all gone, though caps remain. Within this great recess on the right a small one with side shafts containing piscina. On left is window rises only to half height of pointed arch within which inclosed. One time general belief that this recess was site of parochial altar of St. Nicholas which may have stood here during short time between completion of north transept and new work at east end of nave..Registrum Roffense states after a dispute the altar was removed to its position before the pulpitum in 1322. History of Antiquities of Rochester quotes a will suggesting an altar of Jesu stood on this spot.' p.74 Bell's Cathedral Series 1897

Ceiling: 'Although preparations had been made to vault north transept, could not be done until arch to crossing built. Eastern arch already in place having formed part of William of Hoo's quire, as also north east pier, north west pier too completed, but south west one only begun...vault when built was octopartite, of two bays with logitudinal transverse diagonal and wall ribs..carved bosses at intersections of ribs'. p.261 Arch.Cant.XXIII 1898

Eighteenth century

Ironwork 30 October 1712 DRc/FTv/45 Simon Lambe, smith, bill...new key for padlock at N. dore of Cathedral church...

SURVEY Keene 10 October 1760 DRc/Emf/34 Several of the Column shafts that adorn'd the windows of this end have from time to time, being decay'd, being taken, or drop't down, and the remainder of 'em are in so 2uI&'5s a Condition that they should be taken down to prevent their falling.

The handsomest way of repairing this end will be to reinstate the Columns and dressings to the Windows as they were originally. But if the expence of this method should be Sufficient objection, it may be done in a plainer manner by omitting the Columns and their consequences; and in the place of their Capitals, put in a projecting Corble; according to the Stile of the Building to receive the Springing of the Arches.

NEW PORCH at north door 24 December 1781 DRc/FTv/140 F. Patten: ¹/₂ day Mason cutting away for carpenters to fix their Porch at N. Door of Cathedral 1s 6d December 1781 DRc/FTv/139(I) E. Harrison: 12 days to the poarch; 40' batting; 58' deal, etc. 14 February 1782 DRc/FTv/139(I)

E. Harrison: 3 days hanging the Curtain and alltring the poarch.

SURVEY

Alexander 1799 DRc/Emf/38 Inside fabric of N. and S. Cross Aisles and also immediately under the Tower does not want immediate repair on columns. When it was whited last the little Pepworth Marble pillars were coloured like the rest of the building, which I think would be better left in original state like those now in Choir.

The regular panels in the Arched Cieling formed by the intersection of the Mullions were likewise bordered by black stripes on each side of them, the effect of which is harsh and unprepared, especially when contrasted with the whiteness of the panels; it forms the mullions into nothing more than an even white flat stripe, whereby we hardly perceive that they are projecting Moldings. When coloured again, I conceive the little Pillars should be left in their native state, and the intervals or plain parts between them of a mezzotint between these pillars and that already intentioned for the Mullions in the Cielings, as before noted.

Nineteenth century

REPAIRS Cottingham Jan. 1825 to Feb. 1829 DRc/Emf/135 .. Interior repaired in part.

WALLPAINTING uncovered

'The arch to the east of doorway was cleared of masonry in 1840. A large figure, in distemper, of St. Christopher bearing the Infant Christ was then uncovered, but only to fall away as the air was admitted to it. Miss Stevens, daughter of the dean, made as complete a copy of it as possible, as stone by stone was carefully removed to disclose only a small piece at a time, and her drawing with a note by Mr. Spence, is preserved in the British Museum' p.75 Bell's Cathedral Series 1897

RESTORATION tender Scott 26 June 1872 p.382 DRc/Ac 14 Mr. White's tender for restoration of N. Transept of Nave...to Scott's specification - £2741 - be accepted.

Triforium notes in back of book of Irvine undated DRc/Emf/77/131 ...two passages from Triforium of Transepts to Church, in E. piers of Tower, built up; others had been long before about 1793. In 1853 Mr. Ashpotel in his papers says that the late Mr. Essex was employed about sixty years back in executing some repairs.

Twentieth century

JESUS CHAPEL restoration 9 May 1923 DRc/Ac/27 Balance £600 outstanding; sunmission for Foord Bequest: .. Jesus Chapel be renovated, restored..

Cleaning and decoration agreed

15 January 1924 DRc/Ac/27

19 September 1924 DRc/Ac/27 Special Chapter: Cobb attended discuss plans completion of work and erection of altar there. Lethaby to prepare further plan.

WALLPAINTING AND DECORATION ?Cobb undated unnatributed typescript Cleaning and preservation of decorative work on walls and vaulting: In areas specially pointed out by the Architect clean the surface with methylated spirit applied with small flat brush (1" varnish brush). Greatest care to be taken not to disturb or damage old work.

The wax: Beat white beeswax (Boots 2'\$¶ \$[#00 thinner than that of cream. On loose edges of plaster or stone employ wax at about consistency of soft putty. Work well into cracks and loose edges with fingers or thumb. Such work to be done previous to spraying or brushing over the whole surface. Where polishing is required, as on marble, let the waxing stand for a week or longer (using less oil and turps) the result will be a better polish and harder surface. Rub with a soft rag. Oak: Soak with turps mixed with 5% paraffin and afterwards apply wax. Stop all cracks and insect holes.

REPORT Cobb to Chapter Clerk 22 Oct. 1924 CCC Foord Bequest: Whole of vaulting has been cleaned by brushing, and in part with methylated spirit and then coated with a preparation of wax to preserve the colour and to bind flaking surfaces. The solution was applied to the yellow band only on the soffite of the arched ribs. The ridge rib was coated all over. Some cracks were filled in. The whole of the walls, recesses and mouldings, string courses were thoroughly cleaned and examined in hopes of finding colour decoration - negative results. Broken and crumbling plaster repaired and afterwards distempered, in particular on walls of Clerestory, which were very stained and dirty. Stone slabs have been placed upon the benchings in the arched recesses at the base of the N. wall of the Transept.

The marble shafts, caps and bases which had been covered with paint and distemper cleaned and repolished. Several loose lengths of shafting have been made fast and eight missing stay irons replaced

by new banded to the shafts. Stay bars to shafts, saddle bars to windows, and other ironwork, painted. A portion of the window in Altar recess has been fitted with an opening light for ventilation. Mural tablets to Samuel Baker, F.W. & H.L.C. Robinson removed to N. Aisle. William Cayley's monument taken down has not been refixed. Upper part of Caeser Monument found to be in very loose condition due to iron cramps having rusted and mortar perished. Repaired, copper replacing iron. Expenditure on work undertaken at cost to Foord Trustees amounts to about £300 - understand Chapter responsible for cost of any fittings and furnishings they may decide to add. Archdeacon and Prof. Lethaby are obtaining drawings and patterns from Mr. Watts for hangings for the Altar now stored in the Crypt, in front of it is proposed to place kneeling benches similar to those in Lady Chapel. Proposed to suspend four electric light pendants from Clerestory passage to light Transept and incidentally the crossing beneath Tower and portions of Aisle. Scaffolding to be re-erected in S. Transept.

SURVEY Godfrey 4 April 1952 DRc/DE/209 There is some stone and plaster repair necessary behind the arcade, which should not be delayed too long. This is dealt with under Plastering below.

West wall Godfrey Survey 4 April 1952 DRc/DE/209 One free standing shaft has perished badly. It appears to retain sufficient substance for safety, but should be watched.

Plasterwork Godfrey Survey 4 April 1952 DRc/DE/209 There is some plaster repair needed in the Clerestory, which could be undertaken as a separate operation. Some consolidatiof!'&VAULTING 2 November 1967 DRc/DE/209/V(k) Small fall of chalk; point of impact not clear and exact position from where came not clear. Believe some of these ribs of vaulting are of stone and panels between are of chalk, has happened on a previous occasion. Important point of origin of fall be examine. Please arrange to examine, may need to rope area off. Kentish Church Builders inspected through binoculars; no evidence of serious movement.

Bill for repairs 16 January 1968 DRc/DE/209/VI(b) Kentish Church Builders account: £319, 358 hours craftsmen; 3 tons 2 cwt. brick, mortar, sand.

SURVEY

Godfrey 21 April 1971 DRc/DE/209

E. arch (at low level). One stone missing from inner order in S. half of arch. Keep under observation Arch above John Parr memorial we took off a large piece of plaster make-up from the label. Keep under observation

Vaulting Godfrey survey 21 April 1971 DRc/DE/209 It is more than 20 years, ie before my time, since the vaulting of the N. Transept and its stonework has been closely examined. This should be done and if the oportunity can be taken to improve its appearance in the way that appearance of the Nave has been transformed, so much the better.

Clerestories Godfrey survey 21 April 1971 DRc/DE/209 Nor will I repeat in full my observations on the Clerestory walks. It is evidence of the 'aliveness' of a Gothic building that the corbels between the inner and outer skins of its walling stand very little chance of remaining uncracked, and such cracking has occurred in Scott's restoration of the E. end. ... the corbels altogether. Such aliveness does however require observation of movement and reference is made to this, both in regard to the walks and to the vaults.

Budgetting approximate estimates N.W. Transept interior £3500 9 June 1971 DRc/DE/209/VII(a)

QUINQUENNIAL REPORT Godfrey 22 November 1971 DRc/Ac/ ...although fabric in generally good condition,... With help of Friends following items should be undertaken in this order: a) Interior decoration to N.W. Transept..

Cleaning estimate 24 January 1972 DRc/Ac/ ..by architect would cost approx. £3500, asked to arrange to be done..

Redecoration Estimate £5611

*

16 February 1972 DRc/DE/209/VII(bd)

Chandelier 22 May 1972 DRc/Ac/ Archdecon offered give a chandelier for N.W. Transept memory his parents; agreed design ...

NEW CHAIR STORE west wall 7 June 1972 DRc/De/209/VII(m) C.A.C. to D.& C.: no hesitation approving proposal to go through medieval bench to form doorway; indeed medieval builders done so to form N. door; arch proposed by Mr. Godfrey immensely suitable; brass tablet there be moved: consider elegant and satisfactory solution.

12 February-August 1972 DRc/DE/209/VII(h) Construction correspondence; archaeological dig in graveyard prior to work (k, 1) 3 chalk lined graves only found. 3 July 1972 DRc/DE/209/VII(a)

Commencement of work Norman & Burt. (Note: all correspondence removed from file 3.2.90 for Martin Caroe)

Stone sample from vault 24 July 1972 DRc/DE/209/VII(t) Godfrey to Dimes: small piece of stone taken from a vault rib..more hard than normal Reigate type firestone, although moulded, ?Kentish rag RESTORATION: Site visit 1 29 July 1972 DRc/DE/209/VI(b) Vaulting: plaster in fair condition: samples taken for submission BRS to determine nature of ochre coating Purbeck marble covered with wax like material removable by white spirit or possibly radiant heat. Experiments for method to be used for cleaning Vaulting: no traces of medieval painting likely to be found beneath present paint and plaster Bosses: colour to be used Cryla by Rowney Principles: vaulting between ribs to be limewashed: ribs to be left as natural stone, etc. Defects in stonework: roll mould of rib W. of lst free boss from S.:

3' removed remainder sound; 2 ribs of this boss stone cracks of long standing: skew dowel as precaution; wall rib N. end large spall to be removed.

PAINTING CONSERVATOR'S REPORT 29 July 1972 DRc/DE/209/VII C. Rouse: Main work of transept well-developed 13th century but vault, and in particular foliate bosses may be later. Plastering presents some curious features; considerable admixture of hair, colour of plaster unusually white for medieval work; hair does not generally appear before 1500 or so. One or two places thin coat of limewash runs under the plaster layer, suggesting that plastering itself may well be 17th or 18th century; removed surface in several places, no trace of colour or any older surface beneath. At some time masonry lines been drawn in pencil over this surface and on exposed stonework of vault web where exposed by plaster failure; must obviously be very late feature. No attempt ever made to paint them, and not in every compartment. Whole surface been coated with dark toned beeswax, which has run into plaster failures, both unsightly and will prevent limewashing. Can be removed from some of ribs fairly easily, but not elsewhere. Treatment: essential to remove wax entirely. Suggest painting

Treatment: essential to remove wax entirely. Suggest painting Nitromors..stippling action to disturb surface. Should enable wax to be removed with cotton wool swabs of white spirit, but asno paintings involved treatment can be fairly drastic. Final cleansing essential, acetone or mixed with white spirit. If wax in hollows diffiult to remove, suggest replastering such areas. Vault excluding ribs and bosses can then be limewashed.

Ribs and bosses: do not recommend colouring stone ribs after cleaning. Bosses should be fully coloured and gilt. Notes were taken of existig colours (I think 17th century) and some modification on lines discussed. Would prefer use of a Cryla Colour (water vehicle light emulsion by Rowneys) rather than oil on stonework.

RESTORATION Site visit 2 3 August 1972 DRc/DE/209/VII(b) Little success in removing waxy application from webs of vaulting. Crack: N.E. corner clerestory E. wall. Long standing, not significant. Tell tale to be fixed Corbel: E. Clerestory: not structurally significant; precaution necessary to prevent parts detaching. Delta plate to be fixed to underside bolted vertically through top of it. Tie rods: clerestory shafts: to be overhaulted replace missing with Delta rods RESTORATION Site visit 3 12 August 1972 DRc/DE/209/VII(b) Washing by spray started. Webs: method not yet found removing wax-like surface decided to paint over it. BRS reported not in fact wax not yet established what: if possible to prepare for limewash would prefer BRS to investigate. Bosses: note of existing colouring complete; removal of paint therefore to proceed.

GEOLOGICAL ASSESSMENT 16 August 1972 DRc/DE/209/IX(x-z)F.G. Dimes, Geol. Museum to Godfrey: ..small piece stone taken from vault rib..coi(1176), rebuilding Westminster Abbey (1252), Hampton Court (1520)..In fourteenth century quarries so important worked exclusively for Crown; use prohibited except for royal or ecclesiastical buildings. Not very durable, soft, easily dug, hardens on exposure to air. Found near Merstham, Reigate, Gatton, Godsone. Have on record that Caen, Chilmark and Weldon stones were used for repairs in 1892..

Purbeck shafts 18 August 1972 DRc/DE/209/VII(b) Removal of wax: wood scraper recommended.

RESTORATION Site visit 4 26 August 1972 DRc/DE/209/VII(b) Washing vaulting and clerestoreys completed. Carved heads cleaned Sepiolite method; 2 cracks at springing of vaulting ribs E. wall examined in front roll moulding; Precaution: northern case, roll to be stitch dowelled through fillet into sound stone; southern crack considered secure.

Chalk vaulting: where spalled, depth of each affected block to be ascertained; if firm bearing could remain - otherwise new blocks to be let in from above; each case on merits. No attempt to be made to make up patches which had spalled. Ensure no insecure pieces left in vaulting.

Boss: Boring for chandelier cable at central boss; 1" hole internal dia...directions

Ribs: different coloured stone. When stones dried out colours in vault ribs would not be sufficiently different to warrant camouflage. Dark joints and cement make up would be camouflaged in lime.

Shafts: Purbeck - rub up existing waxed marble and camouflage patching with matching colour

Webs: limewash would not be used after repairing chalk and plasterwork; one coat white Sandtex stabilizer.

Spandrels: above clerestory arches: Sandtex to match stone as nearly as possible

Limewash: extent within clerstorey and triforium demarcated. Main east wall to be washed: objective to avoid having to limewash any main interior wall faces.

RESTORATION Site visit 5 2 September 1972 DRc/DE/209/VII(b) One coat stabilizer 1 coat white Sandtex aplied to all webs; vault bosses: colouring to be determined

25 September 1972 DRc/Ac/

Report on roof from Mr. Rouse received.

Chair store correspondence 28 September 1972 DRc/DE/209/VII/(y-z)

RESTORATION site meeting notes 2 March 1973 DRc/DE/209/VIII(1) Limewashing to be completed. Memorial E. wall resite E. bay S. wall; restore cima moulding

26 March 1973 DRc/DE/209/VIII(1) Norman & Burt: limits of limewashing delineated: exception of jambs and soffite of arch into E. chapel to remain as stone. Leave all moulded stone and Purbeck as is; leave all stone work on line of main face of interior walls as stone; limewash all recesses finishing at first arriss..

NEW CHAIR STORE Completed and in use 25 April 1973 DRc/DE/209/VIII(1)

Builder's statement: Contract 6 Jan. 1972 Jan. 1974 DRc/DE/209/IX(m) Norman & Burt:

a) interior restoration N.W. Transept c) Sundry during restoration N. Transept, repair, stone paving, steps.. £1103 £7508

d) Construction new chair store

£3432

NORTH WEST TRANSEPT Walls and Windows

History: Is in Early English style; flat buttresses with offsets halve the sides and flank the end. The high gable, with three circular windows and flanking pinnacles work of Sir G. Scott, who rebuilt it, in place of the low commonplace one that had replaced it about seventy years before. He also raised the roof to its original pitch; Windows in northern bay of the west wall were all inserted by Scott who found only dilapidated blind arcades there, and the doorway in its present form is also by him... the old entry found very ruinous. East side used to be almost entirely hidden by Gundulph's tower, and is still slightly concealed; it has therefore no windows except in the clerestory, and some bays even of this have none. Bells Cathedral Series 1897

Seventeenth century

Maintenance 9 December 1681 DRc/FTb/18 Pay'd Oatmeal Thomas for removing the Rubbish from ye North door

Eighteenth century

Window over door 22 January 1714 DRc/FTv/47 Simon Lambe, smith, bill for making 3 new Barrs for the Window over the N. door waying 12 lbs.

SURVEYDickinson26 June 1716DRc/Emf/14Masons estimate 1716To repair the face and return of ye upper part of ye Buttresses by
ye front of ye North Cross about 25 ft high£20

SURVEY Keene 10 October 1760 DRc/Emf/34 The sides of the N.E. and N.W. crosses and the N. side of the Body of the Cathedral behind this last mentioned Tower, want several parts of the facing to be repair'd but as great part of it is now not easily to be got at by reason of this Tower, it cannot be compleatly repair'd till the Tower is. But care should be taken to repair those parts that can be got at, where the stone is so decay'd as to admit and lodge the wet and thereby greatly encrease the decay of the Fabrick; Care should be also taken to Convey away the Water that falls between the tower and the Cathedral, which by being so confin'd between the buildings must greatly damage those parts where it is Suffer'd to lay. The battlements round in this part want also repairing and some new Coping.

SURVEY Keene 10 October 1760 DRc/Emf/34 Buttresses want repairing, new Coinstones and the facing repair'd and made good. End of ditto: the Battlements want repairing, new jambs and moldings round the windows, and many parts of the facing is decay'd and wants new facing. Several of the Column shafts that adorn'd the windows of this end have from time to time, being decay'd, being taken, or drop't down, and the remainder of 'em are in so ruinous a Condition that they should be taken down to prevent their falling.

The handsomest way of repairing this end will be to reinstate the Columns and dressings to the Windows as they were originally. But if the expence of this method should be Sufficient objection, it may be done in a plainer manner by omitting the Columns and their consequences; and in the place of their Capitals, put in a projecting Corble; according to the Stile of the Building to receive the Springing of the Arches.

Many places of the facing are decay'd and want reinstating. And on the W. side of this Cross the window dressings want repairing, the battlements part want re-working and new Coping.

Maintenance 13 March 1769 DRc/FTv/124 J. Harrison: repairing the door Case at N. side of the Cathedral. 2s

REBUILT GABLE 7 September 1776 DRc/FTv/132 J. Nicholson: taking down and rebuilding a pediment against the Roof on N. side of Church: 637' stonework faced with new Rag stones; 10 days labourer taking down old; 20 loads Rubbish carted away.£18.3.6d

Flashing behind Gable 19 September 1776 DRc/FTv/132 J. Pluckwell: plumbing worke done to N. cross: mill lead for flashing: 5 cwt. 3 men 1 day; lead for masons use. 2 gr.

SURVEY windows Alexander 1799 DRc/Emf/38 Windows here are of a better manner of design and execution than those in any other - four of them blanked up, which might very properly be opened by putting new leaded lights in to them - there are eight windows requiring glass and leadwork repair. In repairing these old windows and in breaking out of the new there will be a considerable quantity of new glass wanted, these might be had of coloured glass at no very increased price, and be disposed in the leadwork in an ornamental manner, tending to take away the glare of light which results from so many windows. £715 for all N. cross aisle work exclusive of coloured glass.

SURVEY External Alexander survey 1799 DRc/Emf/38 External work of N. end below gutters constructed of rough Kentish stone and flints, and although in very rough state it admits of no proper repair. Mullions of windows in upper storey all mouldered away and the four buttresses and angles in very dangerous state at top - nothing can be done to the windows and the buttresses admit of no repair except rebuilding, from middle cornice upwards. I propose this should be done with Ipswich straw coloured brick and Portland stone cornices and dressings. The mullions of windows in lower tier generally perfect except a few stones. In E side wall down to roof of building below, work very rough but tolerably sound except another buttress which will require to be new likewise and W wall has another buttress in same state.

Nineteenth century

REPAIRS Cottingham 7 December 1826 DRc/Emf/150 Summary of artificers' works 1825-26: Repairing Buttresses round E. side of N.W. Transept..

Contemporary comment 1 January 1874 The Times '...last portion of exterior restored was great N.W. transept; work here extensive, including new roof, new windows, restoration of large part of masonry, construction of doorway and massive oak door in place of ruinous entry formerly existing...Cathedral now presents very different aspect from what it did two or three years back...'.

Scott's restoration: 'Almost whole of external ashlar work of north transept was renewed by Sir G. Gilbert Scott during the late repairs, but on the old lines, so far as they could be recovered. For quite a century previously the outside had been more or less a ruin, and nearly all the western windows were blocked up...'

p.257 Arch.Cant. XXIII 1898

DRAWINGS Scott undated, uncatalogued at Kent Archives, Strood N. Transept W. side: external elevation 4' to 1"; plan of buttresses, ashlar quoins; details upper & lower windows $1\frac{1}{2}$. Pencil and wash; good condition. signed G.P. White and G. Scott. Numbered 7

RESTORATION

'The great transept on each side (south and north) has been restored externally. It had been most monstrously 'transmogrified', yet parts of the old work remained, though in an advanced state of decay: in fact it had almost perished. The design has been recovered from these remains, aided by old prints.' p.351 Personal & Professional Recollections of late sir G.G. Scott, 1977

Twentieth century

WAR DAMAGE 24 April 1941 DRc/Ac/30 8 April windows damaged in Nave transepts..

SURVEY Forsyth 14 April 1950 DRc/DE/209 For Pilgrim Trust by E.C. Butler of W.A. Forsyth & Partners

Gable

Including repairs and replacements to the pinnacles and shafts to Turrets Approx. cost £535 (done cost £526.12.-d)

Windows Forsyth 14 April 1950 DRc/DE/209 All the shafts to the above windows show signs of scaling and decay; those over the entrance door being in a very bad condition, and more than half of its substance has already weathered away. Should be repaired as soon as possible. Approx. cost £400 (Done cost £500) SURVEY Godfrey 4 April 1952 DRc/DE/209 There is some stone and plaster repair necessary behind the arcade, which should not be delayed too long. This is dealt with under Plastering below.

W. wall Godfrey Survey 4 April 1952 DRc/DE/209 W. wall. One free standing shaft has perished badly. It appears to retain sufficient substance for safety, but should be watched.

E. Clerestory Godfrey survey Sept. 1963 DRc/DE/209 Hard strap pointing as before. Example of washed stone in S. face of N.E. Buttress. Flaking occurring on central buttress. Wash down and repair.

N. face Godfrey survey Sept. 1963 DRc/DE/209 Upper part of this face has rather unsightly squared rubble with strap pointing which has come away in places, particularly on E. face of N.W. Buttress (where washing by rain does not take effect). Improve sound pointing (if any) and make good weak pointing.

W. face Godfrey survey Sept. 1963 DRc/DE/209 There is less rubble work in this face, it being confined to the band above the clerestory and triforium ashlar and the bottom stage. Wash as before.

Some flaking occurs in the shafts of the two southernmost windows and a portion of weathermould in northern of these has broken away. No action needed at present.

Purbeck cap replacement 25 September 1963 DRc/DE/209/IV(k) Norman & Burt to make a Purbeck cap. grey green & brown, preferably to blue grey.

21 September 1964 DRc/DE/209/IV(e) Baldwin to Godfrey: Dean wants to know when purbeck cap. would be fixed; he wishes prop to be removed.

WINDOWS 5 May 1966 DRc/DE/209/V(g) Clerk to Godfrey: two most N. lights will probably have to be renewed to match the four other lights, probably should have expert look before decision; will see repair of glazing forms part of this year's work.

15 June: visit by a committee Church Commissioners.

Builder's estimate £486. includes remaking the 3 W. windows of great S. Transept.

Godfrey to Clerk: postponement - may have been right decision financially; to be completed by mid autumn. Goddard & Gibbs inspecting windows at their site £406.

WASHING external stonework 27 September 1967 DRc/DE/209/V(g) Chapter would like you to go ahead cleaning west wall up to clear storey Estimate 29 September 1967 DRc/DE/209/V(k) W. wall up to Nave clerestory £116 W. wall up to N. Aisle £350. Proceed.

23 November 1967 DRc/DE/209/V(k)

Godfrey to Kentish Church Builders: press on, imminence of frost. The thin and unsightly Roman cement joints of the parapet and elsewhere even in the ashlar are softened by the washing. Replacement with a normal mortar joint, using a fine pointing tool would improve appearance even if not completed.

E. wall 21 November 1968 DRc/DE/209/(b) Kentish Church Builders: repair and washing faces, raking out deep pointing, removal rusting ironwork, tipping with bronze saddle bars not iron or non ferrous, painting them.

Finial on gable 23 December 1968 DRc/Ac/ Reported that part of finial on gable end over N. door fallen to ground; Mr. Godfrey would be making an inspection

24 December 1968 DRc/DE/209/(b) Kentish Church Builders: apex cross to be removed in not more than three pieces. These together with recently fallen pieces to be kept as mould for replacement. If practicable dowel hole to be filled with mortar.

Windows Godfrey survey 21 April 1971 DRc/DE/209 Gable windows (access from walkway across gable) Paint saddlebars

Archaeology 5 November 1972 DRc/DE/209/VII(k,1) A. Harris of K.A.S.: findings below Scott's refacing consists reused material mostly tufa..presumably from demolished Norman transepts, could be rebuilding c.1250..present transept on lines of Norman predecessor, originally pilaster type buttress NW corner photographed.

Exterior 25 April 1973 DRc/DE/209/VIII(1) Site meeting notes: work now complete. Santobrite to be used where moss and algae discolouring stonework.

Windows estimate for repair 27 April 1981 DRc/DE/209/XII(h) F.W. Skeat: plain glazing. Removal 6 heads of lights; temporarily glaze, strip panels, reglaze using reinforced steel core lead calms, refix, point up, long tie wires to heads of central stanchions (specified calms not available) £1353

N. door 21 September 1981 DRc/Ac/ Access for disabled: Surveyor to Fabric to investigate whether upper step could be removed and ramp constructed..

N. door Agreed entrance be adapted for disabled 14 December 1981 DRc/Ac/

NORTH WEST TRANSEPT

ROOF

History: In the view of the church published by Thorpe in Customale Roffense in 1788, the north transept is shewn with its original high pitched roof, the gable of which is seen in King's north view (published 1st ed. Monasticon Anglicanum) to be pierced with three circular windows. (Roger Dodsworth and William Dugdale Monasticon Anglicanum London 1655)i, 28. Also John Buckler in 1810, and 1818 in his Views of the Cathedral Churches of England and Wales(london,1822) p.257 Arch.Cant. XXIII 1898

Seventeenth century

SURVEY unattributed 15 July 1670 DRc/Emf/32 The Roofs ajoining the N. East and South of the Stepole wants a repaire Immediately their being no Less then 56 Lower sheets of Lead that are slippid down Into the Gutters, also 42 feet running of ridge pine intirely stripd and Gon, so that the weather must of corse have free access into that part of the Building which will dow Greate damage if not Timley prevented.

Eighteenth century

Leadwork repair J. Pluckwell plumbers work upon the N. Rufe Butting to Spyer: 3 cwt. 29 qr. cast lead 2 men 1 day; ½ cwt Dong Nales 2 men 10 days; 24 Dough nales; 57 lb sodder; 4 bushell Coles; 9 days 2 men; old lead 3 qr. 9 lb.; of the Spyer 2 qr. £10.16.11d.

Carpentry repair 24 September 1760 DRc/FTv/117 J. Harrison, bill: Repairing the roof N. of the Spier: $12\frac{1}{2}$ ' cube oak; 6' cube fir; 1 12' baten; 7 10' best yellow Deal; 3 men 6 days. £6.13.5d.

REPAIR Estimate 30 June 1769 DRc/Emf/35/1 Plumbing estimate of North side of Rufe butting to the Spire Estimate of Plumbers worke to be Done to takeing down 36 sheets of Lead and Replaceing the same an Making good with about 2 foot of New Lead an Fasning the Rest of the Sheets on that Side of the sad Rufe, with Workemanship an Materials on a Moderate Calculation will Cum to £18.10.6d Pluckwell, Plumber.

Scaffold erected 26 July 1769 DRc/FTv/124 J. Harrison: Building the Scaffold for the Plumbers on N. Roof.6s5d

Scaffold struck 10 November 1769 DRc/FTv/124 J. Harrison: takeing down and Carrying away scaffold that was Built for the Plumbers on the N. Roof. 4s Parapets Illustration shows battlemented parapet. Survey of Cities, Towns & Villages of Kent. Chas. Seymour, Vol.3. 1776

Rainwater disposal 16 September 1777 DRc/Ftv/135 J. Pluckwell: sistern head for N. roof Butting the Spire

Nineteenth century

GABLE LOWERED

'In Storer's print, dated 1816, (History and Antiquities of the Cathedral Churches of England and Wales London, 1822) and Coney's drawing in Dugdale's Monasticon Anglicanum (London 1817), i, 153, the old roof is replaced by one of low pitch with a nondescript gable'. p. 257 Arch.Cant. XXIII 1898

c 1810-1816 The north and south transept gables taken down and replaced by lower ones of 'debased classical character'. Hope 1898, 257, 264 see views in J. Storer, Hist. & Antiq. of Cat. of Britain (1819) vol. iv

Cottingham 7 December 1826 DRc/Emf/150 REPAIRS Summary of artificers' works 1825-26: Putting new roof over side altar N.W. Transept; putting up new truss to N. gable W. Transept and laying down new gutters to roofs of N. & W. Transepts.

Jan. 1825 to Feb. 1829 DRc/Emf/135 Roof repaired, gutters renewed and releaded; coping stones put on where there are none.

RESTORATION

Drawings Scott undated, uncatalogued at Kent Archives, Strood N. & S. Transept roof (this drawing to be estimated from): proposed raised roof bolted to old truss; drawing shows no ties, stone corbel supporting truss. Estimate to be given for Whitland Abbey rag slating laid to 3" lap each slate fastened 2 copper nails. Ridge to be Staffordshire roll ridging fixed in cement. Roof to be boarded as described in Spec. but slated as above instead of leaded. Lead flashings and gutters. To provide 100 ft. run $7x2\frac{1}{2}$ for braces to be used as directed and deducted if not used. To provide 1 cwt. wrought iron boltjs and ties to be deducted if not used. 12"; condition good; ink and wash.

History: ''..old roof of low pitch..taken away by Sir Gilbert Scott, who restored the high roof with its triple-eye gable, and added present flanking pinnacles'. p. 258 Arch.Cant. XXIII 1898

PINNACLES Gordon Hills to Irvine 10 June 1881 DRc/Emf/77/92 Am I right in thinking you carried out restoration on gable of main S. Transept's two octagonal pinnacles. Certain you did also N.Transept pinnacles - and wonder why their shafts being almost

1776

like the S. ones, you omitted all canopies and cusping on the North.

Twentieth century

REPORT on condition of roof Cobb June 1921 DRc/Emf/135 As slates occasionally slip or blow off, the nails are probably nearing the end of their service, but there is no indication that stripping and relaying is likely to become necessary for some years to come.

Gutter repairs Cobb 19 June 1924 CCC Sunken lead gutter in front of base of gable taken up, decayed remains of boarding bearers removed and replaced with concrete reinforced with wire netting. Greater part of old lead relaid and some new lead on a layer of Ruberoid being placed between it and concrete.

SURVEY roof internally Godfrey 21 April 1971 DRc/DE/209 Vaults show no weakness. Timbers appear to be in good order and roof is diagonally boarded, giving it added stability. All beams except that of southernmost free truss are clear of the vaulting. Free vault at this point from possibly giving support to the timber.

Rainwater pipes Godfrey survey 21 April 1971 DRc/GA Downpipe at N.W. buttress ends high with a shoe and stonework is affected. Lengthen downpipe

SLATE repairs 5 December 1974 DRc/DE/209/IX(x-z) Broughton Moor Green Slate Quarries..samples of your green slate fair match, though Rochester's more texture of Delabole.

11 December 1974 DRc/DE/209/IX(1) Replacements from Broughton Moor ordered

12 June 1975 DRc/DE/209/IX(x-z)Stirling & Johnson, Cuckfield to Godfrey:..wonder if slates on existing are in fact Westmoreland, sizes 60x30" and 50x25" very unusual for this slate. Could they be Burlington? I have never seen such sizes..

Chandelier 30 October 1975 DRc/DE/209/IX(k) Support beams in situ : 2 9"x3" joists in centre trusses.

Gales 14 January 1980 DRc/DE/209/XI(b) Clerk to Godfrey: severe S. gales.... gable finials, steeplejacks will inspect.

PINNACLES steeplejacks report 28 January 1980 DRc/DE/209/XII N.E. pinnacle, N.E. corner N. transept: 3 no. courses stonework plus section of capstone removed for safety N.Transept pinnacles sound except small section stone removed apex gablet N.E.

S.E. TRANSEPT

History Scott 20 April 1871 DRc/Emf/65/1 ...Eastern portions including N. and E. Transepts, Choir and Presbytery with their aisles and chapels are, throughout, of fine Early pointed architecture, and though sadly mutilated and decayed, their design is in the main intelligible.

1596

The south side of the cathedral had been weakened by the demolition over the years of the supporting cloistral buildings; precautions against further interference in the fabric were taken by the dean and chapter in 1596, in the terms of a lease to a property adjacent to the Cathedral, granted to Philip Heath, which contained a clause ..'all stone, mortar, and stuff in the wall of the church: forfeiture of the lease was incurred on digging stone, etc. out of the wall or any part of the foundation to the hurt or weakening thereof'

Memorials of Cathedral Church Rochester Rev.Samuel Denne 1788 p. 169

Eighteenth century

SURVEYDickinson 26 June 1716DRc/Emf/14The south front of ye East Cross to be repaired in ye Quoins and
Stones to be repaired£130

FLAT ROOF leaking condition 1719 DRc/Emf/18/2 Report by John Proby, plumber...the drop that is going to the Chapter House..

Estimate flat east roof repair 6 August 1735 DRc/Emf/22/1 J. Proby: plumber:..and the flatt on the south side gooing ye Chapter House whear appear souvrall drips; the lead much decayed thrue or Near; fouer squear of worck to be new..

14 August 1735 DRc/Emf/22/2 Propose to tacke up, New Cast and Relay all the Gutters and other leads on ye Rouffe and flatt ove the passage leading to ye Chapter House at 21/-d. per hundred and to reduct 14/-d per hundred for the ould lead arising from ye laid gutters, rouffe and flat £144; Thomas Harwood to lay Carpenters work said gutters at 6d. per super foot

Carpentry Estimate for item below 8 November 1735 DRc/Emf/23/1 £43.0s.9d

DRAWING Flat roof east side 8 November 1735 DRc/Emf/23/2 Drawing: plan and two sections scale 5' to 1" roof over aisle leading to Chapter House; ?drawn by Charles Sloane. Good condition. Middle beam 14x12; next the walls 12x8; two next 12x10; two middle 12x12; joyst 5x3; braces 6x4; 1¼" boarding quartered with yellow Deal; 10 iron straps about 12 lb (15 in bill); 2 large boults for beams 56 lbs.

NEW FLAT ROOF CONSTRUCTED 10 November 1735 DRc/FTv/80 T. Harwood, bill: worke done ove ye south flatt: 236' naur fir timber; 600' fir jost 3x3; 100 10 deals; 2 Iorn dogs wayen 1 qr.15 1b; 14 Iorn dogs fand 30 stapels and dogs nales wayen 2 qr.;8 1b spicks; 3700 nales; 8 men 12 days £46.0s.6d. 27 November 1735 DRc/Ac/6/19 Agreed that the flat roof over the floor leading to ye Chapter House from the body of this Church be repaired and made Good according to the plan and estimate thereof drawn up and delivered by Slone of Gravesend. Agreed that the lead work of the said flatt roof be done by Mr. Proby according to the plan and estimate thereof by him given in to the Dean and Chapter. 9 December 1736 DRc/FTb/72 Paid Mr. Sloane for surveying Mr. Proby's work £1.1s Comment 1751 'For a long time the outer walls of the S. Choir aisle and S. Choir Transept had occasioned great anxiety. They were not buttressed originally, like the similarly situated walls on the other side of the church, probably because they had the cloister and other conventual buildings to support and shelter them. Several attempts were made, in particular, to render the Transept secure. First was by fixing wooden ties, with large iron bolts, in the main timbers of the roof; a second in pursuance of advice by Mr. Sloane in 1751 by the raising of two great brick buttresses; about twenty years later a third attempt by lightening the roof...' p.30 Bell's Cathedral Series 1897 1751 Arch. Cant. 23 (1898) 194-328 Two great brick buttresses were 'built in pursuance of the advice of the late Mr. Sloane' to support the south face. BUTTRESSES - bills etc. Sloane 1751 DRc/FTv/105 E. end: to the 2 buttresses built in Mrs. Pratt's garden against the Cathedral by Cable £66.5s. To Chubb ye carpenter lls.lld £67.2s.11d 1751 DRc/FTv/104 J. Cable, bricklayer, bill: 94 Rods brickwork in Buttress £62.18s; 25 September 1751 DRc/FTv/104 J. Chubb, bill: meterials for Buttress: 20' super Oke plank; 6' large Balk; 1 man 1 day. 9 July 1752 DRc/FTv/230/170 Rec'd J. Cable by hands Chas. Sloane for all bricklayers work Don...Buttresses £36 27 July 1752 DRc/FTv/230/170 J. Cable: for Pulling wall doune, clearing Rubbish, helping stone cutter, levelling the way, mending the wall, for Diggin the Ground out for the Buttresses 32 yds. £3.7s. Roof ties ?S.E. Transept 2 May 1755 DRc/FTv/109 J. Harrison: work done to puting up the Ties in the roof: 2 8' fir

12x6; 12 2' Oack trunnells; 12' oak for ties; 3 lb. Old spicks; 3 men 4 days

?Windows 23 July 1755 DRc/FTv/114 I. Dent, mason, bill: ... 1 day a mason repairing the Gothick work going to the Chapter House etc. 1/2 day a labourer; a new piece of Portland to ditto; 2 hod mortar.

SURVEY

1 January 1756 DRc/FTv/111 J. Harrison, carpenter, bill: tending on Mr. Slone several times tacken dimentions.

Scaffolding 4 August 1757 DRc/FTv/112 J. Harrison, carpenter, bill: work done to building the scaffolding to the buttress at the S. side of the Cathedral. £3.3.5d.

Repairs to a buttress 26 August 1757 DRc/FTv/114 I. Dent, mason, bill: 5'4" cube Portland to a Buthrust: 24'8" super plane Workmanship; 16 days Foreman Building the Wall; 16 days a mason; 16 days labourer.

3 September 1757 DRc/FTv/112 J. Cable, bricklayer, bill: making Scaffold to the Buttress and making good to the top and taking the Scaffold down: 1 load lime and sand; bushel of hair; 3 bushell drift sand; scaffolding; 4 men 6 days.

SURVEY south wall Keene 10 October 1760 DRc/Emf/34 This part of the Building is in a very dangerous and irreparable Situation, the whole end being near 3' out of a Perpendicular, and has drawn off with it the two first Arches (from the south end) with their columns etc; and the whole is much crusht and tore to peices; about ten years since two brick buttresses were built to Secure it from falling, these being but injudiciously perform'd do not answer the intended purposes. For the observation of the workmen and others and indeed also by visible appearances, fresh cracks have happened, and the old ones have opened afresh since they were stopt, and since the Erection of these Buttresses, there is therefore great reason to believe it is still in a Moveable state, and to fear from that State that it cannot long stand. It should therefore be wholly taken down together with what appertains to that End and is drawn off with it, and rebuilt in the same stile and form as it was.

But if this work, which must of course be attended with a great expence, cannot be immediately or soon set about, and the cracks should appear to continue opening which may be to a great Nicety ascertain'd by fitting stone wedges to several places between solid parts of those cracks, marking how far they will now enter and trying them at times afterwards to their respective places where fitted, and it does appear to keep moving, the Danger will be great because the upper part will receive a greater proportion of additional Power, the more it gets out of a perpendicular Line, and must, when that Power becomes sufficient to overweigh its counter balance inevitably fall, and bring with it a great part of that Cross.

To prevent which, therefore for the present, it will be not only in point of Prudence, but absolutely necessary to prevent these consequences, advisable to Erect a Truss Buttress of Timber against the said End: which properly perform'd will keep it from moving any further, and may secure it till a proper and convenient time for the taking down and rebuilding it.

SURVEY roof Keene survey 10 October 1760 DRc/Emf/34 The whole roof of the.. S.E. Cross.. was rack't and inclin'd considerably to the south, along with the south end of the S.E. Cross; those in the S.E. Cross were in all probability rackt so far out of their due place, that it was found necessary to take them down and reframe them ...

I before mentioned slightly and take this place as proper to repeat more fully that, during the course of these repairs, the old building call'd Five Bell Tower may be very properly applied for all solid walls, cores, buttresses, and in the rebuilding the End of the S.E. Cross and S. wall adjoining, and some Freestone will be found in the same, that may be used as new Coinstones to repair facing, stop holes made by scaffolding and such like purposes. And this may be taken down by degrees, as the uses to which it will be proper to apply it may call for it.

?S.E. Transept 25 July 1764 DRc/FTv/121 J. Harrison: puting up a Long Ladder to ye Arch and widging yt. 9d

6 December 1764 DRc/FTv/121 J. Harrison: boarding up the Arch in the Valt; 3 men $\frac{1}{2}$ day 4s 3d

Wedging up the arch; 2 men 1 day.

Ironwork S. window 14 January 1765 DRc/Ftv/123 J. Harrison, carpenter, work done in side the Cathedral: Puting up barrs to window at S. side of Cathedral, work and stofe: 1s 9d.

Scaffolding 3 December 1765 DRc/Ftv/123 J. Harrison: 2 spare shores, nails and time ...

Estimate to hip roof 28 November 1767 p.25 DRc/Ac8/25 That Mr. Harrison Church Carpenter having made an estimate for the taking down the gable end of the south part of the Cross Roof and to clear away the bricks and stones and to lay them in the Deanery Yard on the north side of the Cathedral, and to hip back the roof, and to put new pieces to that part of the roof and to make all good again. £51.16s. If Mr. Silverside the Dean's Surveyor considers the scheme Feazible that it be executed for the above sum.

GABLE TAKEN DOWN 1 July 1768 DRc/FTv/126 C. Hogsflesh: Taken Down the S. Cross by Mr. Harrison's order; 4 men 12½ days.

ROOF HIPPED BACK2 July 1768DRc/FTv/126J. Harrison: work done to South Cross Roof to taken down Gable headand hiping back roof and makeing Good the wall.£51.16s.0d.

4s 7d.

Rebuilding gable 23 July 1768 DRc/Ftv/126 C. Hogsflesh: Begun to Build again. 5 men days.

Scaffolding wall 17 October 1768 DRc/FTv/126 J. Harrison: shoreing up the old wall for the Bricklayers on S. side of Cathedral. 1s 6d.

Cracks repaired ?inside 5 December 1768 DRc/FTv/124 J. Nicholson, bricklayer: Stoping the Cracks within side of the Church of that part that has given way and repairing the pavement: 22 hods lime/hair; 6 fine ditto; 25 plain tiles; ½ bundle stout lathes; nails; spikes; 2 10" paving Tiles; 12 9"; 3 men 17 days £5.2.2d.

Internal decoration 23 July 1774 DRc/FTv/131 S. Nicholson, bricklayer: plaistering & whitewashing Chapel leading to Chapter House: floated Rendering, wash stop and white; plain tile Dubing and filling out to side wall. Erecting Scaffold and taking down old plaistering, clearing away, mending pavement, rubing the Capitals of the pillars, making good Copeing over the Doorway, Striking scaffold, pointing windows; use of large sail to prevent dust spreading. 7 men 3 days £17.0.7d.

SURVEY Robert Mylne 29 December 1776 DRc/FTv/139(I) Went from Town to Rochester, surveyed the Whole Cathedral inside and outside, taking Minutes of Observations, particularly the Defective front to the South - examined the Roof, foundations, etc. £2.2. Expences £3.3.

SURVEY Robert Mylne 22 February 1777 DRc/FTv/139(I) Gave the Dean a long Report in writing on the present State of the Cathedral, on what works are necessary to be done throughout the whole building; but more particularly on the state of the defective front of the Cross Aile towards the South - specifying its defects and reommending a Mode of Repair to preserve it from falling, together with a Minute drawing explanatory of the said mode of repair.

STRENGTHENING south wall 25 February 1777 DRc/FTv/138 S. Nicholson, bricklayer, bill: securing the S. wall of the eastern cross Ile of the Fabrick By building solid Brick and stone work under several of the Arches in the Undercross, and making a firm and solid Base to the Outer Wall, filling up the stair case with Brickwork, and the two Arches leading to the Chapter House, and sundry other work: 83,493 bricks; 67½ loads lime; 40 loads drift sand; 20 loads pitt

sand; 915 plain tiles; 3 ridge tiles; 2½ bundles oak laths; 300 nails; 8' paving tiles; 90 10" paving tiles; 95 9" ditto; 20 bushell hair; 16' purbeck; 716 candles and ½ Firkin Plaister; 3 Bricklayers 161 days; other bricklayers 221; 3 labourers 120 days; other labourers 294 days. £254.13s.8d. SURVEYRobert Mylne 14 April 1777DRc/FTv/139(I)Surveyed the Cathedral and ordered the work to be done agreeable to
said Report; explained them to the Workmen.£1.1s

Leadwork to new hipped roof 24 April 1777 DRc/FTv/135 J. Pluckwell: plumbers work to New Gable Head: sheet lead for Rigin 4 cwt. 3 qr.; sorder 3 qr. 3 men 3 days.

REPAIR TO EAST WALL exterior 16 January 1778 DRc/FTv/136 F. Patten: 4 masons 28 days working Coping out of old Stone and setting it over the Chapter House; a sawyer 28 days sawing do.; 1 mason 6 days working and setting 2 window Cells and cutting the Holes for the Barrs by the Chapter House; 90' 1" new cube Portland stone coping; 218' 8" super. work to do.

SURVEY Robert Mylne 10 July 1778 DRC/FTv/139/(I) Went from Town. Surveyed the Works done; ordered some additional works. Reported the State of the whole and that the defective front was thoroughly secured. £3.3s; expenses £3.17.8d.

Scaffolding removed 5 August 1778 DRc/FTv/136 E. Harrison: stricking the Shores

REPAIRS EAST WALL interior 4 September 1778 DRc/FTv/136 E. Harrison: fixing shores in Gallerys before letting in the irons. 2 men 5 days £1.8.4d. Making molds and floats for Plaisterers; 60' oak for shores;

Iron ties to window pillars E.wall 10 September 1778 DRc/FTv/136 F. Patten: fixing the iron holdfasts to the Columns at windows over the Chapter House door and letting them in wall and cutting Holes through the Curb for Iron work. £17

Inspected 29 March 1780 Mylne Diaries Went to Rochester... Inspected all repairs to south front and parapets, etc. Expences £4.5s.

SHORES for east wall 11 September 1780 Robert Mylne Diaries Survey of the Defective East Side of South Cross Isle; prescribed temporary Shores and struts and took minutes for a report on the whole £3. Expences £4.3s.

Dean and Chapter 2 December 1780 p.76 DRc/Ac8/26 Large and necessary expenses incurred by Repairs on the Fabrick... Whereas many and absolutely necessary Repairs are recommended by Surveyors to be forthwith done on sundry parts of the Fabrick, it is agreed that the Dean or Senior Prebendary in residence shall be empowered and duly authorised to order such Repairs to be made as are represented to him to be so expedient as cannot be postponed without imminent danger to the building.

Report on east wall 22 March 1781 Robert Mylne Diaries Sent Dean and Chapter of Rochester a Report on Defect and Remedy of Piers and Arches near Chapter House Door, with 2 plans etc. sketch sections. £8.

 Shoring arch
 21 April 1781 DRc/FTv/139(I)

 E. Harrison: shoring up the Arch S. Cross Isle; 47' Oak 6x6; 27'

 4x3; 2 men 4 days.
 £2.0.5d.

 Making a Center: 36' ¼" deal; 12' " deal; 3 12' 1¼ battings;

 131'Oak 4x3; 2 men 3 ½ days.
 £2.17.4d.

16 August 1781 DRc/FTv/139(I) E. Harrison, carpenter: shoring the Arch of Chapter Room and Centers.

SURVEY Robert Mylne Diaries 27-28 August 1781 Went to Rochester. Surveyed the Cathedral. Ordered work contained in last report; waited on Dean. Ordered some new works £3. Expences £4.

STONEWORK repair 22 September-23 November 1781 DRc/FTv/139(I) F. Patten, mason: taking Down work over Chapter House Door 15s; 2 masons $2\frac{1}{2}$ days; cutting a Hole through the Wall and clearing away for the Arch over the Chapter House $2\frac{1}{2}$ days Masons 15s; fixing and repairing the Arch over the Chapter House door 4'6" whole Firestone to repair the Arch over the Chapter House door 9s; 6 days Mason; 21'8" cube Portland stone for an Arch over the C.H. £2.14s.2d; 51'9" supl plain work to ditto £2.3.1 $\frac{1}{2}$ d; circular plain work 29'4" £1.9s.4d; $4\frac{1}{2}$ days 3 masons Hoisting Stones and fixing the Arch £2.0.6d.; 3 days 1 mason working Ashler and Repairing a Buttrice 9s; $\frac{1}{2}$ day Mason fitting Stones between the Iron braces and Pier over the Chapter House 1s.6d; $\frac{1}{2}$ day a Mason Repairing a small Arch over the C.H. 1s6d; $\frac{1}{2}$ day Mason Repairing an Arch in the Cieling 1s.6d.

Holes cut in wall 4 October 1781 DRc/FTv/139(I) E. Harrison: making holes for the Masons

Ironwork strengthening 5 October 1781 DRc/FTv/139(I) P. Penn: a large Steel Bitt and bore holes in ye wall: 3 cwt. 12 lb. of iron work with Large Nuts Screwes and Plates for ye Chapter House. Cutting ye shett and Altering a Large Bar Nuts and Screw; cutting and putting ye Iron work up, etc.

Clearing stonework, cutting hole 6 October 1781 DRc/FTv/139(I) F. Patten: 3 days Masons cutting a Hole through the Wall and clearing away for the Arch over the Chapter House. 15s.

Shoring Chapter Room doorcase 13 October 1781 DRc/Ftv/139(I) E. Harrison: shoreing and fixing the Doorcase of Chapter Room

Brickwork 20 November-7 Dec. 1781 DRc/Ftv/139(I) S. Nicholson, bricklayer: Work to Fabrick: 27,063 bricks £37.4.2d; 4 bushell lime 1s8d; 6 bushell hair 7s.; 660 Plain tiles 16s.6d; 7 Ridge do. 1s 9d; 50 tiling Laths 2s1d; 1900 nails 8s 4d; 64 loads Morter £25.18s; 11¼ loads Lime and hair £6.15s; 19 hods fine lime 12s; 7 hods fine morter 3s6d; 25 hods Stucco 12s6d; 4 bags Plaister 3s6d; 92 10" Paving tiles £1.10.8d; 9 9" do. 2s3d; Glew and Umber 5s9d; 12 lb candles 8s; 42 loads rubbish carted away £2.2.0d; 6½ days Plaisterers £10.15.3d; 316 days bricklayers £42.4s.8d. 357 days labourers £32.14s.6d; 47 days a Lad £2.2.5d.

Brickwork 7 Feb.- 8 November 1782 DRc/FTv/140 S. Nicholson, bricklayer: work done to the Fabric: 4200 bricks; 200 plain tiles; 7¼ loads Morter; 2 do. lime/hair; 10 tiling laths; 6 hods fine stuff; 1½ hods stucco; 140 9" paving tiles; 30 10" do.; 1 firkin fine laister; 10 loads Rubbish carted away 8 days Plaisterer; 8½ days Bricklayer; 36 days other bricklayers; 48 days labourers.

£25.5.6d.

Comment Thorpe 1788, p.169 'by his (Mr. Mylne's) direction piles of brick have been reared in the undercroft and within the aisle, and other methods used to discharge the weight of the upper works. The scheme has hitherto fully answered the purpose'.

Iron support to column 6 June 1782 DRc/FTv/139(I) T. Penn: a 4" Bar which superted a Pillar near the Chapter House: 5s

Repair columns 8 June-12 September 1782 DRc/FTv/140 F. Patten, mason, taking down Repairing and Resetting Columns: two journeys to the Quarries £1.1.0d; 13'7" new Curb for small Columns to stand on £1.10.6d; 1'3" cube Portland 3s 1d; 1' Portland slab 1s 8d; Paid for Stone at the Quarries and carriage £5.1.0d; 3 masons 33 days ; labourer 12 days.

Ironwork 9 July 1782 DRc/FTv/140 W. Penn, bill: 2 cramps for ye Mason; to sharp 12 tools for ye Mason; stone plug, weges, scrue bar; new Drill to Drill ye Colomb; 3 stone wedges, 2 stone Pluggs, cramp wt. 3 lb.

Report Robert Mylne Diaries 13 September 1782 Surveyed works at the Cathedral. Found all right and Columns on East side put in proper order. £3.4s.

SURVEY roof Alexander survey 1799 DRc/Emf/39 Roof of this part is in same condition as that of N. - it is hipped off next the S. instead of being gabled. This gable certainly has been taken down of old to prevent the excess of weight toward the top of the building at the N. end, which has ever been defective for the want of good foundation - was a very wise operation.

The oaken ties of timber which have been introduced to prevent push of this Roof away from others are decayed; they should be cut out and proper ties of iron introduced to answer this purpose, and repairs to the Plates where defective from this cause.

The lead and rafters here are like those adjoining; I estimate for new slating accordingly. The gutters round the three sides should be taken up and relaid. The S. parapet is ruinous and must be rebuilt. W. parapet is brick, coped with stone, and will last some time longer. Repairs generally must be had to seven single mullioned windows below.

This part of the building has sunk very little indeed since the voids of the Arches below were filled up - the operation then attempted to prevent the Settlement of the north having succeeded, the end facing the S. is now feet overhanging in ... feet of height. (Dimensions not in text). Repair the lead flat at E. side of this roof which is in tolerable condition. £200

SURVEY internal decoration Alexander 1799 DRc/Emf/39 Those parts of the Transepts adjoining and of the same nature as the Choir require no internal decorating until the Choir is done; at that time also all that can be done to Chapel adjoining N. Transept is simply whitewash, and that part forming the Entrance to the S. Transept, towards Chapter House, will admit of some decoration also.

Nineteenth century

SURVEY roof 1825 p. 68 DRc/Acz 1 Mr.. Cottingham the Architect surveyed the Cathedral and reported that the Roof of the... East Transept, erected about fourteen to fifteen years ago, was in a very dangerous state from the dry rot. Resolved that before we entered upon the internal repairs etc. that we should put the fabric itself into a safe and firm state

In consequence of this representation which by the inspection of Mr. Hotham and myself was found to be correct, it was deemed right to abandon, at least for the present, the idea of restoring the interior, upon the principle that it was our first duty to look to the stability and security of the fabric.

As a further justification for our proceedings, it was considered right to have the opinion of another Architect of eminence. Mr. Smirke therefore was sent for to take a survey of the whole fabric and report thereon.

COTTINGHAM RESTORATION New front Jan. 1825 to Feb. 1829 DRc/Emf/135 Restored; a new front being built up all around it. Arches and windows restored, all new.

Jan. 1825 to Feb. 1829 DRc/Emf/135 Window to the left of the Chapter Room re-opened and renewed, the window to the right of the Chapter Room before you enter, renewed. The brickwork that filled up the arches opposite to Chapter Room taken down.

Jan. 1825 to Feb. 1829 DRc/Emf/135 St. Edmund's Chapel repaired and new leaded. Ceiling repaired.

Stonework 26 November 1827 DRc/Ftv/182 J. Hooper 7 W. Maggs: work prepared by measure in S. Transept: 298' window jambs and ornament; 45' cornice; 91' label straight and circular; 29' circular large Moulding; 82' weather moulding; 44' shaft of Columns; 32' window sills; 57' chamfer'd quoins; 256' super square do.; 11'9" plain weathering; 6 no. caps and bases of Columns £59.0s.10d.

Payments by C. of W. 26 November 1827 DRc/FTv/181 G. Wilkins:...; preparing mouldings etc. for S. Transept by measure £56.12s.9d; ...Masons and labourers day work at S. Transept £489.1s.10d.

Comment: 'Between 1825-30..the disfiguring brick buttresses were taken down, and whole front recased with a perpendicular face; the arches into the eastern aisle were also unblocked..the southernmost arch on the interior east side filled with the rebuilt screen from the south choir aisle' p.285 Arch.Cant. XXIII 1898

Comment: 'All that can be seen of the transept end is by Cottingham. He gave it a new ashlar facing, which, as the wall was considerably out of the perpendicular, constituted an invisible buttress. His destruction of the old brick buttresses was great improvement. He found no gable, and built the present rather flat one containing a circle ornamented with zigzag mouldings. In the south wall of the transept aisle is a Decorated window with beautiful tracery...of course an insertion. Remains of recesses on each side of it, like those still in transept end, made this evident until 1825, when were hidden beneath smooth modern surface. p.54 Bell's Cathedral Series

Stonework F. & W. Freeman: Combe Downe 2013'; 37' 8" foundations; 172'6" landings, etc.

Bricks W. Nicholson: 3000 Grey stock bricks

17 March 1827 DRc/FTv/182 £7.10s.

Windows 30 June 1827 DRc/FTv/182 J. Foord: re-glazing 6 windows, making good broken quarries; 1 circular window glazed and fix'd complete; painting its iron bars.

Clerk of Works disbursements 26 November 1827 DRc/FTv/181 G. Wilkins....preparing mouldings etc. for S. Transept by measure £56.12s.9d

Masons 26 November 1827 DRc/FTv/182 J. Hooper & W. Maggs: work prepared by measure in S. Transept: 298' window jambs and ornament; 45' cornice; 91' label straight and circular; 29' circular large Moulding; 82' weather moulding; 44' shaft of Columns; 32' window sills; 57' chamfer's quoins; 256' super square do.; 11'9" plain weather; 6 no. caps and bases of Columns £59.os.10d.

SCOTT RESTORATION letter from Scott 26 June 1867 DRc/Emf/136 I would not throw these Transepts so completely open to the Choir as they now are...ancient landmarks must be respected, and as the Choir with Presbytery eastwards should be clearly defined in their boundary lines..should draw these by means of a light iron screen or grille across the arches leading into the Transepts. Would require no seats but chairs should be placed in Presbytery to E. of stalls. In Transepts, however, benches might be used if preferred.

SURVEY Scott 20 April 1871 DRc/Emf/65/1 ...Eastern portions including N. and E. Transepts, Choir and Presbytery with their aisles and chapels are, throughout, of fine Early pointed architecture, and though sadly mutilated and decayed, their design is in the main intelligible. I propose that these parts shall be completely restored retaining all old work which is sufficiently sound following old design in every detail which remains, and using one's best judgement in restoring those parts which are hopelessly lost.

Excavation pavement Irvine January 1876 DRc/Emf/77/27 Note by Irvine: Excavation for laying gas pipes through floor part of S. Transept and also through part of St. Edmund's Chapel; laid open an ancient floor of plaster which was cut through. Depth of its surface below that of present stone paving in St. Edmund's Chapel was 1'. From present surface of stone floor in S. Transept to surface of plaster floor there seen was $11\frac{1}{2}$ ". This plaster floor seen in the Transept bore strong marks of fire being discoloured to some depth. Masses of lead which had poured down in a melted state from the burning roof above were found run into and sunk into its surface. The plinth of the large square buttress at the top of stairs down into crypt from St. Edmund's Chapel had stood on this floor though now much concealed (to the above depth) by the rise which had taken place.

Report required Restoration Cttee DRc/Emf/138 7 May 1895 Resolved that an architect be appointed to report upon the restoration of the face of the S.E. Transept, preparatory to the raising of the roofs. Dean undertook to discuss with Mr. Pearson.

Roof Hodgson Fowler 4 June 1898 DRc/Emf/144 Next work should certainly be the raising of the roofs of the Choir and E. Transepts to levels of gables shown by gables erected by Sir Gilbert Scott. Present roofs appear quite sound and of good quality timber, so might all be retained and merely raised in same manner as those of main transepts have been. S. gable of E. Transept would require raising to same pitch as others.

Twentieth century

SURVEY 1914 Temple Moore DRc/Emf/135 Pitch of this roof should not be raised, principally undesirable to add to weight and foundations of a high gable at the end of this transept. Present timber work requires some repair; pitch too flat for slate, desirable to recover with lead or copper.

Movement 1914 Temple Moore DRc/Emf/135 Movement appears to have been stopped by Cottingham; tie rods, strutting and other remedial measures appear to be doing their work without being over strained.

SURVEY E.F. Cobb June 1921 DRc/Emf/135 Gable end, not having been raised, I should propose to leave it and the pitch unchanged for same reasons that caused it to be left by Mr. Cottingham and Sir Geo. Gilbert Scott, ie the undesirability of adding anything to the weight on the foundations. The roof itself is in the same need of repair as are those of the Choir and the corresponding Transept on the North - some of the best of the old slates might well be used in recovering it after stripping, the bulk of the remainder for the lowest courses of the main roof.

SURVEY Forsyth 14 April 1950 DRc/DE/209 Bath stone appears to be the chief stone used and is fairly well preserved with exception of the lower string under a series of seven unused corbels, roughly 16 yards run requires renewal for at least half of its length. Approx. £300

SURVEY Godfrey 4 April 1952 DRc/DE/209 In the S.E. Transept one of the Purbeck shafts at the northern end of the W. Clerestory is split right down. This is an old failure, but the shaft should be banded as a precaution.

SURVEY Godfrey Sept. 1963 DRc/DE/209 Is of ashlar stonework: in good order. Spalled stone at low level is due to a disused stoveipe not being entirely extracted from the wall. This might be done now and so remove it from view from within the Transept. Wash stonework; remove pipe.

S. face

Ashlar apparently in good order when viewed from above. Easternmost window split in 14 places where ends of internal saddle bars are rusting. Not many such instances detected during our inspection. Centre window split similarly in about 3 places (both seen from inside). Make good; renew stone where necessary; reset saddle bars; tip with bronze.

Great tie tods which go through the Indulgence Room are evidently splitting the stone at their entry to the S. wall. Examine and repair and renew anchors - if necessary all tie rods of S. wall.

E. wall

Not examined externally. Parapet is a thick one, very much eroded internally. Wash in its time. Loose stuff requires removal

SURVEY walls Godfrey 21 April 1971 DRc/DE/209 Comparatively modern Bath stone faced construction externally. Well washed appearance in gable and upper stage, but dirty at base of lower stage and ground storey. Wash, repair

Anchorages of great tie rods should be exposed during work and whole tying system reassessed and overhauled. (Signs at S. wall of Indulgence Chamber of lamination on rod occurring within wall).

Open up tie rod anchorages; carry out work as found necessary

Windows externally Dog tooth ornament: jambs and arches of window openings decorated with two rows of dog tooth ornament, the blind windows with one. There are over 700 of these on S. face alone, out of which 7 were missing and we removed one. In due course they will all fall away. There is pathway beneath. Removal will add to austerity of this front. During washing determine risks to ?remove

St.Peter's Chapel 27 May 1972 DRc/DE/209/VII(c) Godfrey to Whitehead, builder: clean down friable stonework, half dozen applications limewater; difficult to obtain knob lime now Bluebell Hill kilns closed; Norman & Burt had success with ready made limewash: Barnet Lime Co., S. Mimms, 'Hybrite'

Site meeting notes 26 March 1973 DRc/DE/209/VIII(1) Norman & Burt: Memorial ledger to Dean Crick: fix ledger so inscription reads from west as approach Chapter Room, opposite normal practice. Mediaeval mosaic paving: loose tiles in surviving small area at west side: take up and relay

Roof 20 August 1975 DRc/DE/209/IX(1) Clerk to Arch.: to board area from which tiles removed; large stock available from demolished St. Peter of same period as those in Cathedral; could obtain samples.

Possible slates for repair 17 September 1975 DRc/DE/209/IX(1) Clerk to Godfrey: visited Delabole quarry: quotations

Dean's report: floor tiles 24 November 1975 DRc/Ac/ ... Extraordinary eruption of tiles in S.Quire transept thought due to excessive heat in summer; repair work to start mid January. Tiles so closely packed that presssure had to be relieved in presbytry and N. transept also.

Floor tiles 26 January 1976 DRc/Ac Agreed work be completed in accordance instructions by architect.

External stonework 17 August 1977 DRc/DE/209/IX(1) Pennell & Spooner ordered to start Phase II washing and repair programme, during which decision will be made Phase I and III

Site meeting 1 28 September 1977 DRc/DE/209/IX(k) S. front washing commenced. pin 2 large stone spalls on coping gable; knife filling open joints to be done deeply; dog tooth ornaments to be tested for soundness; fine washing must be achieved; treatment against lichen Thaltox Q from Mesrs. Richardson & Starling. Glazing external iron saddlebars extract renew with " sq. bronze

Site meeting 2 6 October 1977 DRc/DE/209/IX(k) Washing at clerestory level; discussion repairing these windows on site. Band of stonework containing eroded pockets in ashlar on S. face not to renew; ways out for water to esape to be cut. Top of string course where laminating dress off tofall. Unsettled parapet stones, fill joints deeply. Remove loose dog tooth.

Original stonework 10 October 1977 DRc/DE/209/IX(x-z) Architect to Dimes, Geolog. Museum: ..believe found some original thirteenth century work under Cottingham's refacing of 1830, ?Caen Geol.Museum to architect: no hesitation, yes. French limestone from Caen, Calvados, Brittany. No direct equivalent in this country

Walls washing 19 October 1977 DRc/De/209/IX(m) Message from R. Spooner: progress still slow; top nicely dried out; ready for Thaltox which he is getting.

Site meeting 3 9 November 1977 DRc/DE/209/IX(k) Stonework lengths to be renewed in lower string agreed. Bath renewals in Westwood Ground being coarse grained and reputedly good weathering. S. Clerestory: stanchion bars not renewed. Saddle bars renew 1" sq. bronze. Jambs generally split by rusting.. Westernmost Purbeck lintol, movement in a crack pointed before; to be shored up, joints and crack raked out and filled.

Site meeting 4 23 November 1977 DRc/De/209/IX(k) Washing completed. Only Thaltox treatment to complete. Anti pigeon nesting fixed on E. elevation windows. S. elevation: stuubborn stains on lower stages resisted washing, drying out lighter. Westwood Ground stone available from Stone Firms Ltd. approved; sawn block collecting from Bath. S. Clerestory windows.

30 August 1978 DRc/DE/209/X(b) Pennell & Spooner: Phase 1 exterior E. wall completed

Report Godfrey 12 Oct.1978 DRc/DE/209 Eventually in 1977 progress with external washing and repair continued by recent work to S. and E. faces of this Transept. This was after new inspection by Ian Stewart and myself during latter part of 1976. Some of defective stonework of the windows had got worse which pointed to this area as next for methodical attention to fabric.

Examine vaulting Godfrey 12 Oct.1978 DRc/DE/209 Scaffold tower required for examination apex rib joints of southernmost section of vaulting. Could not conveniently reach this in conjunction with recent work in clerestory next to it.

Spray timbers 15 November 1978 DRc/DE/209/X(g) A. Whitehead & Son. confirm instructions spray adjacent timbers with Wykermol.

Rusting ties 20 September 1979 DRc/DE/209/X(b) W. wall iron strap rusting lifted whole course ashlar below parapet extracted 5'7" from S. face, stones refixed.

Site visit 21 December 1979 DRc/DE/209/X(b) Scaffolding removed W. face S.E. Transept.

SOUTH WEST TRANSEPT

Exterior - roof, walls, windows Interior - ceiling, walls, decoration

٠

SOUTH WEST TRANSEPT

History: 'General design of south transept, built under direction of Richard of Walden, (1280) distinctly inferior to Richard of Eastgate's work in opposite wing. Design not new at all, merely adaptation of that of presbytery modified in detail...clerestory unlike north transept which practically all of one date, here at least two dates...externally lower stage, both on east and west sides of transept, is covered by buildings, and clerestory windows are only visible features. South end towards monastery..windows placed as high up as possible on acocount of monastic buildings outside..' p.262 Arch. Cant. XXIII 1898

'..of Early Decorated period and rather later than the N.W. transept. In east wall, opposite the wide arch leading into the socalled Lady Chapel, two bays were, about 1320, included under one arch to form a larger recess for altar of Blessed Virgin Mary. Corbel heads of king and queen once painted, colours said to be still tolerably fresh in 1840. Clerestory windows on each side are two lighted with quatrefoil heads. Have gallery running in front, but screens vary...on the transept end figures in fresco could, in 1840, despite whitewash, still be traced on lower part of the wall.' p. 72 Bell's Cathedral Series 1897

'Shortly after rebuilding of south transept, alterations made..two arches in east side replaced by one of twice their span, built with the old voussoirs, and resting on shafts made of the pier that formerly divided the two. Recess thus formed for one important altar..' p.264 Arch.Cant. XXIII 1898

Roof almost entirely of wood, though in form of a quadri-partite stone vault with longitudinal and transverse ridge pieces. Springings of ribs are of stone..' p.72 Bell's Cathedral Series 1897

Seventeenth century

SURVEY Unattributed 15 July 1670 DRc/Emf/32 The Roofs ajoining the N. East and South of the Stepole wants a repaire Immediately their being no Less then 56 Lower sheets of Lead that are slippid down Into the Gutters, also 42 feet running of ridge pine intirely stripd and Gon, so that the weather must of corse have free access into that part of the Building which will dow Greate damage if not Timley prevented.

Eighteenth century

Leaking state of roof 1719 DRc/Emf/18/2 Report by John Proby: According to your order have taken account of the leads on the south side next the Steepoll and I find that the lead for 50 ft must be tacken down and most of it new cast what parts dare sound I can make.... SURVEY Sloane 5 December 1754 DRc/FTv/110 Report:..several needfull Repairs to be don at the Cathedral Church. One of the windows in the S. Isle of the Steeple Cross, is fell down, being worn out with age, and quite rotton; as also the stone work of the other two, therefore am of opinion it may be best (as it will help to succor the wall) to brick it up; and perhaps it will be best to brick up the two others, one of which will amount to £3.

Window repaired with brick8 May 1755DRc/FTv/109J. Cable: for stoping up the window in Cross Isle: 1375bricks; 2bushell hair; load lime/sand; l man 4 days.£3.11.0d.

Leadwork repair 7 August 1760 DRc/FTv/117 J. Pluckwell, plumbers work at the S. Rufe Butting to ye Spyer: 44 cwt. 3 qr. 18 lb. sheat lead 9 days 3 men; ½ cwt. Dong nales; 2 cwt. Clouts Nales 6 days 3 men; 24 Dough nales 5 days 3 men; 2 qr. 2 lb. sodder; 4 bushell Coles; 6 days 2 men; old lead deducted 35 cwt. 19 lb. (paid 25.7.1761) £51.2s.l½d.

Carpentry repair 17 August 1760 DRc/FTv/117 J. Harrison, for work done and materials delivered to ye several roofs as foweloweth: to the S. side of the roof, south of ye spier, to Repairing the Lathing and rafters and bems and wall plates etc.; 27 12' Deale for lathing; 4 10', 4 12' whole deals for ye floors; 11' cube Oak for ye bems; 11' cube fir for rafters. 3 men 14 days. £10.13.5d.

SURVEY walls, windows Keene 10 October 1760 DRc/Emf/34 South west cross, south end: The windows want repairing with new Stone Jambs, heads, muntins and cills, part of these having been repaired with bricks, and are now in a very decay'd state. The facing and battlements want many repairs and the Gable end wants reworking at the top, the facing repair'd and new coping on the Top.

Against part of the south side home to the S.W. Cross are several houses and buildings which harbour the wet and damp, and in many places Gutters being against the walls of the Cathedral contribut much to the prejudice and decay of the outside of this part of the building. The drippings from the roofs of the Houses, Sheds, etc. dash against the Walls, keep the foundations always damp and cause the stone to moulter and decay, and to be tore to peices by the Frosts. The removal therefore of such adjoining buildings, at proper and convenient opportunity, were much to be wish'd. In meantime till such opportunity offers, the Ill Effects should be guarded against as much as possible by proper conveyances of the water from the buildings, and a constant attention to the keeping free and clean the several Gutters, Pipes and water courses, and to prevent the cutting and damaging the Cathedral by negligent and unskilful Workmen, for the trifling purposes of Sheds and other matters relative to the said Adjoining Buildings.

SURVEY roof and gable end Alexander 1799 DRc/Emf/38 Timbers not so perfect tho of same form in N. Cross Aisle nor of so late a date. Some of raising plate appears decayed from defects in Gutters. W side of this roof had its lead recast some years since; E is in a bad condition. I purpose and estimate for its removal as the last has been, with new timber work to gutters, old lead recast to form new gutters. Timber ribs of arching of the lath and plaister Cieling below are in pretty good condition and require no repair. Effect of these lath and plaister arches below is same as that of the regular groining of Chalk works.

South gable is of very rough stone work but is very secure; I suppose nothing need, or indeed can be done to it - a great part of the work in this building appears to be constructed of the soft Surrey freestone called fire stone, which will stand up inside but never resist the weather. The south parapet wall is dangerous in its present condition - must be rebuilt. Work of wall below is composed of rough materials and the window (lying behind Dr. Eveleigh's house) is of Brick Mullions to which nothing can be done but hereafter to rebuild the window with stone; it is disgraceful, though not much out of repair in its present condition. Of the buttresses at the SW angle, that next W is entirely gone at the top and requires to be new; that facing the S will require considerable repair. The W. parapet is equally bad as the S and must be new, although the copings would work in because they are not so decayed as the others. The wall below this is of the same rough rag and flint stones, and the leaden trough to roof in tolerably good condition. E. parapet also in same state and a new stack of rain Trunks is required from thence to lead of flat below. Windows of this Cross Aisle are not same as those in the opposite one, although there are parts of them very beautiful they admit of no improvement, although the small columns of the lower arches have been taken away; it would be only required to repair lead and iron work of eight double panelled windows and five single ones. £314

Nineteenth century

Adjacent surviving building J. Wilson 28 Nov.1805 DRc/Emf/49 To cut down the remains of the old building lined with the other wall in front, the whole to be made good with Kentish rag stone, and the whole front to be raked, jointed and galloted. The stone work to the windows to be reinstated with a Portland projecting cill under and the glass windows to be taken out and thoroughly repaired, and to be made good with new where wanting, the same to be done to saddle barrs.

Gable lowered

c. 1810-1816

'The old gable was taken down in early part of this century and replaced by a lower one of debased classical character, flanked by pedestals on the tops of the buttresses (see two views, 1816, James Storer History and Antiquities of Cathedral Churches of Great Britain (London, 1819) vol.iv.

Gable ?altered again 7 December 1826 DRc/Emf/150 Repairs under Mr. Cottingham 1825-6 Summary of artificers' works : Taking down gable of S.W. Transept and making good coping of do. with Portland stone... Roof raised Scott undated, uncatalogued at Kent Archives, Strood N. & S. Transept roof (this drawing to be estimated from): proposed raised roof bolted to old truss; drawing shows no ties, stone corbel supporting truss. Estimate to be given for Whitland Abbey rag slating laid to 3" lap each slate fastened 2 copper nails. Ridge to be Staffordshire roll ridging fixed in cement. Roof to be boarded as described in Spec. but slated as above instead of leaded. Lead flashings and gutters. To provide 100 ft. run $7x2\frac{1}{2}$ for braces to be used as directed and deducted if not used. To provide 1 cwt. wrought iron bolts and ties to be deducted if not used. $\frac{1}{2}$ "; condition good; ink and wash.

Comment on further rebuilt gable

+

The gable is entirely modern, having been rebuilt by Sir G. Gilbert Scott, who also added the flanking pinnacles, in imitation of old design figured by Thorpe in Customale Roffense (plate xxxix p. 165). This was ornamented with transverse band of flint checker work, interrupted by three panels with shields of arms, with inlaid cross of same material above, and in the apex a sculptured bust, apparently of Our Lord. This last has been replaced in the new gable. The shields seem to have borne (i) three crowns in pale (2) the saltire and escallop shell of the church of Rochester, (3) a cross...' p.264 Arch.Cant XXIII 1898

Comment 8 August 1874 The Times 'the appeal...liberal response ..the Cathedral Body have now entered upon..restoring the exterior of the great south transept'.

24 September 1874 The Times '.. Ruined stonework of exterior of great south west transept being removed and replaced by new.'

'The great transept on each side (south and north) has been restored externally. It had been most monstrously 'transmogrified', yet parts of the old work remained, though in an advanced state of decay: in fact it had almost perished. The design has been recovered from these remains, aided by old prints. The interior of the south transept with its timber groining, has been repaired, as has a pojecting uilding on its eastern side'. p.351 Personal & Professional Recollections of late Sir G.G. Scott, 1977

Excavation Livett's extracts from undated notes by Irvine DRc/Emf/135

The first excavation made was in the ordinary execution of the contract for the repair of the great South Transept. This portion of the Cathedral, the work of six or seven or even more rebuildings and alterations had both suffered terribly from exposure to the wet quarter but more especially so since the removal of Monastic Hall (these were the Cellarers' buildings - Hope) or Halls or other buildings which attached rose up some two-thirds of its height at the south east corner. At some time in the eighteenth century it had been partially repaired and its upper gable by a remarkable construction in which upright timber beams were surrounded by a thin coating of stone about three inches thick changed into a rude sort of Classic design, photographs of which remain. With all the labour so expended it still kept going outward and Sir Gilbert Scott found that nothing short of reconstructing the foundations would be effective, nor did the result vary from what his experienced judgement predicted as will be seen in the diagrams.

Sir Gilbert's directions had been that only short lengths should be excavated at a time and in all cases to reach the solid chalk or gravel, as the case might be and the same to be very carefuly and solidly built up before other excavations were made, so as to prevent danger to the building or those employed.

After the removal of heaped up earth at the base of the gable wall of the transept a short length of excavation was made at the point This very shortly reached what on the east side was seen to be A.B. the natural gravel which had never suffered removal. On the west only soft back earth was found. This last was excavated to a considerable depth and being supposed to be only of slight depth the gravel side was stepped (see section) and the concrete filled in another short space west of the first being opened with the intention to include the whole of this space. The gravel edge of western face of ditch was about eleven feet six inches from the eastern edge. Instead of the excavation as expected being of slight depth, 22' was reached without its bottom being found nor even by a bar sent down feet further. The sides presented a fair slope of solid natural gravel in lines parallel to each other running not quite at right angles to the building but slightly N.E. and S.W. of the central line of the church. It was evidently a ditch and not a mere excavated hollow at the depth of 22'. The whole was filled in with concrete which went home under the wall so far as even this soft matter could with safety be removed. At the depth thus reached its width had reduced to about ... feet. A considerable part of the mischief to the building above ground had thus arisen from this compressible soft stuff much of whose substance was such that a stick could with ease be thrust into it, by which the wall was deprived of a secure footing at the very point where from the various rebuildings it was most required. The reason of the very dangerous state of the transept and its continued advance from the perpendicular was thus made manifest.

Gundulph's work at the base of this gable wall remained standing for not more than one foot above the surface of the ground, the Transept having been reconstructed at a very early period. On this fragment of his wall the returning quoins remain at present exposed so far as it is of the rebuilding up to the string under the window sills, Gundulph's Tufa materials and quoins being by then reused as walling stones; a fate which their own in turn were similarly found to have suffered higher up as will be referred to further on at the proper Underground the remains of the flat buttresses of Gundulph's date. period were found at both angles of this narrow Transept, the mass in itself being fortunately of great strength forming indeed all the support the Transept had to rest on. Remarkable to relate his S.W. corner was planted right over this ditch, over which it, by its own strength may rather be said to have corbelled than rested. The

section presented in the excavation of this ditch proved conclusively that the soft black deposit had comletely filled it prior to his foundation being placed over it. The depost was composed of an abundance of wood ashes and mould. Roman wall stones of the usual triangular shape roughly dressed, flints, Roman brick in small fragments; pottery mortar (with pounded tile) etc. and towards the top even a fragment of black pottery with stamped hollows like Saxon work (now preserved in museum case in Chapter Room with all other small items found). No coins nor metal ornaments turned up in it. In front of the gable a considerable mass of earth and materials partly of the destroyed Halls of the Monastery and partly from removal of the Prebendal house which had been erected on the site of those buildings rested, a way in which the whole artificial platform reaching from in front of Canon Millar's house is formed. In this is at present buried the lower walls not only of these early buildings but even parts of those of the late Prebendal house which Mr. Twopenny (now a very aged man) the late Chapter Clerk, remembers standing.

S.W.TRANSEPT (cont) Extracts by Livett from undated notes by Irvine DRc/Emf/135 On extending the excavation round the S.E. angle of the Transept it was found that the original ground here at once sank to a very considerable depth that presented a steep bank in front of which close to the angle of the buttress, the extraordinary fact was found of a dry well or cesspool (connected with the old Prebendal house) of considerable width had been sunk to the depth of 14' below the very bottom of Gundulph's foundation. This reckless excavation was emptied and filled up with concrete. To the gable wall near the S.E. angle the W. wall of the Hall as before mentioned was found to have risen to a height greater than the triforium passage inside.

On the E. side of the Transept Gundulph's walling had been left remaining still to a height somewhat greater than on the other side and the excavation gradually laid open part off what evidently was his 'little' tower. This wall it will be seen was of extraordinary thickness so far as the S. side went with a very incommensurate depth of foundation. On the stump of this the small building in the angle then a coal and lumber store and now a Vestry had been formed by cutting away the outer face of the Norman wall, and on the inside by setting back on it. Of this wall of Gundulph the inside was found to have been plastered; this still remains under the new wooden floor. At a later period of the works on the repair of the wall of St. Edmund's Chapel it was discovered that a small fragment of the E. wall of this Norman work remained in the present wall and the quoin stones of what may have been one of its flat butt resses remained there when the open joint which had existed in the wall was repaired. The old quoins as far as could be done were preserved and some others placed so as to preserve this bit of historical information.

In the heart of the wall an impost moulding of an arch or part of a string was discovered. It unfortunately could not be left open but was carefully left intact. Its top surface is ... above the top bed of the exterior string or drip weathering below the windows of St.

Edmund's Chapel. This wall probably joined on to the aisle wall of Gundulph's choir now below the floor level of St. Edmund's Chapel, but as the paving was not being moved we could not ascertain its appearance. To the S. of the S.E. angle of this little tower, where at present the new diagonal buttress stands was found to rest on a bed of wood ashes of great depth containing a vast collection of oyster shells, the layers of which slope outwards, as if to a central hollow and necessitated to give a safe foundation the deposit of a very large mass of concrete at this point. During the underpinning of the wall of St. Edmund's Chapel when that point was reached where the wall unites at the door jamb with Gundulph's, his chalk foundation constructed as usual was exposed although quite a different construction existed under the wall of the chapel. The removal of earth etc. from the remains of the interior of this small tower merely shewed that the present E. wall of the Transept had been rebuilt and did not permit us to discover whether or no this Norman tower opened in its lower stage so as to serve for a chancel or E. chapel to that arm of the church. The removal of this tower took place at a period prior to the erection of Glanville's stone cloister shortly before which time a fire had taken place (Did the fire destroy a pre-existing wooden temporary cloister? H.M.L.)

Removal of earth at S.W. corner of S. Transept next up to commencement of wall of Lady Chapel laid open a fresh section of what seemed to be defences connected with the ditch and leading to the idea from whole section that there had existed two stocades, one external and one internal to ditch (see section).

RESTORATION Scott report 24 November 1875 DRc/Emf/65/3 Completely restored including high pitched roof.

Vestry walls Scott report 24 November 1875 DRc/Emf/65/3 Small building abutting E. side of S.W. Transept restored externally Gordon Hills to Irvine 10 June 1881 DRc/Emf/77/92 Pinnacles Am I right in thinking you carried out restoration on gable of main S. Transept's two octagonal pinnacles. Certain you did also N.Transept pinnacles - and wonder why their shafts being almost like the S. ones, you omitted all canopies and cusping on the North.

Windows

22 March 1884 DRc/Ac/15 Letter from Major Vetch - with view to further development of Royal Engineers Memorials in Rochester Cathedral...may I ask whether the Chapter are disposed to reserve for the Corps all the windows in the S. Transept of the Nave. Should they be willing to do so I propose to ask you to suggest subjects...and then to have the designs prepared by Clayton and Bell and deposited in the Royal Engineers Institution so that every facility may be given...Resolved to inform Major Vetch that Dean and Chapter gladly accept proposal but cannot pledge their successors.

Stained glass 27 November 1899 DRc/Emf/153 C.E. Kempe, 3 two light windows showing figures Bezaleel, Aholiab, King Solomon, King Ethelbert, Gundulph, W. de Merton with borders, quarries, tracery, heraldry, emblems. fixing E.side S. Transept £400

Roof E.F. Cobb June 1921 DRc/Emf/135 As slates occasionally slip or blow off, the nails are proabably nearing the end of their service, but there is no indication that stripping and relaying is likely to become necessary for some years to come.

Damage to gable cross 16 January 1925 DRc/Ac/27 Cobb reported eastern arm and upper portion of cross on gable fell down into gutter during recent gales. Slates and lightning conductor repaired; replacement of cross to stand over. 24 February 1925 DRc/Ac/27

A.G.Webb & Sons paid balance for work in S. Transepts. £119.18.5d.

WAR DAMAGE 24 April 1941 DRc/Ac/30 8 April windows damaged in Nave transepts,.. part of cross on S. side S. Nave Transept

SURVEY Forsyth 14 April 1950 DRc/DE/209The pinnacles at the base of coping to gable end show signs of weathering and need attention and repair. The shafts on the angles need repair and some Chilmark stone quoins to buttresses require replacement £1200

Centre buttress E. wall Godfrey Survey 4 April 1952 DRc/DE/209 Quoins are flaking badly. May be dealt with by repair only.

W.face Clerestory Godfrey survey Sept. 1963 DRc/DE/209 This has ashlar parapet and random stonework below with unsightly strap pointing, good deal of which is coming off. Accelerate removal of pointing.

Considerable flaking occurs on quoins of buttresses. None has reached a stage where cleaning off would not be sufficient. Washing coupled with making good the jointing would be of value.

Stonework of the windows is in good order except a few small sections at base of shafts. A new piece of lead flashing should be dressed over the shaft base of centre mullion where we have removed loose stuff.

S. face Godfrey survey Sept. 1963 DRc/DE/209 Capitals of some of shafts on S.E. pinnacle are flaking badly. S.W. turret is similar but kept in a better washed condition by rain.

Stonework on this side of the Cathedral has better opportunity of survival due to better washing by rain than is received by the N. and E. On the other hand risks of penetration are greater and some of the deterioration of the stonework of this Transept at Clerestory level may be due to penetration. It is desirable therefore that the scheme of washing and repair should extend to this side of the building also. Wash and repair as before. E. face Godfrey survey Sept. 1963 DRc/DE/209 Clerestory rubble work has strap pointing, unsightly but generally in fair order. It should be washed down and improved with the rest.

Gable cross 24 December 1968 DRc/DE/209/VI(b) Remove remains of shaft of gable cross and make good apex stone which supports it.

SURVEY roof and gutters W. slope. One slate slipped, 10 slates away from Tower wall. Refix Parapet gutter: one wiped mend in lead developing crack on S. side. Repair mend

E. slope: gutter where under eaves has slipped down in two places. Take off eaves courses and refix. 9th course up about 8 ft. from Tower wall a slate slipped. Refix Parapet: open joints a N. end. Pointing required

Windows - glazing estimate 2 September 1966 DRc/DE/209/(PQ) Goddard and Gibbs, Shoreditch: estimate: 3 no. 2 lights in W. wall: removing exising leaded glazing entirely; relead using 3/8" round lead cames reinforced with steel core; all sound antique glass cleaned and reused, all clear sheet glass to be discarded, matching antique substitutes: £486

Stonework estimate 5 September 1966 DRc/DE/209/V(g.k) Kentish Church Builders: Estimate £486. Includes remaking of three west windows. Instructions on repairs to windows.

Work postponed Godfrey 15 October 1966 DRc/DE/209/V(g) .. may have been right decision financially.

Completion date: by mid autumn

5 April 1967 DRc/DE/209/V(g)

Saddle bars 7 June 1967 DRc/DE/209/V(k) Godfrey to Kentish Church Builders: Chapter Clerk's instructions to you to omit bronze tipping of saddle bars and confine to stanchion bars - which in these particular windows are easily accessible, but you must not omit tipping on any high work.

Inspecting windows 14 August 1967 DRc/DE/209/V(g) Godfrey inspecting windows at Goddard & Gibbs' site. £406.

Windows 17 October 1967 DRc/DE/209/VI(b) Repairs £935. Kentish Church Builders account.

SURVEY

Turrets Godfrey 21 April 1971 DRc/DE/209 Close examination, eradication of vegetation and repair (with some renewal) of stonework should be undertaken.

Roof internally Godfrey survey 21 April 1971 DRc/DE/209 Wooden vault and timbers appear to be in good order. Ironwork needs painting, especially tie rods and straps at gable. Paint ironwork Rainwater pipesGodfrey survey 21 April 1971 DRc/DE/209W. wall. Bottom length of downpipe at Lady Chapel roof is cracked
at the back.Renew bottom length

W.Clerestory Godfrey survey 21 April 1971 DRc/DE/209 Stonework in fair order; it is to be hoped ugly strap pointing can be removed when washing is carried out. At windows, perished bases of shafts need attention - at least fixing of lead flashings to weather them. Provide flashings; wash; repair

S. front Godfrey survey 21 April 1971 DRc/DE/209 Plinth has been renewed; restored stonework above in fair order. Some exfoliation occurs (eg on S.W. arris of S. buttress, when removed, leaves little more than ½" erosion measured on the diagonal). Wash; repair

S.W. Turret Godfrey survey 21 April 1971 DRc/DE/209 Because of plinth renewal and restored stonework above the apparently very much eroded shafting of the Turret may seem to be worse than it is. Wash; repair

S.E. Turret Godfrey survey 21 April 1971 DRc/DE/209 In better order, but a tree has taken root between gablets. Wash; repair

Windows Godfrey survey 21 April 1971 DRc/DE/209 Similar defects at the five windows of the top stage are simply cases of peeling back of hardened surfaces, which was in so much greater evidence on N. side of Choir etc. before recent washing and repair. Sills are good. An old crack through sill and into walling below is immaterial, but watch. Wash; repair

S. face: five windows of top stage. Old crack through string at sill and down into walling. Observe

Middle stage Godfrey survey 21 April 1971 DRc/DE/209 Some loose pieces of label mould removed, (due to defects in stone itself; saddle bars cast iron not therefore necessarily needing to be renewed). If general washing not in current programme this work should be placed in second priority.

TIMBER TREATED 27 October 1971 DRc/DE/209/VII(b) Norman & Burt:.. with Cuprinol.

Clerestories Godfrey survey 21 April 1971 DRc/DE/209 Nor will I repeat in full my observations on the Clerestory walks. It is evidence of the 'aliveness' of a Gothic building that the corbels between the inner and outer skins of its walling stand very little chance of remaining uncracked, and such cracking has occurred in Scott's restoration of the E. end. By the time the great S. Transept was built, this had been discovered and the design omitted the corbels altogether. Such aliveness does however require observation of movement and reference is made to this, both in regard to the walks and to the vaults. Budgetting 9 June 1971 DRc/DE/209/VII(a) Approximate estimates: interior S.W. Transept £3500

Quinquennial report 22 November 1971 DRc/Ac/ Result of Architect's report, although fabric in generally good condition... With help of Friends.. following items should be undertaken in this order:

 Exterior repairs to S.W. Transept followed by interior decorations

Dean's report: cleaning and repair 22 January 1973 DRc/Ac ..external work shall be carried out during the present year

Cleaning proceed 13 February 1973 DRc/DE/209/VIII(k) Canon Gripper-Godfrey: go ahead with cleaning outside straightaway.

Funds arranged 12 March 1973 DRc/Ac/ ...that on the exterior estimated £7000 would be defrayed from Fabric Fund.

Exterior stonework 25 April 1973 DRc/DE/209/VIII(1) Site meeting notes: work now complete. Santobrite to be used where moss and algae discolouring stonework.

South wall 16 August 1973 DRc/DE/209/VIII(k) Sketch in section stones numbered.

Exterior 26 November 1973 DRc/Ac/ Dean reported cleaning and repair completed.

SOUTH WEST TRANSEPT

History: 'General design of south transept, built under direction of Richard of Walden, (1280) distinctly inferior to Richard of Eastgate's work in opposite wing. Design not new at all, merely adaptation of that of presbytery modified in detail...clerestory unlike north transept which practically all of one date, here at least two dates...externally lower stage, both on east and west sides of transept, is covered by buildings, and clerestory windows are only visible features. South end towards monastery..windows placed as high up as possible on acocount of monastic buildings outside..' p.262 Arch. Cant. XXIII 1898

'.. of Early Decorated period and rather later than the N.W. transept. In east wall, opposite the wide arch leading into the socalled Lady Chapel, two bays were, about 1320, included under one arch to form a larger recess for altar of Blessed Virgin Mary. Corbel heads of king and queen once painted, colours said to be still tolerably fresh in 1840. Clerestory windows on each side are two lighted with quatrefoil heads. Have gallery running in front, but screens vary...on the transept end figures in fresco could, in 1840, despite whitewash, still be traced on lower part of the wall.' p. 72 Bell's Cathedral Series 1897

'Shortly after rebuilding of south transept, alterations made..two arches in east side replaced by one of twice their span, built with the old voussoirs, and resting on shafts made of the pier that formerly divided the two. Recess thus formed for one important altar..'

Roof almost entirely of wood, though in form of a quadri-partite stone vault with longitudinal and transverse ridge pieces. Springings of ribs are of stone..' p.72 Bell's Cathedral Series 1897

Eighteenth century

SURVEY Dickinson 26 June 1716 DRc/Emf/14 Carpenters estimate 1716 To repair ye Groin ribbs and centers in ye ceiling to south part of ye west cross and prepare spandrills for the Plaisterers. £18.0.0d

REPAIRS ordered 12 December 1729 p.29a DRc/Ac6/18 Ordered that ye Top of ye Southern Side of ye Western Cross of this Church be putt into Good Repair by Making Good ye Woodwork thereof and ceiling

Scaffolding and ceiling repair 1 June 1730 DRc/FTv/73 T. Harwood, bill: in bilden of a Scafell to seale (ciel) the S. Ioyle and to make good the Timber work: 100' oak Enterdise 4x4"... 3 men 12 days. Decorating 1 July 1730 DRc/FTv/73 T. Harwood, bill: whitwashing of the wurkes: 8 hods mortar; 200 bricks; 27 baskets lime; 9 haire; 11 hods fine stuf; 10 galons size; 3 dousen whiten; 1 man 10 days. £3.5s.0d.

SURVEY ceiling Alexander 1799 DRc/Emf/38 ... Timber ribs of arching of the lath and plaister Cieling below are in pretty good condition and require no repair. Effect of these lath and plaister arches below is same as that of the regular groining of Chalk works.

Walls, columns, ceiling Alexander survey 1799 DRc/Emf/38 Inside fabric of .. S. Cross Aisles ...does not want immediate repair on columns. When it was whited last the little Pepworth Marble pillars were coloured like the rest of the building, which I think would be better left in original state like those now in Choir.

The regular panels in the Arched Cieling formed by the intersection of the Mullions were likewise bordered by black stripes on each side of them, the effect of which is harsh and unprepared, especially when contrasted with the whiteness of the panels; it forms the mullions into nothing more than an even white flat stripe, whereby we hardly perceive that they are projecting Moldings. When coloured again, I conceive the little Pillars should be left in their native state, and the intervals or plain parts between them of a mezzotint between these pillars and that already intentioned for the Mullions in the Cielings, as before noted.

Nineteenth century

Jan. 1825 to Feb. 1829 DRc/Emf/135 Interior of Gable end repaired.

... The interior of the south transept with its timber groining, has been repaired, as has a pojecting building on its eastern side'. p.351 Personal & Professional Recollections of late Sir G.G. Scott, 1977

27 November 1874 p. 494 DRc/Ac14 Scott to procure estimate of cost of certain repairs in interior of S.W. Transept - Dean to sanction up to £300

Ceiling p. 72 Bell's Cathedral Series 1897 Sir G. Scott found the whole ceiling greatly in need of repair - the ribs rotten and decayed, and the spaces between them filled principally with plaster - and thoroughly restored it'.

Internal condition Godfrey survey Sept. 1963 DRc/DE/209 Redecoration: cleaning down of stonework gently and generally, but not suggested that washing by water jet (the best way) can be afforded. Before redecoration is undertaken, stonework of the windows and shafts should be repaired. Internal S. wall Godfrey survey Sept. 1963 DRc/DE/209 Clerestory level: considerable erosion and some stones sound hollow and likely to need replacement. Eroded surfaces of caps etc. must be cleaned down and true nature of stone be established. Repair

Windows - glazing estimate 2 September 1966 DRc/DE/209/(PQ) Goddard and Gibbs, Shoreditch: estimate: 3 no. 2 lights in W. wall: removing exising leaded glazing entirely; relead using 3/8" round lead cames reinforced with steel core; all sound antique glass cleaned and reused, all clear sheet glass to be discarded, matching antique substitutes: £486

Stonework estimate 5 September 1966 DRc/DE/209/V(g.k) Kentish Church Builders: Estimate £486. Includes remaking of three west windows. Instructions on repairs to windows.

Work postponed Godfrey 15 October 1966 DRc/DE/209/V(g) .. may have been right decision financially.

Completion date: by mid autumn 5 April 1967 DRc/DE/209/V(g)

Saddle bars 7 June 1967 DRc/DE/209/V(k) Godfrey to Kentish Church Builders: Chapter Clerk's instructions to you to omit bronze tipping of saddle bars and confine to stanchion bars - which in these particular windows are easily accessible, but you must not omit tipping on any high work.

Inspecting windows 14 August 1967 DRc/DE/209/V(g) Godfrey inspecting windows at Goddard & Gibbs' site. £406.

Windows 17 October 1967 DRc/DE/209/VI(b) Repairs £935. Kentish Church Builders account.

SURVEY

-

Turrets Godfrey 21 April 1971 DRc/DE/209 Close examination, eradication of vegetation and repair (with some renewal) of stonework should be undertaken.

W.Clerestory Godfrey survey 21 April 1971 DRc/DE/209 Stonework in fair order; it is to be hoped ugly strap pointing can be removed when washing is carried out. At windows, perished bases of shafts need attention - at least fixing of lead flashings to weather them. Provide flashings; wash; repair

S. front Godfrey survey 21 April 1971 DRc/DE/209 Plinth has been renewed; restored stonework above in fair order. Some exfoliation occurs (eg on S.W. arris of S. buttress, when removed, leaves little more than ½" erosion measured on the diagonal). Wash; repair

S.W. Turret Godfrey survey 21 April 1971 DRc/DE/209 Because of plinth renewal and restored stonework above the apparently very much eroded shafting of the Turret may seem to be worse than it is. Wash; repair S.E. Turret Godfrey survey 21 April 1971 DRc/DE/209 In better order, but a tree has taken root between gablets. Wash; repair

Windows Godfrey survey 21 April 1971 DRc/DE/209 Similar defects at the five windows of the top stage are simply cases of peeling back of hardened surfaces, which was in so much greater evidence on N. side of Choir etc. before recent washing and repair. Sills are good. An old crack through sill and into walling below is immaterial, but watch. Wash; repair

S. face: five windows of top stage. Old crack through string at sill and down into walling. Observe

Middle stage Godfrey survey 21 April 1971 DRc/DE/209 Some loose pieces of label mould removed, (due to defects in stone itself; saddle bars cast iron not therefore necessarily needing to be renewed). If general washing not in current programme this work should be placed in second priority.

S.W. Transept Godfrey survey 21 April 1971 DRc/DE/209 Following that, my main recommendation is that the great S. Transept should be washed and repaired externally and that the whole should be overhauled and redecorated inside.

Clerestories Godfrey survey 21 April 1971 DRc/DE/209 Nor will I repeat in full my observations on the Clerestory walks. It is evidence of the 'aliveness' of a Gothic building that the corbels between the inner and outer skins of its walling stand very little chance of remaining uncracked, and such cracking has occurred in Scott's restoration of the E. end. By the time the great S. Transept was built, this had been discovered and the design omitted the corbels altogether. Such aliveness does however require observation of movement and reference is made to this, both in regard to the walks and to the vaults.

Budgetting 9 June 1971 DRc/DE/209/VII(a) Approximate estimates: interior S.W. Transept £3500

Quinquennial report 22 November 1971 DRc/Ac/ Result of Architect's report, although fabric in generally good condition... With help of Friends.. following items should be undertaken in this order:

 Exterior repairs to S.W. Transept followed by interior decorations

Dean's report: cleaning and repair 22 January 1973 DRc/Ac Internal and external work shall be carried out during the present year.

Cleaning proceed 13 February 1973 DRc/DE/209/VIII(k) Canon Gripper-Godfrey: go ahead with cleaning outside straightaway. .. Memorial (brass cross on mauve background) in S. Trans. which you particularly dislike fallen down, rusted clamps, would be convenient if we could lose it..

Site meeting notes 2 March 1973 DRc/DE/209/VIII(1) Advice to be given by C. Rouse on remains of wall paintings E. wall

Funds arranged 12 March 1973 DRc/Ac/ Friends had agreed contribute £6000 toward necessary work on interior; that on the exterior estimated £7000 would be defrayed from Fabric Fund.

Limewashing 27 March 1973 DRc/DE/209/VIII(1) S.W. Transept: complete lower parts.

Exterior stonework 25 April 1973 DRc/DE/209/VIII(1) Site meeting notes: work now complete. Santobrite to be used where moss and algae discolouring stonework.

Norman & Burt: stonemasons 25 May 1973 DRc/DE/209/VIII(k) Gripper: sorry to hear going out of business and cannot do S.Trans.interior

South wall 16 August 1973 DRc/DE/209/VIII(k) Sketch in section stones numbered.

Condition of painting 13 September 1973 DRc/DE/209/VIII(t) C. Rouse: report on extensive area E. wall: greater part as recorded by Prof. Tristram still survives, so dirty and obscured by cobwebs makes virtually invisible from ground; is capable of cleaning. Inner surface of arch no evidence of painting; can limewash. On narrow soffit of arch consisting deep green ground with two roundels at base: possibly buds or mammals, favourite decoration 14th century. Recommend painting vaulting white as, since stone vault, clearly intended; favour painting ribs some polychrome decoration, certainly colouring carved bosses as in N. Transept. Estimate £1000

Pennells & Spooner stonemasons 15 September 1973 DRc/DE/209/VIII(k) Ex employees of Norman and Burt to do the work.

Renovation 15 October 1973 DRc/DE/209/VIII(1) Pennells & Spooner undertaken to do interior. C. Rouse to use their scaffolding to treat wall paintings E. wall; a painting firm will do vaults.

Vaults 12 November 1973 DRc/DE/209/VIII(Mc) Painting specification, estimate. Clean and varnish previously stained roof; size and gild 23 carat gold leaf roll member and lower ogee of timber ribs; pick out 6 no. roof bosses in traditional colours, gild highlights; filling holes in timber vault

Exterior 26 November 1973 DRc/Ac/ Dean reported cleaning and repair completed. Renovation specification 18 January 1974 DRc/DE/209/IX(1) Norman & Burt: washing, repair, restoration internal stonework same as work in N.W. Transept of 1972. Differences: vaulting is wood, painting and embellishement to be undertaken by specialists; paintings E. wall treated by specialists.

East wall paintings 30 January 1974 DRc/DE/2909/VI Visit by E.C. Rouse to assess and inspect work done on cleaning remains of important wall painting surviving in former Lady Chapel. Discussion on procedure with Mr. Godfrey and Miss A. Ballantyne. Discussed also cleaning monuments, conservation heraldry, treatment of vault, bosses and ribs.

Report: position assessed: resultsdisappointing, little actual pigment survives; setting and details almost of whole scheme can be made out. One of great elaboration and skill, should not be obscured. [see Prof. Tristram Arch.Cant. XXIII 297 (1898)]. (Apart from minor discrepances otherwise entirely reliable). Condition of wall and painting curious; after removal 50 years dirt, surface very yellow. May be due use egg fixative by Prof.Tristram. Design not set out by scribing in plaster as he says, but outlines of architectural setting and main elements of figures show up white where pigment has perished down to base white lime plaster. Where colour survives mainly green, black, with little red outline. More colour in lower register of composition as shown earlier by experimental cleaning of figure of donor on south side.

Method of treatment: Whole wall must be cleaned meticulously. Four alternatives: (i) ignore painting and limewash over (ii) attempt to show main elements by putting toned limewash on background areas, difficult, complex (iii) go over surviving lines with pale black and red outline (iv) accept situation, make best of wall, rendering as acceptable as possible; last alternative strongly urged. Wall can be made presentable, cracks filled, surrounding stonework cleaned, recent repairs covered with toning limewash.

Wall paintings 25 February 1974 DRc/Ac/ Accept E.C. Rouse's recommendation for treatment: 'to accept situation as it is, make best of wall, rendering it as acceptable as possible to tone in with rest of work and preserve what remains of painted scheme'.

E. wall paintings 5 April 1974 DRc/DE/209/VI Account submitted by E.C. Rouse for: completion work uncovering, cleaning, conservation, remains of 14th century painting on east wall, toning out defective areas; cleaning some monuments and their heraldry, advice on colouring roof bosses (conclusively proved to be medieval).

Decoration ceiling 11 February 1974 DRc/DE/209/IX(m) Godfrey to Campbell Smith: confirm instructions accordance your estimate 12.11.73: painting £825, prov. sum preventing draught through holes in vaulting £20. Scrim for making backs of ribs airtight with plaster: builders agreed to work from above whilst you work underneath simultaneously. Stone fall 30 May 1974 DRc/DE/209/IX(m) Godfrey to Pennells & Spooner: small fall of stone thought from vault springing S.W. corner of S. Transept.

Decoration ceiling 31 May 1974 DRc/DE/299/IX(m) Campbell Smith & Co. gilding, painting 6 no. bosses £60; repairs to open joists in roof £80; decoration of vaulting £905

Wall paintings 4 June 1974 DRc/DE/209/IX(t) E.C. Rouse, account: cleaning, conserving wall paintings on E. wall S. Transept, advice re colouring roof bosses, cleaning heraldry and some monuments..

31 July 1974 DRc/Ac/

E. wall To E.Clive Rouse £700

Final account 11 July 1974 DRc/DE/209/IX(1) Pennells & Spooner and Campbell Smith: work on interior Clive Rouse restoration wall paintings. Architect's professional fees. Introduction V.A.T. £6204

Tax classification 12 July 1974 DRc/DE/209/IX(n) Godfrey to Campbell Smith: ..in view of fact vaulting was plain oak and not painted, and that it is actually a transformation, I suggest Excise would accept it as 'improvement' and VAT need not be charged

Limewashing instructions 20 October 1975 DRc/DE/209/IX(m) Godfrey to Pennell & Spooner: limewashing to be gone over on S. wall only

Dean's report 24 November 1975 DRc/Ac/ Work required by last quinquennial survey completed and on eve of new survey. Work on interior S. Nave transept completed by painting wall...

Report Godfrey 12 Oct.1978 DRc/DE/209 Next big operation was the washing and repair of outside of this Transept, following by washing, repair and re-decoration of inside. Latter included the painting of wood vaulting and attention to remains of wall painting on its E. wall

SOUTH WEST TRANSEPT

INTERIOR

Eighteenth century

Repairs ordered 12 December 1729 p.29a DRc/Ac6/18 Ordered that ye Top of ye Southern Side of ye Western Cross of this Church be putt into Good Repair by Making Good ye Woodwork thereof and ceiling

Scaffolding and ceiling repair 1 June 1730 DRc/FTv/73 T. Harwood, bill: in bilden of a Scafell to seale (ciel) the S. Ioyle and to make good the Timber work: 100' oak Enterdise 4x4"... 3 men 12 days.

Decorating 1 July 1730 DRc/FTv/73 T. Harwood, bill: whitwashing of the wurkes: 8 hods mortar; 200 bricks; 27 baskets lime; 9 haire; 11 hods fine stuf; 10 galons size; 3 dousen whiten; 1 man 10 days. £3.5s.0d.

SURVEY ceiling Alexander 1799 DRc/Emf/38 ... Timber ribs of arching of the lath and plaister Cieling below are in pretty good condition and require no repair. Effect of these lath and plaister arches below is same as that of the regular groining of Chalk works.

Walls, columns, ceiling Alexander survey 1799 DRc/Emf/38 Inside fabric of .. S. Cross Aisles ...does not want immediate repair on columns. When it was whited last the little Pepworth Marble pillars were coloured like the rest of the building, which I think would be better left in original state like those now in Choir.

The regular panels in the Arched Cieling formed by the intersection of the Mullions were likewise bordered by black stripes on each side of them, the effect of which is harsh and unprepared, especially when contrasted with the whiteness of the panels; it forms the mullions into nothing more than an even white flat stripe, whereby we hardly perceive that they are projecting Moldings. When coloured again, I conceive the little Pillars should be left in their native state, and the intervals or plain parts between them of a mezzotint between these pillars and that already intentioned for the Mullions in the Cielings, as before noted.

Nineteenth century

Interior of Gable end repaired Jan. 1825 to Feb. 1829 DRc/Emf/135

RESTORATION Scott report 24 November 1875 DRc/Emf/65/3 Completely restored ... Timber groining and interior of Clerestory carefully cleaned and repaired.

... The interior of the south transept with its timber groining, has been repaired, as has a projecting building on its eastern side'. p.351 Personal & Professional Recollections of late Sir G.G. Scott, 1977

Vestry Scott report 24 November 1875 DRc/Emf/65/3 Small building abutting E. side of S.W. Transept restored externally and internally fitted up in inexpensive manner for use as Vestry.

History: '..at southern end of great altar recess in east wall a small doorway opens into a little room in the angle between the transept and south choir aisle. Here said once were kept valuables belonging to the altars in this part of the church; at the end of eighteenth and earlier part of this century marked on plans as coal hole; now used as vestry of master and king's scholars'

p. 72 Bell's Cathedral Series 1897

Twentieth century

SURVEY E.F. Cobb June 1921 DRc/Emf/135 Greater part of wooden vaulting over S. Transept of Nave is modern and it is not anticipated that much repair is needed.

SURVEY Godfrey Sept. 1963 DRc/DE/209 Redecoration: cleaning down of stonework gently and generally, but not suggested that washing by water jet (the best way) can be afforded. Before redecoration is undertaken, stonework of the windows and shafts should be repaired.

Internal S. wall Godfrey survey Sept. 1963 DRc/DE/209 Clerestory level: considerable erosion and some stones sound hollow and likely to need replacement. Eroded surfaces of caps etc. must be cleaned down and true nature of stone be established. Repair

Dean's report 22 January 1973 DRc/Ac Internal...cleaning and repair shall be carried out during the present year

13 February 1973 DRc/DE/209/VIII(k) .. Memorial (brass cross on mauve background) in S. Trans. which you particularly dislike fallen down, rusted clamps, would be convenient if we could lose it..

Site meeting notes 2 March 1973 DRc/DE/209/VIII(1) Advice to be given by C. Rouse on remains of wall paintings E. wall

Funds arranged 12 March 1973 DRc/Ac/ Friends had agreed contribute £6000 toward necessary work on interior; that on the exterior estimated £7000 would be defrayed from Fabric Fund. Limewashing 27 March 1973 DRc/DE/209/VIII(1) S.W. Transept: complete lower parts.

Norman & Burt: stonemasons 25 May 1973 DRc/DE/209/VIII(k) Gripper: sorry to hear going out of business and cannot do S.Trans.interior

Condition of wall painting 13 September 1973 DRc/DE/209/VIII(t) C. Rouse: report on extensive area E. wall: greater part as recorded by Prof. Tristram still survives, so dirty and obscured by cobwebs makes virtually invisible from ground; is capable of cleaning. Inner surface of arch no evidence of painting; can limewash. On narrow soffit of arch consisting deep green ground with two roundels at base: possibly buds or mammals, favourite decoration 14th century. Recommend painting vaulting white as, since stone vault, clearly intended; favour painting ribs some polychrome decoration, certainly colouring carved bosses as in N. Transept. Estimate £1000

Pennells & Spooner stonemasons 15 September 1973 DRc/DE/209/VIII(k) Ex employees of Norman and Burt to do the work.

Renovation 15 October 1973 DRc/DE/209/VIII(1) Pennells & Spooner undertaken to do interior. C. Rouse to use their scaffolding to treat wall paintings E. wall; a painting firm will do vaults.

Vaults 12 November 1973 DRc/DE/209/VIII(Mc) Painting specification, estimate. Clean and varnish previously stained roof; size and gild 23 carat gold leaf roll member and lower ogee of timber ribs; pick out 6 no. roof bosses in traditional colours, gild highlights; filling holes in timber vault

Renovation specification 18 January 1974 DRc/DE/209/IX(1) Norman & Burt: washing, repair, restoration internal stonework same as work in N.W. Transept of 1972. Differences: vaulting is wood, painting and embellishement to be undertaken by specialists; paintings E. wall treated by specialists.

East wall paintings 30 January 1974 DRc/DE/2909/VI Visit by E.C. Rouse to assess and inspect work done on cleaning remains of important wall painting surviving in former Lady Chapel. Discussion on procedure with Mr. Godfrey and Miss A. Ballantyne. Discussed also cleaning monuments, conservation heraldry, treatment of vault, bosses and ribs.

Report: position assessed: results disappointing, little actual pigment survives; setting and details almost of whole scheme can be made out. One of great elaboration and skill, should not be obscured. [see Prof. Tristram Arch.Cant. XXIII 297 (1898)]. (Apart from minor discrepances otherwise entirely reliable). Condition of wall and painting curious; after removal 50 years dirt, surface very yellow. May be due use egg fixative by Prof.Tristram. Design not set out by scribing in plaster as he says, but outlines of architectural setting and main elements of figures show up white where pigment has perished down to base white lime plaster. Where colour survives mainly green, black, with little red outline. More colour in lower register of composition as shown earlier by experimental cleaning of figure of donor on south side.

Method of treatment: Whole wall must be cleaned meticulously. Four alternatives: (i) ignore painting and limewash over (ii) attempt to show main elements by putting toned limewash on background areas, difficult, complex (iii) go over surviving lines with pale black and red outline (iv) accept situation, make best of wall, rendering as acceptable as possible; last alternative strongly urged. Wall can be made presentable, cracks filled, surrounding stonework cleaned, recent repairs covered with toning limewash.

Decoration ceiling 11 February 1974 DRc/DE/209/IX(m) Godfrey to Campbell Smith: confirm instructions accordance your estimate 12.11.73: painting £825, prov. sum preventing draught through holes in vaulting £20. Scrim for making backs of ribs airtight with plaster: builders agreed to work from above whilst you work underneath simultaneously.

Wall paintings 25 February 1974 DRc/Ac/ Accept E.C. Rouse's recommendation for treatment: 'to accept situation as it is, make best of wall, rendering it as acceptable as possible to tone in with rest of work and preserve what remains of painted scheme'.

E. wall paintings 5 April 1974 DRc/DE/209/VI Account submitted by E.C. Rouse for: completion work uncovering, cleaning, conservation, remains of 14th century painting on east wall, toning out defective areas; cleaning some monuments and their heraldry, advice on colouring roof bosses (conclusively proved to be medieval).

Stone fall 30 May 1974 DRc/DE/209/IX(m) Godfrey to Pennells & Spooner: small fall of stone thought from vault springing S.W. corner of S. Transept.

Decoration ceiling 31 May 1974 DRc/DE/299/IX(m) Campbell Smith & Co. gilding, painting 6 no. bosses £60; repairs to open joists in roof £80; decoration of vaulting £905

Wall paintings 4 June 1974 DRc/DE/209/IX(t) E.C. Rouse, account: cleaning, conserving wall paintings on E. wall S. Transept, advice re colouring roof bosses, cleaning heraldry and some monuments..

E. wall To E.Clive Rouse £700 31 July 1974 DRc/Ac/

Final account 11 July 1974 DRc/DE/209/IX(1) Pennells & Spooner and Campbell Smith: work on interior Clive Rouse restoration wall paintings. Architect's professional fees. Introduction V.A.T. £6204 Tax classification 12 July 1974 DRc/DE/209/IX(n) Godfrey to Campbell Smith: ..in view of fact vaulting was plain oak and not painted, and that it is actually a transformation, I suggest Excise would accept it as 'improvement' and VAT need not be charged

Limewashing instructions 20 October 1975 DRc/DE/209/IX(m) Godfrey to Pennell & Spooner: limewashing to be gone over on S. wall only

Chandelier 30 October 1975 DRc/DE/209/IX(k) Support beams in situ: 2 9"x3" joists in centre trusses.

Dean's report 24 November 1975 DRc/Ac/ Work required by last quinquennial survey completed and on eve of new survey. Work on interior S. Nave transept completed by painting wall...

Report Godfrey 12 Oct.1978 DRc/DE/209 ... washing, repair and re-decoration of inside. Latter included the painting of wood vaulting and attention to remains of wall painting on its E. wall

SOUTH WEST TRANSEPT

ROOF

Seventeenth century

Unattributed 15 July 1670 DRc/Emf/32 The Roofs ajoining the N. East and South of the Stepole wants a repaire Immediately their being no Less then 56 Lower sheets of Lead that are slippid down Into the Gutters, also 42 feet running of ridge pine intirely stripd and Gon, so that the weather must of corse have free access into that part of the Building which will dow Greate damage if not Timley prevented.

Eighteenth century

Leaking state thereof 1719 DRc/Emf/18/2 Report by John Proby: According to your order have taken account of the leads on the south side next the Steepoll and I find that the lead for 50 ft must be tacken down and most of it new cast what parts dare sound I can make

Leadwork 7 August 1760 DRc/FTv/117 J. Pluckwell, plumbers work at the S. Rufe Butting to ye Spyer: 44 cwt. 3 qr. 18 lb. sheat lead 9 days 3 men; $\frac{1}{2}$ cwt. Dong nales; 2 cwt. Clouts Nales 6 days 3 men; 24 Dough nales 5 days 3 men; 2 qr. 2 lb. sodder; 4 bushell Coles; 6 days 2 men; old lead deducted 35 cwt. 19 lb. (paid 25.7.1761) £51.2s.12d.

Carpentry 17 August 1760 DRc/FTv/117 J. Harrison, for work done and materials delivered to ye several roofs as foweloweth: to the S. side of the roof, south of ye spier, to Repairing the Lathing and rafters and bems and wall plates etc.; 27 12' Deale for lathing; 4 10', 4 12' whole deals for ye floors; 11' cube Oak for ye bems; 11' cube fir for rafters. 3 men 14 days. £10.13.5d.

Nineteenth century

Gable c. 1810-1816 'The old gable was taken down in early part of this century and replaced by a lower one of debased classical character, flanked by pedestals on the tops of the buttresses (see two views, 1816, James Storer History and Antiquities of Cathedral Churches of Great Britain (London, 1819) vol.iv.

Gable 7 December 1826 DRc/Emf/150 Repairs under Mr. Cottingham 1825-6Summary of artificers' works : Taking down gable of S.W. Transept and making good coping of do. with Portland stone ...

SURVEY

DRAWINGS Undated, uncatalogued at Kent Archives, Strood N. & S. Transept roof (this drawing to be estimated from): proposed raised roof bolted to old truss; drawing shows no ties, stone corbel supporting truss. Estimate to be given for Whitland Abbey rag slating laid to 3" lap each slate fastened 2 copper nails. Ridge to be Staffordshire roll ridging fixed in cement. Roof to be boarded as described in Spec. but slated as above instead of leaded. Lead flashings and gutters. To provide 100 ft. run $7x2\frac{1}{2}$ for braces to be used as directed and deducted if not used. To provide 1 cwt. wrought iron boltjs and ties to be deducted if not used. $\frac{1}{2}$ "; condition good; ink and wash.

Gable

The gable is entirely modern, having been rebuilt by Sir G. Gilbert Scott, who also added the flanking pinnacles, in imitation of old design figured by Thorpe in Customale Roffense (plate xxxix p. 165). This was ornamented with transverse band of flint checker work, interrupted by three panels with shields of arms, with inlaid cross of same material above, and in the apex a sculptured bust, apparently of Our Lord. This last has been replaced in the new gable. The shields seem to have borne (i) three crowns in pale (2) the saltire and escallop shell of the church of Rochester, (3) a p.264 Arch.Cant XXIII 1898

Twentieth century

SURVEY Cobb June 1921 DRc/Emf/135 As slates occasionally slip or blow off, the nails are probably nearing the end of their service, but there is no indication that stripping and relaying is likely to become necessary for some years to come. Greater part of wooden vaulting over S. Transept of Nave is modern and it is not anticipated that much repair is needed.

Damage to cross 16 January 1925 DRc/Ac/27 Cobb reported eastern arm and upper portion of cross on gable fell down into gutter during recent gales. Slates and lightning conductor repaired; replacement of cross to stand over.

24 February 1925 DRc/Ac/27 A.G.Webb & Sons paid balance for work in S. Transepts. £119.18.5d.

SURVEY Forsyth 14 April 1950 DRc/DE/209The pinnacles at the base of coping to gable end show signs of weathering and need attention and repair. The shafts on the angles need repair and some Chilmark stone quoins to buttresses require replacement £1200

Gable cross 24 December 1968 DRc/DE/209/VI(b) Remove remains of shaft of gable cross and make good apex stone which supports it.

SURVEY Godfrey 21 April 1971 DRc/DE/209 W. slope. One slate slipped, 10 slates away from Tower wall. Refix Parapet gutter: one wiped mend in lead developing crack on S. side. E. slope: gutter where under eaves has slipped down in two places. Take off eaves courses and refix. 9th course up about 8 ft. from Tower wall a slate slipped. Refix Parapet: open joints a N. end. Pointing required Roof internally Godfrey survey 21 April 1971 DRc/DE/209 Wooden vault and timbers appear to be in good order. Ironwork needs painting, especially tie rods and straps at gable. Paint ironwork Rainwater pipes Godfrey survey 21 April 1971 DRc/DE/209 W. wall. Bottom length of downpipe at Lady Chapel roof is cracked at the back. Renew bottom length Timber treated 27 October 1971 DRc/DE/209/VII(b)

Chandelier 30 October 1975 DRc/DE/209/IX(k) Support beams in situ: 2 9"x3" joists in centre trusses.

18 June 1979 DRc/Ac/

Repair mend

Agreed work checking gable finials proceed

Norman & Burt:.. with Cuprinol.

Finials

Gales 14 January 1980 DRc/DE/209/XI(b) Clerk to Godfrey: rainwater disposal: snow boards would not solve problem; severe S. gales water entered Nave transept... All need attention. Gable finials, steeplejacks will inspect.

TREASURY

History:

p.95 Bell's Cathedral Series G. Bell & Sons 1897 "The Communion Plate is still kept in an old iron-bound chest in the Treasury, over the N. Choir Transept Aisle."

Eighteenth century

Treasury chest carpentry A. Turner, carpenter, bill: £3. 13.3d: 2 12' hole deales; 3 10' hole deales; nailes; a large dubell spring lock; 2 dubell spring locks for the chest; 4 days work myself; 5 a man; 1 pair large hinges. For tacking care of bringing the plate from London £1.

5 December 1701 DRc/Ftv/33 pence a pound 1s 8d;

Ironwork 6 December 1701 DRc/FTb/35 Pd. Simon Lambe..iron works done about ye door and chest of the Treasury to secure ye Communion plate given to Church by Sir Jos. Williamson £1.10s; and carpenter £2.12.0d.

Simon Lambe: bill Boolt and stabells for ye work for ye cheaste.

6 October 1711 DRc/FTv/44 Simon Lambe, smith, bill:... mending 2 locks Treasuree doore..

J. Harrison, carpenter, bill: 2 feather edge'd board and 1 12' deal for ye Treasurery 4s; workmanship 3s6d.

7 August 1758 DRc/FTv 114 Estimate of carpenter and bricklayers work wanting to be done to the Treasury room: Carpenter: firing of the Joist work and all materials 7s6d; puting up a new Joist work and materials 4s; Bricklayer: about 32 yds. Lath and Plastered Celling, Scaffoulding, work and materials £2. (Ordered to be done 8.8.58 J. Lawry).

Door J. Harrison, carpenter: alltering the Treasury room door & lock ls6d Door J. Harrison: Opining treasure room Door and minding it. Later 10 January 1762 DRc/FTv/119 & lock ls6d DRc/FTv/121 ls. ?Treasury

West Bros: removing cupboards from lobby, repairing, colouring walls yellow, repairing floor, converting cup'd into glass case for Cromwellian relics, internal fitting

Treasury roof Godfrey Survey 4 April 1952 DRc/GA Need to renew the cross at apex of gable.

Treasury wall

Godfrey survey 21 April 1971 DRc/GA

Crack in W. wall has opened a little. Fix tell tale and observe

Wall 29 October 1976 DRc/DE/209/IX(1) Chapter Clerk to Godfrey: very bad crack in plaster. Godfrey: not new, sort of thing should include in programme of of monitoring movement in the building

20 April 1982 DRc/DE/209/XII(c) dismantled; spiral staircase suitable access general public, badly worn, boarding temporarily, repair with stone by degrees. Needs handrail or rope. Limewashing, improved lighting, cleaning and ?polish 'bakers oven' floor tiles

VAULTING

Eighteenth century

PLUMBER'S WORK J. Pluckwell, bill: ...a Boss

13 April 1764 DRc/Ftv/121

Nineteenth century

CHOIR Dean Scott to Irvine 13 Oct. 1881 DRc/Emf/77/93 ...cracks and looseness of vaulting over clerestory windows, not only in Choir (which are almost completed now) but in N. bay and end of N. Choir Transept...to ascertain whether N. Triplet on W. side (clerestory) of that Transept and stone vaulting near it showed any signs of settling or looseness during the period of the restorations. I understand the underpinning of the N. end of Transepts was before you were with us, but expect you observed. At present there is a settlement - caused great crack from top of centre window in that triplet upwards and the vaulting of the bay of the Transept very loose and broken, and what we are anxious to know, how far this and the general looseness of Choir vaulting over Clerestory windows are old defects or new.

We are in <u>Mr. Butterfield's</u> hands now. But I hope you will have no objection to give us best your recollection as Sir Gilbert Scott never made a report on the subject or in any way called our attention to it.

Dean Scott to Irvine DRc/Emf/94 Thank you very much for the pains you have taken in answering my enquiries about the cracks in the Cathedral vaulting. Your information will be very valuable. No doubt something was said on one or two occasions about these awkward places but Sir Gilbert never spoke of them...I am confident in such a tone as to make us suppose there was real cause for uneasiness, and he certainly made no formal or written report on them at all.

Note written on back of this letter: "No wonder - Chapter were so close on money question that it was most difficult to get monies made to place the Building in mere safety. This is very hard measure dealt out to their architect who endeavoured to make the money extend as far as possibly could.

Dean Scott to Irvine DRc/Emf/77/95 With reference to defects in vaulting - I am not prepared to deny that verbal remarks on the subject were made to us, but I can say that no formal report was made on the subject; and that we were not led to think that it was foregoing, or even that it was the next thing which ought to be taken in hand, when we could afford it. In fact in the final Report which Sir Gilbert sent us on the completion of the works...he specified an entirely different work as that which was the next thing to be done. II The choir: Rest.Comm.Appeal 17 Dec. 1891 DRc/Emf/65/47/2 Mr. Pearson says in his report: between 1871-77 great work was accomplished by G.G.S... vaulting was made sound throughout.. Choir was cleansed and repaired and fitted out...the Purbeck and Sussex marble shafts were left untouched. Their cast iron like appearance is due to successive coats of paint or dark varnish. They would blend more harmoniously with the light stone if they were properly cleansed and polished and here and there they sadly want repair. G.G.S. would have done all this if funds had been forthcoming. The work is not included in the present scheme.

Twentieth century

E. END vaulting

Godfrey survey 21 April 1971 DRc/GA

In contrast with the vaulting of N.W. Transept where there is a high roof and the vaulting is contained by the side walls, which rise above it, the vaulting in the eastern arm stands up freely. There is no restriction from the side walls, and cracks have opened up in most of them. There is very little, if any, thrust in this direction however. A method must be found to buttress the vaults where normally they would have the support of a wall.

The worst instance occurs on the S. side of the Presbytery, where the crack shows through to the interior of the Cathedral. If the eastern arm is scaffolded as is intended, the opportunity should be taken to fill such cracks carefully, with an undercutg key for the filling (this cannot be satisfactorily done from above).

Measures can also be taken to stop the movement. Some of the vaults towards the W. end and of the Choir, it appears have been improved in this respect and have been more newly rendered over the top.

In the S.E. Transept a dwarf brick wall has been built against some of the vaults.

N.W. TRANSEPT roof internally Godfrey survey 21 April 1971 DRc/GA

Vaults show no weakness. Timbers appear to be in good order and roof is diagonally boarded, giving it added stability. All beams except that of southernmost free truss are clear of the vaulting. Free vault at this point from possibly giving support to the timber.

S.E. TRANSEPT Godfrey report 12 Oct.1978 DRc/GA Scaffold tower required for examination apex rib joints of southernmost section of vaulting. Could not conveniently reach this in conjunction with recent work in clerestory next to it. VESTRY

1

History: S.W. Transept: '. at ..southern end of great altar recess in east wall a small pointed doorway opens into the little room so noticeable outside...This room, like so many other parts of the building has had considerable vicissitudes. Here are said to have been kept at one time the valuables belonging of the altars in this part of the church. Then at the end of the eighteenth and during the earlier part of this (19th) century, the room is mentioned and marked on plans as the coal hole. It is now more honourably used again, as the vestry of the masters and king's scholars of the Grammar School, who have to attend the cathedral services on Sundays and Saints' Days' p. 72. Bell's Cathedral Series 1897

Eighteenth century

Carpentry estimate 1742 DRc/Ftv/90 J.Chubb, estimate 21' 2" Vestry door £1.1.; 29' jambs 19s4d; 10' double architrave 10s. 10' plain dado 9s; 4 hinges, screws 4s 6d; labour, oak sill and takeing old wood down 2s; £3.5.10d.

Bill 1 January 1742 DRc/Ftv/91 J. Chubb, carpenter, bill: work done to Westry Room floor: 1 10' whole deale; 2 7' ditto; 3 ½' ditto; 1 man 1 day

SURPLICE ROOM8 June 1781DRc/FTv/139(I)E. Harrison: Inclosing the Surplice Room: 125' deal; 5' oak; ironlock; 12 keys. 2 men 4 days.£1.2.6d.

Nineteenth century

NEW VESTRY 23 June 1896 DRc/Ac/17 Dean having reported new Vestry nearly finished - Messrs. Foord to remove old cupboards into new Vestry, and Dean to arrange to preserve such part of old woodwork as was of interest and consider what use should be made of it.

VESTRY new 25 November 1896 DRc/Ac/17 Reported to Chapter that walls were very damp. Mr. Friend requested to investigate and also report on lighting required by Lay Clerks.

Twentieth century

OLD VESTRY Cobb 16 August 1909 DRc/Emf/147 Enclose drawing showing simple shelving to receive music and use such available space as there is in the Old Vestry in S. Choir Aisle. Cost with sliding doors in oak probably about £50 or more. Floor is in need of some repair - some of the joists or the plates on which they rest may have become decayed. Drawing: Proposed conversion of Old Vestry into Music Library. $\frac{1}{2}$ " - 1' Pencil and wash on tracing. Elevations and plan. E.F. Cobb. Good condition.

r .

1

*

WALLS GENERALLY

Eighteenth century

REPAIRS walls 10 September 1702 DRc/FTv/34 J. Gamball's bill: mending walls and other works: 14 basket lime; 20 basket sand; 125 bricks; 4 days work myself; 4 days servant; 6 days labourer.

SURVEY of fabric by Mr. Dickinson

26 June 1716 DRc/Emf/14

Plaisterers estimate 1716

To repair ye rendering on ye inside walls and white ye whole Church... Bricklayers estimate 1716 To finish upon ye outside and walls in severall parts of the Church and dubbing out ye several parts and underpinning £70.0.0d

Bricklayers estimate 1716

To finish upon ye outside and walls in severall parts of the Church and dubbing out ye several parts and underpinning £70.0.0d

PRIMARY VISITATION p.206 18 July 1724 DRc/Arb/2 Answer to Bishop from Dean We know of no defects in the walls of the Cathedral Church of any moment...

WALLS cracks 18 June 1761 DRc/Ftv/118 C. Hogsflesh, bill: stoping of Cracks on the Out Side; 6 hods lime/hair; 2 men 1 day 6s 6d

N. SIDE 3 September 1761 DRc/FTv/118 C. Hogsflesh, bill: Repairing the N. side: 9 hods morter, 100 bricks; 2 men 1 day 11s

Unidentified but probably S.E. Transept

BRICKWORK 20 November-7 Dec. 1781 DRc/Ftv/139(I) S. Nicholson, bricklayer: Work to Fabrick: 27,063 bricks £37.4.2d; 4 bushell lime 1s8d; 6 bushell hair 7s.; 64 loads Morter £25.18s; 11¼ loads Lime and hair £6.15s; 19 hods fine lime 12s; 7 hods fine morter 3s6d; 25 hos Stucco 12s6d; 4 bags Plaister 3s6d; Glew and Umber 5s9d; 12 lb candles 8s; 42 loads rubbish carted away £2.2.0d; 6½ days Plaisterers £10.15.3d; 316 days bricklayers £42.4s.8d. 357 days labourers £32.14s.6d; 47 days a Lad £2.25.5d.

BRICKWORK 7 Feb.- 8 November 1782 DRc/FTv/140 S. Nicholson, bricklayer: work done to the Fabric: 4200 bricks; 7½ loads Morter; 2 do. lime/hair; 6 hods fine stuff; 1½ hods stucco; 1 firkin fine laister; 10 loads Rubbish carted away 8 days Plaisterer; 8½ days Bricklayer; 36 days other bricklayers; 48 days labourers.

£25.5.6d.

4. Several of the Parapet walls are much decayed and begins to want some reperations, and when done they may be lowered at least a foot, which will lessen the expense.

11 December 1754 DRc/FTv/109 ROOF W. End J. Harrison, bill: putting up a new post and trussing up the Girder wich was by order of Mr. Slone: putting up the Caffold and tacking of it Downe 2 men 4 days; 8 cub.ft. Oak for Corner post £1.2s; 6 cub. ft. & 1/2 for trusse of the Garder 13s; 7 12' whole deale; 1 14' deal for the Cording; 10 lb. long Spicks; 350 nails for the Cording; 3 men 6 days boy 3 days £6. 17s. 4d.

1 7 5 5

ROOF West 8 January 1755 DRc/FTv/110 J. Harrison, bill: 12' oke joist; 4 14' Deals; 2 men 1 day 18s 6d.

2 May 1755 DRc/FTv/109 ROOF S.Side J. Harrison, bill: work don S. side of the Cathedral: 3 10' whole deals for platform; 30' board lathing; 3 men 1 day.

ROOF

2 May 1755 DRc/FTv/109 J. Harrison: work done to puting up the Ties in the Roof: 28' fir 12x6; 12 2' Oack trunnells; 12' oak for ties; 3 lb. Old spicks; 3 men 4 days.

GUTTER SPOUTS 23 July 1755 DRc/FTv/114 I. Dent, mason, bill: 3' 6" new purbeck two spout stones..

ROOFS and rainwater goods 12 August 1755 DRc/FTv/110 G. Rowland, bill: 2 men 12 dayes soddering the drips and puting up the pipes and cistern heds: old lead 33 cwt. 3gr. 6 lb.; new lead 43 cwt. 5 lb.; sodder 1 cwt. 1 qr. 27 lb.; 6 bushell charcole; 3 duz. wallhooks.

don at W. End of Cathedrdal church also repairing leaks and soddering Leaks and crack in the Lead on the Roof, with new doing several stacks of Pipes and Cistern heads at W. end. £45.4s., minus old lead £28..2.94d: total £55.6.3d.

Repairs W. End 14 August 1755 DRc/FTv/110 J. Harrison, carpenter, bill: to W. roof to tacking up the Gutters and new laying them and macking Good the bording: 132' oak joist; 23 12' whole deals; 22 10' whole deals; 1 10' ½" baten; 2 men 16 days. £9.9.13d.

Leadwork and guttering 1755 DRc/FTv/109 G. Rowland: 59 cwt. 29 gr. 26 lb. cast lead £62.14.4d; 36 wall hooks 9s; 4 bush. charcole 5s 4d; adjusting the W. pipes £2.5s. 3 men 6 days £2.5s. 1 cwt. 2 qr. 11 lb. sodder £6.14.3d; to Harrison for scaffolding £1.0.5d; deduct old lead 35 cwt.2 gr.18 lb. £44.17.10d.

1756

Leadwork

8 March 1756 DRc/FTv/111

POINTING & REPAIR OF STONE FACING Godfrey Survey 4 April 1952 DRc/GA

1) There are several parts of the ashlar facing where damage is occurring by the surface of the stone peeling away. The trouble starts at the joints. This may be simply the result of frost expansion in a soft joint or chemicals in the atmosphere being absorbed by moisture into the joint. It is possible also that the surface has been made more dense than the rest of the stone by natural hardening or by treatment and is therefore being forced off from behind. The effect is for the surface to come away as if the stone had been end bedded, whereas it is in fact correctly bedded.

This trouble is very evident on the parapet of the N. wall of the Choir, and the adjacent parapets of the two Transepts. It also occurs on the N.W. Turret and pinnacle of the N.E. Transept. There is a case too on the S. side of the building, in the E. parapet of the S.W. Transept.

The badly decayed pinnacle at the N.E. angle of the N.E. Transept is probably a case of the advanced stage of this same trouble. It is the only really bad pinnacle remaining to be renewed under the present programme. One could I think erect a local staging in order to examine it again more closely, and in order to carry out the work too, should it be found possible to restrict it to repair and not renew.

The stonework in which this particular failure is occurring is not old and I would like to see some alternative methods tried to mitigate it. Again it will be useful to examine previous reports to see whether this is a new development, and to see the results of any earlier attention which may have been given to it.

2 There is some very deep wasting of stone in the main wall of the Nave S. aisle. Tiles have in the past been inserted as weatherings over some of the stones, where they have decayed most, but there is little that can be done to stop the flaking of firestone, which is the worst offender in this case. You have already been advised that extensive repair is required. I have mentioned too that the joints are hard, perhaps too hard, with flint spalls embedded. I do not think it is urgent to embark on a general repair, though it would be of advantage to do something locally and thereby gain information the wall's condition.

Stonework repairs required Godfrey Survey 4 April 1952 DRc/GA In dealing with repair to stonework the question always arises of how far complete renewal is called for. In many cases a weathered and worn appearance is quite harmless and looks less incongruous than new, provided the bulk of the stone is sound and stability is maintained with good jointing. In other cases, where decay is local, bad sections can be cut out and made good with 'plastic' stone, that is to say an artificial stone compounded of stone dust, sand and cement, which is formed in position and, if properly reinforced with rustless metal, can stand for a long time. It is obvious however, that a policy should not be adopted, even if attractive from the point of view of economy - which is followed over a period of many years would start to transform the appearance and material of the Cathedral. I am certainly in favour of postponing reneweal, where the removal of loose stuff and improvement of the jointing is practicable, and in some instances of using the plastic stone method locally, as a temporary expedient until such time as the condition of the surrounding work should call for the complete renewal in natural stone of this and the temporary repair together.

Exterior washing of stonework Godfrey survey 21 April 1971 DRc/GA I am particularly happy that my recommendation of a systematic washing and repair of the exterior of the Cathedral has been adopted and this has formed the main part of the work undertaken in recent years. At that time only the W. front had been tackled and since then the whole of the E. and N. sides of the eastern arm has been put in hand (excluding a small postponement in the area between Gundulph's Tower and the great N. Transept. I hope that this policy may continue.

WASHING FABRIC Godfrey report 12 Oct.1978 DRc/GA You may wish to consider again whether to continue with this progress or not. Architecturally it is desirable to avoid bands of uncleaned and repaired stonework between areas that have already been gone over. We have not followed this principle entirely however because we started with W. front and then took up work again with the whole of E. and N. side of eastern arm and N.W. Transept, leaving Nave clerestory and Aisle untouched. No doubt that this has transformed appearance of eastern arm of Cathedral from High Street side and at same time picked up various items of repair needed, which only close access can detect. Intention was to return westwards along S. side. Break in progress made by tackling outside of S.W. Transept so that it could precede work on interior and so avoid risk of spoiling it by penetration of water (which actually occurred) during outside washing, if it had been left to be done after the interior.

During this progress an area out of sight between Gundulph's tower and N.Choir Aisle was left and now, if we do not carry on with S. side of Presbytery, another unseen area will have been neglected. To go on with present plan means quite a modest programme.

Seventeenth century

N.W. door 19 November 1681 DRc/FTb/17 To Antho. Hardin for making the little (west) door, Nayles, Rides rivetts and nayles 7s 0d

Great window 28 June 1682 DRc/FTv/12 Extract from J. Gamball's bill - 'work on Gt. window'

Eighteenth century

Ironwork w. door February 1704 DRc/FTv/230/152 S. Lambe: 2 iron plaits and Revets for ye graite doore waying 30 pounds; more iron for ye Crosse Barr and shuting it .. Great doors 28 February 1753 DRc/FTv/107 J. Chubb: fastning the Great Front doors of the Church. 6d W.Windows 22 February 1754 DRc/FTv/109 C. Soane bill for 2 large pieces of wire work for window wires.£2.4s W. windows 22 March 1754 DRc/FTv/109 J. Harrison: for putting up the wier to the windows at the W. end of Cathedral. SURVEY Charles Sloane 5 December 1754 DRc/FTv/110 Some of the Stone Coping of the great Gable end is come down and sharted, which ought to be replaced and repaired as soon as there is no danger from frost. £1.10. £57.5s. Drawing 1763 DRc/FTv/119 To Chas. Sloane: to an elevation of the W. Front £2.2s... (not in archives) Carpentry 3 December 1765 DRc/Ftv/123 J. Harrison: ... putting up the weier at the West Door; N.W. door 10 February 1769 DRc/FTv/124 J. Harrison: Taking down the Partition at the Little North end Doors and putting them up again 2s 6d W. window 24 December 1770 DRc/Ftv/128 J. Pluckwell: over W. Dore: 120' leaded; 348 quarries 12' repaired; W. window 24 May 1780 DRc/FTv/139(I) For wire work to Cathedral windows: Bt. of R. Hopkins at the Three Keys, 3 Gracechurch St. by E. Harrison: 16 pieces 1/2" wire work 198' £11.11.0d. The Models return'd, wharf, bond, ship on board Cap. Dixon 6d. W. window

W. window 23 December 1780 DRc/Ftb/112 Paid Rich'd Hopkins for wire for the West window (2) £11.11s 6d N.W. door 9 March 1782 DRc/FTv/140 F. Patten: fixing the Hooks for the little Door at W. end of Cathedral; Mason day

Contemporary comment 1788 'The head upon this gable end has been very much defaced. It might be designed for our blessed Saviour, or for the apostle Andrew..the arch over it is so cut, as evidently to shew it was intended to represent a glory. The black squares in the chequered work are formed with small flints'.

Memorials of Cathedral Church Rochester. Rev. Samuel Denne 1788 p.186

SURVEY

Alexander 1799 DRc/Emf/38

The whole of the west wall of this part of the fabric has originally cracked and sunk to the westward, but does not appear to have moved more so for several years....

Masonry on outside of two turrets at west extremity continues to run to decay, but nothing can be done either to mend its appearance or prevent the stone mouldering... The battlements of the parapet between these towers are in the same state but will continue to last some years, after which will all require rebuilding.

Nineteenth century

Doorway gates 20 December 1819 DRc/FTv/175 F. Patten & Brisley: mason cutting holes and fixing Iron gates at Gt. Door W. End. 5s 27 December 1819 DRc/FTv/175 R. Penn: Cutting and remaking Pr. large Iron Gates; 2 new long rabbett'd Fronts, drilling and fixg. £1.10d. W. Blenkinsopp: painting dwarf Iron gates at W. door

Comment

'The removal of cumbrous monuments which obscured the original Gothic architecture was a recurring aspect of Cottingham's restoration work, beginning with Rochester when he resited the heraldic panels that interfered with the west window'.

p.34 J. Myles Victorial Society Annual 1990

W. window 22 June 1825 DRc/FTv/180 R. Penn: 8 pieces stout wire work for W. window....

Casts taken at ?Westminster Abbey April-November 1825 DRc/FTv/181 L.N. Cottingham: for professional attendance...2 days at Westminster with a modeller to procure casts of heads etc. for the W. window of Cathedral..

W. window 1825 DRc/Ftv/180 Browne & Atkinson, masons:...carving Angels to W. window; pointing and repairing W. Turret; do. W. Front; (Postgraduate student C. Miele has reconstructed the drawing of the W. Front made by Cottingham of the original stones; one head in particular appears to have been reproduced. Ed.)

W. Window 1825 DRc/Emf/135 The great West Window which was reported to have been in a very dangerous state and to be incapable of being repaired, has been taken down and an entirely new one set up in its place. The battlement above it, being in a dilapidated condition, was also taken down and renewed at the same time.

W. Window: Mr. Cottingham 1825-6 Summary of artificers' works : e) taking down and rebuilding Great W. window, raking battlements, etc.
E764.13s.7¹/₂d.

W. Obee: washing, stoping, cullering at W. door, taking of moulds and giting metearils and work Readey and to Compoing Roman cement; washed river sand, lime/hare; clay and oile for moulding. 2 men 6 days

Door 21 November 1840 DRc/FTV/196 S. Sidden: repair W. door; fix new mouldings to panels W. door

Wall L. Vulliamy: journey and attendance by desire of Archdeacon King and Dr. Irving to inspect West Wall in their presence; Brisley and Sidden in attendance.

W. window p.364 The Builder IV 1846 Letter from 'a subscriber': "...if the present window was removed and the original architecture restored (no very difficult task as you may actually trace the former arches which have been destroyed) to substitute this abortion..."

Ironwork to W. door R. Penn: cutt'g out old Hook from Stone of W. Door; new Iron Hook, repairing large ride Hinge; fixing large Hook in stone, rehanging Door.

SURVEY Scott 20 April 1871 DRc/Emf/65/1 Contains some of most precious remnants of the later Norman period which we possess, though these have been much interfered with by later works, and parts re-constructed in modern times. It would not be easy to recover the original design as no remnant of the old windows exist excepting to the Aisles and the Norman remains are almost too valuable to be interfered with except to conserve..the question - whether a restoration in part conjecture should be attempted or whether not best to adhere to present form of the front and limit operations to necessary repairs. Favour the latter at present but little demanded at present.

Excavations Irvine's notes DRc/Emf/135 1876 ...during the whole excavations...no trace of an ancient road at the proper depth discovered that might have been supposed to have run past the front of the Saxon church.

The serious fissures which from the want of any proper foundation are gradually shewing themselves in the beautiful W. end will eventually require the whole of that wall to be completely underbuilt to the solid gravel at no very remove period, and as there is no doubt advantage will be taken to remove the accumulation of soil which at present rots the lower part of the wall and necessitates the unpleasant and troublesome steps down into the Cathedral, perhaps further evidence of the Saxon structure may there come to light.

W. window

28 June 1882 DRc/Ac/15 Letter received from Major Vetch RE proposing on behalf of officers of Corps of Royal Engineers that they should like to fill the great West window with stained glass in memory of those members...who fell in the late campaigns in Afghanistan and S. Africa. Resolved...gratefully accept the offer, on the usual conditions, viz. that Messrs. Clayton and Bell be the artists employed and the design be submitted to the Dean and Chapter for approval.

Statue article in The Mirror 29 p.21 undated DRc/77/111 In front of tower on N. side of W. door is a very ancient statue which is supposed to represent Gundulph; it formerly stood in another portion of this tower, which was taken down in 1763.

SURVEY Pearson 16 March 1888 DRc/Emf/142 ... condition of W. Front most unsatisfactory, indeed in so sad a state of dilapidation that unless its restoration be taken in hand some of its most interesting and unique features will be lost and its S.W. Tower will I fear ere long become a ruin. I send with this a drawing showing what I believe W. Front was originally excepting only great W. window and the parapet over. Fortunately we have preserved to us much of this design and there are some old engravings which represent evidently very accurately what its condition was more than a century and a half ago, when the added features shewn in my drawing existed. This Front is of very peculiar design. I do not remember having seen one at all like it and certainly not of such an early date with features so marked at the extreme angles of the Aisles. I fail to see any force in the suggestion that it was intended to have western towers. The very fact that this Front is so peculiar will I hope stimulate a desire to have it restored; the Cathedral would then be quite unique and one of which Rochester might well be proud.

First work - it appears necessary to undertake underpinning of the walls in the same manner that the late Sir Geo. Gilbert Scott dealt with the walls abutting on this end. I am sorry he did not carry out this most important work across the end for I think it would have been less difficult then than it may possibly be at the present The existing foundations of this Front (as I understand they time.

were found to be elsewhere) consist of rough rubble stones of small size loosely packed together and projecting but little beyond the thickness of the walls they have to support, and to this fact and to the yielding nature of the ground on which they are laid may be attributed the various settlements which have occurred and until a new and very solid foundation is added nothing can be done in the way of restoration.

In restoring the Norman work it will be necessary to take out and reset all masonry which has separated and bulged out from the core of the walls and to replace with new stone only such stones as are entirely perished, but in every case each new stone must be of the same size as the old one it replaces and be an exact imitation of it in every respect, doubtless it will be necessary to introduce new to some extent but as the general effect of the old work is so beautiful my desire is to retain every stone which may by any contrivance be kept in its place or be replaced consistently with solid and substantial restoration.

On a line with the lower part of the large window the W. face of both turrets bulges out considerably and here it will be necessary to take out the masonry and rebuild it adding long bond stones. The upper part of the Turret S. of the large window requires very considerable restoration and all the work hitherto done to it in the way of repairs will have to be removed and replaced in a proper manner.

Gable and window Pearson 16 March 1888 DRc/Emf/142 It is much to be regretted that there are no records of any kind of the Norman gable end, the present copy of the perpendicular inserted window is very poor in character and in detail and it is so out of harmony with its surroundings.

Pavement level Pearson 16 March 1888 DRc/Emf/142 I am not at present prepared to say where the original ground line of this Front was; from the limited examination I have made it did not however extend down below the present level to the extent Sir Gilbert carried the walls of the Aisles. Judging merely from what I did uncover I am inclined to believe that the original intention was to descend into the Nave; further examination may modify my opinion.

RESTORATION

Thompson 2 July 1888 DRc/Emf/64/5/3

Stonemasons estimate: 1) Taking up paving and underpinning W. front inside and outside including £150 for dealing with N.W. Tower foundation £860 2) S.W. Tower partly taken down and generally restored £695 3) W. end of S. Aisle £194 4) W. end N. aisle £194 5) W. end including addition of New Work to N. Turret and including boarding up W. window (only) for protection not including repairs of stonework inside except to steps and wall inside of Turrets. NB Nothing taken for repair of arch of central doorway £2718 6) Completion of S.W. Tower

7) Completion of upper part N.W. Tower £1288

8) Upper part W. end of S. Aisle & door in same also W. end N. aisle and new central W. doors £344

£2604

£4565

£7169

Underpinning 17 October 1888 DRc/Ac/15 Mr. Pearson RA, having conferred with Dean..upon state of structure, recommended that the underpinning, both inside and outside of W. front be proceeded with at cost of £860, which includes taking up and relaying the paving and also £150 for dealing with foundation of N.W. tower. Mr. Pearson be authorised to proceed.

£972

Drawings Thompson 28 January 1889 DRc/Emf/77/90-91 S.W. corner. Ink on tracing, sketches of underpinning. Good condition. Section W. front, foundations. Taken from notebooks of J.Thompson, Peterborough, stonemasons. 7 April 1889 Plan, showing outline of Saxon Church. 16 April 1889

Underpinning 24 June 1889 DRc/Ac/15 Agree to pay £400 for work so far done. Contract and plans to be placed among Chapter records. Payments to be made out of Restoration

Fund (15 July 1889).

Stonework Pearson 15 November 1889 DRc/Emf/64/5/25 £100 saved on foundations has been expended on reparations of plinths and bases etc. above ground.

Saxon church 27 November 1889 DRc/Ac/15 Agreed that Chapter Clerk send Mr. Pearson the design by Rev. M. Livetts for marking the site of the Saxon Church discovered during the works now going on...by an inscription on the pavement, if it meets with his approval.

Rainwater disposal 28 November 1889 DRc/Ac/15 Agreed that Mr. Pearson be informed that in addition to ordinary channel to carry off the surface water, the Dean and Chapter would wish, if he concurs, to have a space left for ventilation between the outer wall and the roadway, whether covered, partially covered, or not.

Drawings Pearson 17 February 1890 DRc/Emf/65/13 'Mr. Pearson has never had in his possession any plans of the Cathedral restoration prepared by Sir Gilbert Scott..he has no recollection of having seen such plans...

Scaffolding Pearson 11 October 1890 DRc/Emf/65/15 ...the scaffolding was put up for purpose of making a more careful and complete examination of W. front than could be made any other way, with view to revision of estimates, which I hoped we should be able to reduce and to subdivide in such a way as to enable the Dean and Chapter to institute a portion of the work at once, and to keep the men employed since the completion of the S.W. Tower.

Estimate Thompson 27 October 1890 DRc/Emf/65/16 Revised estimate from Mr. Thompson, Wood Street, Peterborough Enclosed sectional tracing marking Divisions i and ii which have been done (DRc/Emf/65/17) iii Yellow: W. South Aisle including new parapet and coping iv W. North Aisle repairs of ancient work and new door and ironwork iva Upper part W. end N. Aisle: Removal of modern work and restoring to correspond with South Aisle. v Grey: W. end Nave with Turrets

lst: Top of 2nd spring at window sill level and including scaffolding lately done Red: less saving on underpinning

2nd section to top of 3rd string Green: including proportion of work inside the Turret Blue: 3rd: To top of 4th string Brown: 4th To top of 5th string being top of square part of turret. Pink: 5th: Upper part of S. Turret being whole of octagonal portion. Grey: 6th: upper part N. Turret and taking down existing turret Blue: vi completion S.W. Tower vii First section of N.W. Tower viii New central W. doors, ironwork and lowering steps indoors £2310

Estimate Pearson 30 October 1890 Drc/Emf/65/18 Enclosing revised estimate... should like to carry on the restoration of the W. front (Div. v) carrying it up in stages in the order the estimate has been divided, and should be glad of a letter from you to say that I may direct Mr. Thompson to proceed with the restoration of the part tinted red (whole of Norman porch area to lst string of Turrets).

Order of work 25 November 1890 DRc/Emf/65/21/1&2 Dean Livett to A.A. Arnold Have carefully considered Architect's division of works proposed at W. front, and have jotted down a few notes for consideration by Chapter...with the diffidence due from an 'amateur' that I express my opinions.

A The works which seem absolutely necessary for the safe preservation of W. front are specified under Divisions iii and v. Division v includes restoration of whole of the central part of the Front from the foundations to the top of the two turrets. Division iii is the wing which connects this central part with S.W. Tower. £2508 (note: the central doorway and the window above would not be touched). B The works which would have to be done in addition (in order to be in a position to move the scaffolding and render the entrances available) are specified under iv, iva and viii. These include the wing which joins the central portion of the N.W. Tower, and new doors to both entrances with steps to suit new pavement £340

C. Divisions vi and vii are not essential for the <u>safety</u> of the building. Division vii is the N.W. Tower, badly rebuilt in the eighteenth century and not worth preserving or even copying. It might be left to a future generation to carry out. £1168 Division vi however would be <u>better</u> carried out before the present scaffolding were removed, if the money could possibly be found. It would show the grandeur of the whole scheme of restoration, and would be an incentive towards its completion £924

It will be seen that £2508 must be quickly raised...according to whether the carrying up of the S.W. Tower to its full height were excluded or included. ...I am of the opinion that result would be more satisfactory both to Dean and Chapter, the Architect and Contractor if the way could be seen to give a single order for Divs. iii and v, i,2,3, which include portion which most pressingly calls for being placed in a condition of absolute safety. £1225

Completion Stage I Pearson 7 July 1891 DRc/Emf/65/24/25 Mr. Thompson has now practically completed the works ordered to the W. Front. He will remove his men and plant very shortly should you be unable to direct him to proceed further, but the condition of this W. Front is so precarious that I should be very glad if you were in a position to go on. The next stage is in a most dilapidated condition and must become rapidly worse unless something can be done.

PROGRESS REPORT Pearson 14 November 1891 DRc/Emf/65/26 ...will prepare Report you desire...should require to have Sir Gilbert Scott's reports...and any plans the Chapter Clerk may also have.

I wrote a report just after my appointment which I think embraces most of what you now require; perhaps it would be as well to consider this Report and if necessary add into it anything thought necessary (I have just found copies of Gilbert Scott's Reports April 1871 and November 1875).

In my 1888 Report I dealt chiefly with the W. front. I need scarcely add that those portions of this Front, the preservation of which have not not yet been undertaken, are in a much worse condition than they were then, the process of decay during the last few years, I know not from what cause, has been exceedingly rapid.

I obtained estimates for the works necessary to preserve this Front. Since then

1) The foundations have been underpinned

2) Some work done on S.W. Tower

3) Lower portion of W. Front

Two other small sections of this work are now in progress, leaving

to be done the whole of the upper part of the Nave and W. Front of the Aisles estimate £3913

Following rough idea of cost of works still to be done, exclusive of those in progress... W. Front

£4000

Stonemasons report Thompson 7 December 1891 DRc/Emf/65/34 ... the work for which I have instructions will now soon be completed, and shall be glad for further instructions...as Division v, sections 2 and 3, are approaching completion, would be convenient to get the order for 4th section of this Division, costing £276.

APPEAL

17 December 1891 DRc/Emf/47/2 I. The West Front: When Mr. Pearson was consulted by the Chapter in 1888 he found the west front called loudly for immediate repair if it was to be saved from ultimate ruin. In his report of that year he wrote: 'The condition of this front is most unsatisfactory; it is indeed in so sad a state of dilapidation that unless its restoration is taken in hand some of its most interesting and unique features will be lost and its south-west tower will I fear ere long become a ruin'. The upper part of this tower was pulled down in the middle of the last century, doubtless to save it from falling : and merely a shell of its lower part was suffered to remain. The lower part has been thoroughly restored and it remains to build again the upper part with its capping pinnacle. The corresponding north west tower was rebuilt, about the same time, to half its original height in a poor imitation of the original style. The stone, mostly old material re-used, is already much weathered, and the whole tower must be again rebuilt. The central part of the front has already been restored (save the pinnacles) stone by stone, every stone of the old work that was anything like sound being replaced in its old position. The whole of the face of the lower part of the front was found to be detached from the core of the wall, and some of it had actually fallen. The octagonal pinnacle north of the central window is a poor example of a fifteenth century rebuild, and as it could not possibly be restored it will now be rebuilt to correspond with the other pinnacle which is original. Nearly £2000 has already been spent on this work, but the eye does not see all that this sum represents; the renewal of the foundations, commonly called the underpinning, proved a costly though most necessary beginning of the whole work. It was carefully and in every way successfully accomplished, and the unseen new foundations will last longer, probably, than the old have lasted.

Niches for figures 17 December 1891 DRc/Emf/47/2 Proof for circulation ... in the present restoration of the W. front two niches for figures have been discovered, one on each side of the arch of the central doorway; these might be suitably filled with figures of bishops Ernulf and John.

Architect's proposals Pearson 14 Jan.1892 DRc/Emf/137 (In reply to Daily Graphic's request to Committee to publish drawings)

... I cannot help thinking that it would be better not to publish the drawings - my experience is that any publication of the kind rather leads to controversy than to assistance.

Stonemason's payment Pearson 5 February 1892 DRc/Emf/65/42sum due to Mr. Thompson when he has completed works ordered will be £950. Recent work to be undertaken is completion of two western turrets at a cost of £1007 and after that the completion of the two angle turrets of the W. front at a cost: for S. Turret £924 and N. Turret £1168; after these the restoration of the W. ends of the Aisles at £403.

Restoration Sub-Cttee

9 Feb.1892 DRc/Emf/137 A letter from S.P.A.B. was considered. Mr. Hope explained the point of view from which the Society generally regarded the matter of Repairs and Restoration and urged Committee to adopt conciliatory attitude. Agreed the letter should be treated with respect, even tho' its contents might not be endorsed. A Restoration Sub-Committee was formed to deal specifically with architect's plans, contracts, giving orders for successive sections of work, and payment of architect and contractor.

Restoration Sub-Cttee 23 February 1892 DRc/Emf/137 Mr. Livett criticized the Architect's proposed restoration of the Norman raking parapets at W. end of Aisle roofs, on the grounds that it would be impossible to recover the design of the original parapets, they would be false since they would not be accommodated to the present level of the Aisle roofs which were some 3' higher than the original Norman roofs. Proposed 'That for remainder of the work at the W. Front new designs be prepared'. Carried nem.con.

Original Norman work found 20 June 1893 DRc/Emf/138 Remains of the original Norman coping of the parapet at the end of the aisle roofs were discovered in situ on the removal of the perpendicular battlemented parapet which was added when the roofs were raised... the architect is restoring the original coping and is setting back his new parapet (that covers the end of the roof) behind the coping, so that when the restoration is completed, the whole of the outline of the Norman front, with the exception of the central gable, will be presented to the eye.

New statues Restoration Cttee DRc/Emf/138 31 January 1894 Freemasons of Kent..offered to subscribe..two new statues for reopened niches. Accepted...agreed new statues should represent Bishops Ernulf and John of Canterbury and that the old statue now in the Chapel of St. John in the aisle of the N. Choir Transept should be taken as the model.

Doorways

6 February 1894 DRC/Emp/26/5 Mr. Pearson proposes (irrespective of plan to be adopted for road) to lower the entrance by the small N.W. door by about 1'. This will

do away with the 3 steps inside that door and make it possible to do away with the dark and unsightly lobby, instead of which he would suggest a curtain - the space between door and curtain to be covered at top with glass to admit light and keep out draught.

Letter from Livett with proposals to lower road - plan and levels on back; ink and crayon, good condition. Mr. Thompson and Mr. Pearson say that whole work should be finished by end of April and except new central doors can be placed in position by that time, prefer planks to rest for 2-3 months before made up; new doors will be prominent feature of the work, ornamental with scroll work (NW. small door same consideration)

New statues Restoration Cttee 6 March 1894 DRc/Emf/138 Freemasons wish that statues should represent Gundulph and John of Canterbury.

Doors Letter received from Mr. Pearson; possible delay in erecting new doors.

N.W. door Restoration Cttee DRc/Emf/138 5 June 1894 New lobby at N.W. door ordered, est. £60

W.Doorway Dean to Irvine 24 June 1894 DRc/Emf/77/106 The stalagmitic shafts remain in situ in the great W. doorway (sketch) and that in the course of removing and replacing the face of the front around and above the doorway other similar shafts entire (4'6") were discovered, one was in situ in the jamb of the great window (upon the 2nd string) (sketch). It was split by the iron dowel. Its position indicated a double plinth like those of the arcade <u>inside</u> the W. end. There is abundance of fragments from the destroyed portion of the original front (now occupied by great window) sufficient to restore on paper the whole within small

J.B.Sheppard to Irvine undated DRc/Emf/77/47 will find is identical with your own at Rochester - used first half twelfth century - only as pavement - cannot fix date employed, in two of three cases appears in middle Norman work - also Ernulph was prior to Canterbury and afterwards Bishop of Rochester so it may be supposed he imported the stone and used in both edifices with which he was concerned?

Notice boards 26 November 1894 DRc/Ac/17 Vice Dean to provide proper notice boards for public notices to be affixed near W. door, and a small notice board for offertories and

APPEAL ... urgent need for funds...

Undated (about 1895) DRc/Emf/44/6

About six years ago it was found that the famous Western front...in a most critical state, the work being cracked and split more or less from top to bottom. Mr. J.L. Pearson made a most careful

investigation and suggested a thorough renovation and also advised completion of what was probably the original design...accordingly in 1888 the Dean and Chapter commenced with the underpinning - a gigantic undertaking, for a wall 12' thick, and then other works entrusted to Mr. Thompson, also employed on Peterborough Cathedral - who carried it out in a most careful and conservative manner.

Twentieth century

Wall 7 April 1921 DRc/Ac/26 Cobb reported repairs necessary wall above west window. Approved.

West door 27 February 1930 DRc/Ac/28 New floor springs £10 agreed.

SURVEY

.

12 December 1935 DRc/Ac/29 Received Mr. Forsyth's report on condition of fabric and expresed satisfaction with condition of Cathedral as indicated in Report. Repairs to be undertaken forthwith: Parapets copings west gable end of Nave £100.

Preservation of stone 31 March 1936 DRc/Ac/29 Sir Chas. Peers: application of solution to clean and preserve stone. Forsyth to conduct experiment on some other stonework. Chapter to judge effect.

Deferred 15 July 1936 DRc/Ac/29 Forsyth reported experts advised no work to carving above w. door could be safely undertaken. Matter deferred.

Report awaited on work done 26 October 1938 DRc/Ac/30 Ordered when Forsyth's report on work recently done on W. Front received should be shown to Canon Wheatley for his consideration.

WARTIME PROTECTION 30 January 1939 DRc/Ac/30 Possible protection with 'batons'.

26 September 1939 DRc/Ac/30 On outbreak of war should be sandbagged.

W. doorway protection 13 February 1941 DRc/FTv/251 A.G. Webb: forming concrete roof over revettement to w. doorway £12

Wartime protection 29 December 1944 DRc/Ac/30 Protective wall; Civil Defence Committee suggested its removal by naval ratings; Chapter declined at present time until work could be done with no risk.

Railings 29 April 1946 DRc/Ac/31 Urgent request be made Mr. Forsyth for suggestions regarding iron railings outside W. Front; suggest use those around Chandos tomb. 1 July 1946 DRc/Ac/31 Iron railings outside W. Front now completed. 3 July 1946 DRc/FTv/257 A.G. Webb: taking down iron railings to front W. door, altering,

welding to enclose ends with splayed sections, fixing to stone, etc. £25

Removal wartime protection 11 June 1946 DRc/FTv/256 A.G. Webb: demolishing blast walls to W. doors £57.18.

SURVEY Forsyth 14 April 1950 DRc/DE/209 The arcading between two turrets on right side is very much perished and should be repaired. Approx. £750

SURVEY Godfrey 4 April 1952 DRc/DE/209 There is a crack visible internally in the wall on the N. side of the arch of the main W. window. This is a quite normal place for settlement to occur and probably it it happened soon after the window was rebuilt It may however be associated too with the overhanging of the gable parapet above, which has been tied back with rods to the flanking towers. A close examination on this occasion was not possible as it was out of reach.

SURVEY Godfrey 4 April 1952 DRc/DE/209 Whole of the west front appears to be in a very good order with exception of S.W. turret

Gable parapet Godfrey survey 4 April 1952 DRc/DE/209 This parapet is a thin one $(9\frac{1}{2}")$ and leans outwards. As a precaution it has been held in by a metal bar at each end. The coping and some of the ornamental work of the parapet are spalling. The loose pieces should be broken off (as they are over the pathway) and the question of repair considered with the remainder of the W. Front

Doorway Godfrey 4 June 1958 DRc/DE/209/IA(c) Recommend should be cleaned same method as used at Exeter Cathedral.

Cleaning 20 June 1960 DRc/Ac/32 Providing experiment of cleaning small section successful should proceed with whole.

Cleaning commences 8 July 1960 DRc/DE/209/II(c) Scaffolding to be erected and spraying to start. Washing to include flanking towers. Details of a silicone water repellant.

Water penetration23 August 1960 DRc/DE/209/II(Mc)Next stage good deal green algi; needs brushing to remove. Watercoming through stonework into S.W. Tower; told them to point it up.Cleaning programme27 September 1960 DRc/Ac/32Chapter Clerk instructed to inform Architect that hoped cleaning ofcarving round W. door could be finished as soon as possible toenable to dry well before risk of frosts.

Window 29 September 1960 DRc/DE/209/II(c) '..seems our job is to clean outside with soft soap and water and tackle inside more carefully pane by pane with chamois and soft water..' Progress Baldwin to Godfrey 20 October 1960 DRc/DE/209/II(c) Cleaning going satisfactorily except N. Tower; stonework, especially shafts of columns very dirty, seems impossible to remove dirt altogether; to remove surface of stone not wise, certain amount of dirt to remain.

Washing completed Baldwin 9 November 1960 DRc/DE/209/II(c) Washing now finished. Soap, water, pumice on W. window not got it clean. ?use Dokarthan. Mr. Carden thinks too strong.

Invoice 29 December 1960 DRc/DE/209/II(c) Bill for cleaning: £1605.15s.10d.

Figure 20 February 1961 DRc/Ac/32 Question of new head for figure on S. side of west door considered; architect to be consulted.

Door 19 June 1961 DRc/Ac/32 Appropriate treatment for W. door discussed; Kentish Church Builders be asked to have door wire brushed.

SURVEY West front Godfrey Sept. 1963 DRcDE/209 This is in very good order after being washed. Very slight flaking continues. Dust is already lodging on projections and it will be decided whether it requires a quick new wash when the schedule of washing is being carried through and reaches it, or whether it should await its turn after the schedule is completed. It is for the present not being included.

SURVEY Godfrey 21 April 1971 DRc/DE/209 This was first front to be washed and repaired in present programme. Some flaking of Caen stone continues, ie in E. face of S. turret, 4th course up in lowest arcade. This is immaterial at present.

Doorway

Godfrey survey 21 April 1971 DRc/DE/209

Is receiving a film of dust which might be washed off again. I should like to see an experimental patch done.

W. window Godfrey survey 21 April 1971 DRc/DE/209 Lintols to access on both sides of W. window were previously noted as being cracked through and therefore unable to act as ties. These cracks are close shut. Keep under observation

Doorway 3 June 1971 DRc/DE/209/VII(s) Godfrey:..door at w.end pretty certainly 1327 and profile of its stone mouldings some resemblance to wooden ones of choir aisle..

Great door 12 June 1978 DRc/DE/209/X(a) Clerk to Architect: Friends agreed finance cleaning and painting ironwork. Instruct Bennett Masonry Cleaning proceed air abrasion cleaning and immediate application rust inhibitor. Will then arrange painting

11 July 1978 DRc/DE/209/X(a) Godfrey: door is nice but not all that wonderful..heard only last week Gerald Cobb bemoaning loss of its panelled predecessor..but goes well with sculpture around it and does not compete

Architect's proposals accepted 25 September 1978 DRc/Ac/ 29 November 1978 DRc/DE/209/X(a) Bennett Bros. renovation account paid £432

20 October 1978 DRc/DE/209/X(e) Bennett Masonry Cleaning: invoice small tool air abrasive clean, painting ironwork, wax wood. £400

RESTORATION

Caroe 1992 DRc/

WEST FRONT

South west tower

SOUTH WEST TOWER

Eighteenth century

Keene 10 October 1760 DRc/Emf/34 SURVEY Wanting also much repair; I would propose the following Scheme for the repair of this End, which will considerably lessen the Expence, and make the Building as handsome or more so, and much more uniform than it is at present, and at the same time so preserve the Stile of the building that it cannot be discovered but that it is in its originall State.

.... Take off the Octangular part of the S.W. Tower and new top the Square part of the same height, and in same manner as is describ'd for the N.W. Tower, and repair the bottom part of the same. Make a new Staircase in each of the two Towers, to lead up to the Flats over the Isles. Take off the Parapets 'twixt the Towers (now horizontal) and new work ditto raking, as they appear to have been originally.

Comment

1763 Thorpe 1788, 183 'In 1763 the pinnacles on the outer turrets of the W. front were taken down.. Shortly afterwards a crenellated top was added to this turret and to the W. end of the Nave aisle roofs'

'The southern tower is in this view (an engraving dated 1772) still unlowered, but it was cut down to match its fellow in height, soon p.30 Bell's Cathedral Series 1897 afterwards'.

Lowering of tower 31 January 1783 DRc/FTv/139(II) J. Nicholson: .. cleaning away Rubbish, etc.; repairing pavement and making good work to Towers each side of W. Door;

New flat roof R. Cackett: painting 3 large Shoots x 3; 8 cwt. 2 qr. sheet lead to New Flat; new Socket; 2 men 2 days.

Coping 5 July 1783 DRc/FTv/139(II) S. Patten: Repairing the small Towers: 5'3" cube Portland coping on the small Tower. 49'6" plain work; 2'2" cube Portland Cap on the top of a Pinnacle; 5' 7" sunk work; 2 masons 10 days.

SURVEY Alexander 1799 DRc/Emf/39 West end of South aisle wall - parapet and copings of west end as well as Battlements of the Turret at the S.W. corner are in very tolerable repair and only require pointing.

Nineteenth century

Repair to walls and stairs 26 September 1840 DRc/FTv/195 W. Brisley: Reinstating walls S.W. Tower: 19' run Purbeck ashler; York step and landings; 97' Bath stone; 239' Firestone

SURVEY Pearson 16 March 1888 DRc/Emf/142 What remains of W. turret at S.W. corner of S. Aisle is in a very bad state, considerable settlements shew themselves especially on its E. side, and much of it will have to be rebuilt, the staircase in it requires to be entirely renewed. The upper part seems to have been taken down and probably at same time the corresponding turret on the N. was dealt with, but fortunately the lower part was spared. The engravings which show the design of the upper part of this turret are so clear and correspond with one another so well that there is little or no difficulty in restoring it. The end of the Aisles had raking copings and these it will be necessary to restore.

Stonemason's estimateThompson 2 July 1888DRc/Emf/64/5/3S.W. Tower partly taken down and generally restored£695Completion of S.W. Tower£972

Proceed Pearson 2 December 1889 DRc/Emf/64/5/30 Ordered Mr. Thompson to proceed Item 2 of estimate 2 July 1888.

APPEAL 17 December 1891 DRc/Emf/47/2 I. The West Front: When Mr. Pearson was consulted by the Chapter in 1888 he found the west front called loudly for immediate repair if it was to be saved from ultimate ruin. In his report of that year he wrote: 'The condition of this front is most unsatisfactory; it is indeed in so sad a state of dilapidation that unless its restoration is taken in hand some of its most interesting and unique features will be lost and its south-west tower will I fear ere long become a ruin'. The upper part of this tower was pulled down in the middle of the last century, doubtless to save it from falling : and merely a shell of its lower part was suffered to remain. The lower part has been thoroughly restored and it remains to build again the upper part with its capping pinnacle...

•

Twentieth century

SURVEY Godfrey 4 April 1952 DRc/GA There are isolated instances of perished stones. Some renewal or careful weathering of joints is necessary.

WEST FRONT

South west turret

SOUTH WEST TURRET Eighteenth century

Alexander 1799 DRc/Emf/38 Masonry on outside of two turrets at west extremity continues to run to decay, but nothing can be done either to mend its appearance or prevent the stone mouldering ... The battlements of the parapet between these towers are in the same state but will continue to last some years, after which will all require rebuilding.

Nineteenth century

SURVEY

Smirke 1825 DRc/Emf 135 The turret at the S.W. angle of the Nave next the Western Entrance requires particular care for its preservation. The surface of the stone is very much decayed, the stones on the West side at about the middle of its height appear to be loosened and inclined to break forward and there are several large fractures in the inside casing of rubble stone. The fractures should be carefully stopped and the joints of the stones well pointed particularly at the upper part and above the parapet a broad iron hoop secured as far as possible from corrosion should be fixed in a very careful manner round the Turret; the stones apparently loosened should be examined and if they are breaking forward, they must be secured also by an iron strap passing round them, well fastened at each end.

Repaired 1825 DRc/Emf/135 The two turrets (west end) have been partially repaired.

SURVEY Pearson 16 March 1888 DRc/Emf/142 The turret N. of window undoubtedly terminated in a similar manner to that on S.

The steps which originally were built into these turrets will have to be replaced, they will add much very needful strength to them and will give access to the Nave roof. The turret should be carried up in accordance with the original design of which there are ample records and a staircase built in it for access to the Aisle roof.

Stonemason's estimate Thompson 2 July 1888 DRc/Emf/64/5/3 ... not including repairs of stonework inside except to steps and wall inside of Turrets.

RESTORED

1891

Stonemason's payment Pearson 5 February 1892 DRc/Emf/65/42sum due to Mr. Thompson ... Recent work to be undertaken is

SURVEY

completion of two western turrets at a cost of £1007 ...for S. Turret £924 ...

Twentieth century

SURVEY for Pilgrims Trust Forsyth 14 April 1950 DRc/DE/209 The two main turrets should be scaffolded for close inspection as they are over the footway and any badly decayed stonework should be repaired. Approx. £1200

S.W. Turret

Fairly extensive replacements are required to the lower half (all small stones). The shafts, worked on solid with V rib down centre, will require dressing after fixing to obtain true alignment with old work. Aprox. £1100

SURVEY Godfrey 4 April 1952 DRc/DE/209 The arcaded stage of this turret from the level of the springing of the window arch down to its main transome is flaking very badly. One stone of the stage above at a shaft base is also perished.

SOUTH WEST TURRET (post Reformation)

TURRETS ?W. End 5 July 1783 DRc/FTv/139(II) S. Patten: Repairing the small Towers: 5'3" cube Portland coping on the small Tower. 49'6" plain work; 2'2" cube Portland Cap on the top of a Pinnacle; 5' 7" sunk work; 2 masons 10 days.

SURVEY Alexander 1799 DRc/Emf/38 Masonry on outside of two turrets at west extremity continues to run to decay, but nothing can be done either to mend its appearance or prevent the stone mouldering... The battlements of the parapet between these towers are in the same state but will continue to last some years, after which will all require rebuilding.

Repaired 1825 DRc/Emf/135 The two turrets (west end) have been partially repaired.

SURVEY Pearson 16 March 1888 DRc/Emf/142 The turret N. of window undoubtedly terminated in a similar manner to that on S.....

The steps which originally were built into these turrets will have to be replaced, they will add much very needful strength to them and will give access to the Nave roof. The turret should be carried up in accordance with the original design of which there are ample records and a staircase built in it for access to the Aisle roof.

Stonemason's estimate Thompson 2 July 1888 DRc/Emf/64/5/3 ...not including repairs of stonework inside except to steps and wall inside of Turrets.

Stonemason's payment Pearson 5 February 1892 DRc/Emf/65/42sum due to Mr.Thompson... Recent work to be undertaken is completion of two western turrets at a cost of £1007 ...for S. Turret £924 ...

SURVEYForsyth 14 April 1950 Godfrey archivesReport prepared for the Pilgrim Trust by E.C. Butler of W.A.Forsyth & PartnersW. end - parapetThe arcading between two turrets on right side is very much perished
and should be repaired.Approx. £750

W. end - turrets The two main turrets should be scaffolded for close inspection as they are over the footway and any badly decayed stonework should be repaired. Approx. £1200

W. end - S.W. Turret

Fairly extensive replacements are required to the lower half (all small stones). The shafts, worked on solid with V rib down centre, will require dressing after fixing to obtain true alignment with old work. Aprox. £1100

Nave S.W. Turret Godfrey Survey 4 April 1952 DRc/GA The arcaded stage of this turret from the level of the springing of the window arch down to its main transome is flaking very badly. One stone of the stage above at a shaft base is also perished.

WEST END

* . .

.

North West Tower

Eighteenth century

Repairs 5 March 1705 DRc/FTv/39 J. Gamball's bill for: mending the outer Tower and walls and pan tilles; ½ lode lime, sand; 33 pantiles; 2 bushell haire; 5 days 2 men Dickinson 26 June 1716 DRc/Emf/14 SURVEY Masons estimate 1716 To repair ye North side of ye North West Tower £6. 10.0d Scaffolding 14 December 1717 DRc/FTv/50 H. Turner, carpenter, bill: erecting a scaffold: 3 men 1 day 75 17 December 1717 DRc/FTv/50 Repairs J. Gamball, bricklayer, bill: ... and working the side wall of the Tower 26 November 1718 DRc/FTv/51 Paid William Wode for caring a way Rubbish West end of the Church Masonry for insertion ironwork 8 August 1728 DRc/Ftv/70 W. Martin, mason, bill: 20' of stone at 1s 2d per ft; 6 days work cutting ye Cramp Holes at 3s a day. 9 August 1728 DRc/FTv/70 Ironwork strengthening W. Holmes, smith, bill: 6 hould fasts waying 17 lb; 2 upright bars; 4 boults; 1 cwt. 3 qr. 21 lb.; 17 August: 1 cramp; 2 up right bars; 4 small bars: 1 cwt. 3 qr. 5 lb.; 26 August: 1 cramp, 3 boults, 3 kees, 3 bars waying 3 qr. 18 lb. 10 September: 1 cramp; 2 boults, 2 kee; 2 bars wayin 2 gr. 5 lb. For puling Up ye Worck for myself and My Man 3 days: Total £11.18.3d Bills 9 October 1728 DRc/FTb/62 Pd. Will. Holmes, smith, for work done on the N.W. Tower of the £11.18s Church Pd. Wm. Martin, mason for work on N.W. Tower £2.1s SURVEY 5 December 1728 DRc/FTb/62 7s 6d given as fee to the Master Bricklayer at the Dock for his advice about the N.W. Tower SURVEY Charles Sloane 5 December 1754 DRc/FTv/110 Report of several needfull Repairs to be don at the Cathedral Church. There is a large rent below the Iron works in the N.W. Tower, but whether it be of a late date is uncertain, yet it may be proper to Notice it, to observe whether it goes any further or opens wider. SURVEY Younger 15 July 1760 DRc/Emf/32 In a very bad and rotten state ... no sorte of repaire cannot be of any service towards keeping the same from falling. The iron strapps and stayes that have heretofore been made use of have not bin any service to the same, but very mutch otherwise being improperly fixed and the sooner they are released from the Gable End of the Church ye better.

Suggest ... to take down the Top and uper parts of the said Tower as low at least as down to the Gallery, and theare cover the same with a Temprary roof, to keep out the weather and for the time being. This done, will put the same out of any sort of Danger, Untill it may be judged necessary to fix upon a plan and rebuild same at lasure.

SURVEY Keene 10 October 1760 DRc/Emf/34 North west tower is so much crack't and tore to peices that it is rendered incapable of being repair'd to anser the purpose; it must therefore be taken down and rebuilt.

PROPOSALS Keene 10 October 1760 DRc/Emf/34 Carry up the N.W. Tower in same manner as that and the S.W. Towers are at the present, so high as where the S.W. Tower is sett off to an Octangular Figure, at that place cover it with a flat roof leaded and finish the top with proper battlements and a Pinnacle at each Angle. Take off the Octangular part of the S.W. Tower and new top the Square part of the same height, and in same manner as is here describ'd for the N.W. Tower, and repair the bottom part of the same. Make a new Staircase in each of the two Towers, to lead up to the Flats over the Isles. Take off the Parapets 'twixt the Towers (now horizontal) and new work ditto raking, as they appear to have been originally.

Scaffolding 13 October 1760 DRc/FTv/117 J. Harrison, for Puting up the scaffoulding round the N. tower at W. End of the Cathedral and tacken of it downe. 3 men 2 days 19s 1d. (probably to assist survey; Ed.)

18 October 1760 DRc/FTv/117 J. Parr, paviour, Makeing Good the Scaffold holes at W. end of the Cathedral

Anxiety over condition 2 July 1762 p.36 DRc/Ac7/24 Ordered that the Treasurer be wrote to to know whether he hath consulted with any proper workmen about the Repair of the North West Tower of this Cathedral desiring that if he hath not done so that he will forthwith and send somebody down or write to the Dean and Chapter.

Emergency repairwork 22 July 1762 DRc/FTv/118 C. Hogsflesh, bricklayer, bill: Repairing the Tower at W. end. 4 hods morter 50 bricks; 2 men 1 day 6s ld.

Scaffolding 21 Aug.-6 Nov. 1762 DRc/FTv/119 J. Harrison, bill: to building and tacken down scaffoulding to N. tower at W. End. Materials and labour. Paid 27.7.63 £92.7s.4d.

13 April 1764 DRc/FTv/121 Plumber J. Pluckwell, bill: 2 men ½ day on new Tower. 3 May 1764 DRc/FTv/125 Lead for stonemasons J. Pluckwell: lead for the stonemasons use for New Tower: 13 cwt. £10.8s.103d 6 lb. 25 September 1764 DRc/FTv/121 Leadwork J. Pluckwell, bill: 2 men ½ day on new Tower: 1 cwt. 1 qr. 20 lb. sheat lead. Striking scaffolding, temporary cover 3 July 1766 DRc/FTv/125 J. Harrison: to stricking the scaffoulding and covering over the top £2.6.1d of the Tower. 2 August 1766 DRc/FTv/125 Bill J. Pluckwell, plumber: for cramps for new Tower £8 1767 DRc/FTb/98 Striking scaffolding Paid for taking down the scaffolding from the Tower £48 Measurement and estimation of accounts 31 October 1767 DRc/124 Geo. Silverside: Going to Rochester measuring the new Tower making out the Account at London, self and clerk £10.10.0d To Mr. Cowse coming to Rochester about Mr. Dent's bill and measuring £5.5.0d 27 June 1768 p.30 DRc/Ac8/25 Measurement, valuation Mr. Dent, Mason, having deliverd a bill £464.16s.9d for Rebuilding the north west tower of the Cathedral... empowerd the Dean to send down a Surveyor to View and Measure the work and examine the Bill. 31 October 1768 DRc/FTv/124 Measurement, valuation K. Couse, G. Silverside, J. Hockly: measured and Valued above (Penn's bill 1767) examined... 16 November 1768 DRc/FTv/124 The following 6 Blocks portland was taken from Mr. Dent's Measurement; as they lay in the foundation and was taken by Mr. Harrison. Containing 110' 6" cub'd stone £13.16.3d £16.0.5d 53' plain work £2. 4.2 £12.3.0d Morter and freight of stone £74.11.5%d Total: 28 June 1769 DRc/Ftb/100 Mason's bill Paid Mr. Isaac Dent's bill for the new Tower. £374. 11s. 54d 30 June 1769 DRc/Emf/35/2 Roof leadwork Plumbing estimate for New Tower - estimate of plumbers work to be done upon the New tower and taking up 6 sheets of Lead by the side of the Tower and New casting the same Pluckwell £16.9.0d 30 June 1769 DRc/Emf/35/3 Roof estimate carpentry Estimate of Carpenter's work that is wanting to be done to putting a new Roof to the Tower at the N.W. corner of Cathedral.

DEMOLITION 23 Sept.-30 Oct. 1762 DRc/FTv/119 Isaac Dent: for taking down the N.W. Tower. 1 mason and labourers. Paid to Hans Sloane 27.7.63 £26.12s.9d.

REBUILDING

Undated DRc/FTv/124

Isaac Dent, bill: to the building of a New Tower at the N.W. Angle of the Cathedral: 357' 2" cube Portland £44.12.11d; 496'9" sup. plain work to ditto £20.13.11d; 4'7" sup. moulded ditto; 73'10" sup. Circular ditto £4.6.1½d; 1502'3" sup. plain face to old stone £62.11.10d; 414'4" sup. moulded work to old stone £20.14.4d; 327' cubed Perbick Bond Stone £40.17s.6d; 13 no. capitals stone and labour £6.10s.0d; 29 no. labour only £2.18s; 24 Arches Girt £6.0.0d; 1 Flower De Luize Carved £1.1.0d; small piece of Impost Moulding 7s6d; a Figure clean'd and Sett (Virgin Mary) 15s; 2 no. large mortice holes and 4 Joggles 6s; 2 Rose Lights; Labour to 5 Large Bases 15s; ditto 5 small 10s; 273' sup. labour to Rough Cain stone in Passage £6.16.6d. £270.18s.6 d

To work laying in the Church Yard not sett 155'2" cub'd portland stone £19.7.11d 135' sup. plain work £4.10s.2½d 176' sup. mold'd work to ditto £7.5s.11d

£31. 4.0½d

Old stone labour only not Sett laying in ye Cathedral: 233' sup. plain work £7.15.4d; 18' moulding 15s.0d £8.10.4d Day work taken down the Remainder of the Tower 157 days labour, 57 days Foreman; £25.11s. 6d.

To Time moveing the Rubble from the Church Wall and Carrying into Church Yard; Cutting away the Plinth and Returnining it to the Little Door and Carry the work for the Security of the Arch; Letting in Collers Chains Barrs and Running with Lead: 20 days Foreman; 27 Mason; 25 labourer £35. 15s.1½d Final total: £346. 8s. 0¼d

Statue article in The Mirror 29 p.21 undated DRc/77/111 In front of tower on N. side of W. door is a very ancient statue which is supposed to represent Gundulph; it formerly stood in another portion of this tower, which was taken down in 1763.

Comment 1763 Thorpe 1788, 183 'In 1763 the pinnacles on the outer turrets of the W. front were taken down, and the remainder of the N. Turret was rebuilt from the ground. Shortly afterwards a crenellated top was added to this turret and to the W. end of the Nave aisle roofs'

Mason paid27 July 1763DRc/FTb/94Pd. Isaac Dent (mason) for taking down the N.W. Tower£26.12s

Scaffolding 5 March 1764 DRc/FTv/125 J. Harris: carpenters work delivered to N.W. Tower for use of the masons: detailed bill of scaffolding, methods of erection and striking. £47.16.11d. Joist to be of Oak, the board whole Deal, with work and nails £2.12.0d. If you please to mack use of your scaffolding stufe it will come to for work and nails only 15/-d.

October 1769 DRc/FTv/127 COMPLETION - roofwork, coping F. Patten, mason: 27 days 2 masons at New Tower: 88' New Portland 4 November 1769 DRc/FTv/124 coping... J. Harrison, bill: Building the Roof on the top of the Tower 15s Clearing away the Old Stuff from the Roof and carrying it into the 1s 2d Church 8 November 1769 DRc/Ftv/124 J. Pluckwell: plumbing done on New Tower and taking up the Sheets by the side of ditto and Makin good: 25 cwt. lqr.4 lb. sheet lead 4' £16.6.5d. ranewater pipe. 12 men 5 days. 14 December 1769 DRc/FTv/

S. Nicholson: carrying large and refuse Stones from New Tower into Vault under Church, clearing away Rubbish: 19 loads rubbish; 20 days labourers.

SURVEY Alexander 1799 DRc/Emf/38 Turret at N.W. corner may remain in its present condition being in tolerably good repair in its Battlements and leaded roof, only requiring fresh pointing near the top.

Nineteenth century

RESTORATION estimate Thompson 2 July 1888 DRc/Emf/64/5/3 ..stonemason...including £150 for dealing with N.W. Tower foundation £860

.. completion of upper part N.W. Tower

r

£1288

Underpinning DRc/Ac/15 17 October 1888 Mr. Pearson RA, having conferred with Dean...upon state of structure, recommended that the underpinning, both inside and outside of W. front be proceeded with at cost of £860, which includes taking up and relaying the paving and also £150 for dealing with foundation of N.W. tower. Mr. Pearson be authorised to proceed.

Investigation of quoin Livett to Pearson 6 Feb. 1893 DRc/Emf/137 ...with the foreman's assistance I have made an examination of the curious quoin at the junction of the NW turret and the wall at end of Aisle. At first sight it might appear that the quoin was a reproduction by the 1764 builders of original Norman work. The removal, however, of two or three of the stones, has revealed the black face of the original Norman work behind the quoin, which the 1764 people for some unaccountable reason laid on to that face. I measured up the quoin and its surroundings, and send you a tracing which I hope will make the construction clear. As soon as the remaining part of the face of the 1764 turret has been taken down, I will make a list of drawings of the fragments of the details of the original turret and send them to you. Might the bit of string which remains in the N. aisle wall, western bay, be reproduced in the 1st string of the new turret?

Restoration Cttee

.

DRc/Emf/138 20 June 1893

...details of N.W. Turret could not be determined until fragments of the original turret were disinterred from the 1764 turret...drawings of the fragments so discovered (including considerable remains of the original spire, parts of a surface enrichment with many capitals, bases, etc.) were made by Mr. Livett and sent to architect...who altered his design in accordance with them...the fragments of the old spire are sufficient to enable the architect to reproduce it in facsimile except only the knob at the top.

The views of the architect and Mr. Livett, in respect of the character of the details to be adopted in the turret, have approached each other under influence of discovered fragments. The turret will not be wanting in ornament but capitals, etc. of the foliage type will be absent as being likely to have been used only in the central portion of the front.

WEST FRONT

.

.

North west turret

History: 'During the fifteenth centurya new nave clerestory, unlike its Norman predecessor, has no wall passage..with the old clerestory the Norman pinnacle on the north west angle of the nave was taken down and a plain octagonal turret set up in its stead .. '

Eighteenth Century

Keene 10 October 1760 DRc/Emf/34 SURVEY Take down the Octangular Top of the N. middle tower and new work it in the Form of the top of the S. middle Tower; repair the other decay'd parts of both the middle Towers.

The other parts of this End are in tolerable good condition and want but few reparations.

NB A drawing will be necessary for the more clearly explaining the above; and for the direction of the repair when done, proper instructions, draughts and molds will be wanted.

SURVEY

Repair

Alexander 1799 DRc/Emf/38 Masonry on outside of two turrets at west extremity continues to run to decay, but nothing can be done either to mend its appearance or prevent the stone mouldering ... The battlements of the parapet between these towers are in the same state but will continue to last some years, after which will all require rebuilding.

Nineteenth century

1825 DRc/Emf/135

The two turrets (west end) have been partially repaired.

RESTORATION Thompson 2 July 1888 DRc/Emf/64/5/3

Stonemasons estimate:

5) W. end including addition of New Work to N. Turret ... not including repairs of stonework inside except to steps and wall inside of Turrets.

Proposals Pearson 16 March 1888 DRc/Emf/142 The turret N. of window undoubtedly terminated in a similar manner to that on S. and as it is necessary to rebuild the existing top I would restore the original design and not rebuild the poor late fifteenth century alteration, consequent doubtless upon the decay or failure of the Norman work.

The steps which originally were built into these turrets will have to be replaced, they will add much very needful strength to them and will give access to the Nave roof. The turret should be carriei '8 ≈with respect, even tho' its contents might not be endorsed. A Restoration Sub-Committee was formed to deal specifically with architect's plans, contracts, giving orders for successive sections of work, and payment of architect and contractor.

Restoration Sub-Committee 23 February 1892 DRc/Emf/137 Mr. Livett criticized the Architect's proposed restoration of the

N.W. TURRET

Norman raking parapets at W. end of Aisle roofs, on the grounds that it would be impossible to recover the design of the original parapets, they would be false since they would not be accommodated to the present level of the Aisle roofs which were some 3' higher than the original Norman roofs. Proposed 'That for remainder of the work at the W. Front new designs be prepared'. Carried nem.con.

Committee considered Architect's proposals for N. Nave Turret. 'The upper part of the N. turret which flanks the central doorway to be taken down to level of the top of the ancient Norman work, it being unsound and out of perpendicular and to be rebuilt to correspond with S. turret in blue lias mortar' was quoted from Mr. Pearson's specification. Committee adjourned to inspect turret. Mr. Foord expressed opinion that the cracks were of long standing, no signs of active settlement and it would stand.

Mr. Thackray Turner, S.P.A.B. suggested that the cracks in both turrets should be immediately filled with plaster of Paris to attempt to preserve the turret. Vice Dean strongly opposed retention of a feature which was a great eye sore to most people. Resolved: 'That Architect be requested to prepare a special report on condition of upper portion of N. Nave turret'.

Report Pearson 1 March 1892 DRc/Emf/65/48 The Turret can be made fairly substantial and might be retained if it possessed any features of interest to render its retention desirable, but as in any case the outside surface must be almost wholly new and therefore the turret would be practically a new one, as all that could be retained would be some portions of the inside core, it would be better to take the Turret down and rebuild it.

Restoration Sub-Committee 21 March 1892 DRc/Emf/137 Mr. Pearson's report on N. Nave turret considered. A letter from Dean was read...'preserve everything which can be restored or replaced in its original form and beauty, but don't cherish crumbling unsightly rubbish simply because it is old'. Mr. Livett reported that turret was at present faced with bits of flint, rag and Caen stone - how did Mr. Hope propose it should be refaced - in courses, rubble work, flints, rag or ashlar? Resolved: 'The Sub-Committee, having heard Mr. Pearson's special report is of opinion that the fifteenth century turret should not be retained'. Carried except for Mr. Hope who voted against.

Following resolutions made and carried nem.con. I) 'That whole of N.W. Tower and Turret below parapet string with wall at end of Aisle, be retained and repaired'.

II) 'That Committee feels it desirable that flanking towers or turrets be not carried up so high as in design first submitted'.

III) 'That Architect be requested to make new designs for completion of flanking turrets and of N. Nave turret, and restoration of Aisle parapets in a style that will harmonize and yet be easily distinguishable from the old work'. Restoration Committee 13 May 1892 DRc/Emf/137 Discussion on turrets; amendment proposed. Mr. Gower - a principle involved, in modern restoration a tendency to disregard all historical additions to the fabric if they did not square with the architect's ideas of the original design or peoples' ideas of prettiness. N. Nave turret formed part of history of fabric and ought to be kept; sub-committee had visited it and some had thought it could stand.

Mr. Pearson's report did not condemn it as unsafe. He said it would have to be renewed. Mr. Gower asked that it should be renewed stone by stone and treated in same way as rest of Cathedral. A pinnacle might be placed on its top to make it harmonious. The Society of Antiquaries had discussed the matter the previous evening and unanimously desired to intercede for the turret. Considered N.W. turret too should be retained tho' not so valuable. Proposed that Mr. Pearson be instructed to retain and repair the N.W. fifteenth century turret and the N.W. Tower...unless found unsafe to be built upon

Mr. St.John Hope felt strongly turret, a curious piece of the history of the Cathedral, should be preserved; he had been up inside to make a personal examination. Certainly there were cracks, but as they did not appear externally they might be disregarded. It could be made substantial if they put ties in it..concluded in seconding amendment, expressing his objection as..simply to make way for Mr. Pearson's supposed restoration of the original founded on prints which did not agree.

Archdeacon, a member of Soc.Antiquaries..the principle that if a building has fallen into an absolutely degraded state it ought not be meddled with for fear of spoiling history..but beauty of fitness ought to be considered; there was no doubt Sir Gilbert Scott had done the right thing in removing the semi-circular window at E. end of choir...Mr. Pearson's design showed not what he supposed the original to have been but what he knew it was. As to N.W. Turret,Archdeacon said he had been ready to preserve it supposing it to have been sound, but Mr. Pearson said he could not build upon it. Early eighteenth century print by Harris examined. Mr. Livett explained that N.W. Turret was faced chiefly with re-used Norman Caen stone, which of necessity was so thin it could not bond into the wall, and was very unsound. Bad structure of the false arcading was explained.

Octagonal turret - Mr. Livett: in the print it was wrongly presented as built in courses, whereas in reality it was only rough rubble work..the restorer would have similar difficulty; the very nature of the work compelled the artist to represent it falsely and make it impossible for the architect to restore it, as he had the Norman work, stone by stone.

Resolution: "That the whole of Mr. Pearson's design for W. front...be adopted with such alterations in details as may be considered necessary by the sub-committee". Carried 12 to 4.

Restoration Sub Committee 19 November 1892 DRc/Emf/137 Mr. Livett...a careful study of what remained of the original Norman front in situ as well as of the remains which had come to light of the destroyed portions...evidence that while central part of front was originally very highly decorated, flanking turrets were severely plain - hoped Mr. Pearson would keep as plain as possible.

REBUILT

.

,

Pearson 1894 DRc/Emf/137

SURVEY Godfrey 4 April 1952 DRc/GA N.W. angle, one stone of angle shaft perished (a few courses above Aisle roof coping).

SURVEY Godfrey survey 21 April 1971 DRc/GA Door at top of turret requires a new ledge and better fixing to top ledge.

WINDOWS

Seventeenth century

1 6 3 3

METROPOLITAN VISITATION

Bishop Bowle complained 'that the Cathedral suffered much for want of glass in the windows,

1 6 3 4

'They submitted to a visit from the archbishop as Metropolitan, and in answer to one of his questions stated that the cathedral was sufficiently repaired in all its parts, the only defects and these small, being in the glass of some of the windows. These defects had been left for a little while, owing to the great charges that they had incurred of late years. If they had been among the first parts repaired they would probably have wanted mending again before the other works were finished... The archbishop evidently thought this report correct, for with regard to the cathedral and its furniture he only found it necessary to enjoin: that the windows should be repaired without delay in a decent manner

'A gang of seamen battered down the images and glass of Rochester Cathedral.... A True Relation of the late Expedition into Kent and A copy of a letter sent by Dr. Paske (T.T. E.116.22; E.115.10). C.V. Wedgwood p. 124 The King's War 1641-47 Penguin 1983

1 6 7 5

1 March 1675 DRc/FTb/10 £3.5.5d

£4.4.0d.

27 January 1676 DRc/FTb/10

To Mr. Booth ye Glaziour for work done

1676

To Booth, glasirr

1 6 7 9

12 July 1679 DRc/FTv/9Paid John Huggins for new leading 9 futt of old glass; 37 newquarries of glass; 12 futt new glass; repairing 5 futt old glass.12/2d.1 December 1679 DRc/FTb/15To Jo. Huggins yeVirger for glazing and soddering ye holes andcracks in ye leads£3.16.0d

1 6 8 0

13 April 1680 DRc/FTb/17 To John Huggins for Glaziers worke done about the Church £2.10.0d

1 6 8 1

10 February 1681DRc/FTb/18To Huggins for glasing work done in ye Church£4. 4s.6d

1 6 8 2

1633

Great window 28 June 1682 DRc/FTv/12 Extract from J. Gamball's bill - 'work on Gt. window' 6 August 1682 DRc/FTv/12 J. Huggins for glazing from 3 July 1681 - 4 February 1682 £4.4.6d 1 6 8 3 18 March 1683 DRc/FTv/14 J. Huggins bill: 18 quarries; 26 ft new glass 14s. 4d 22 August 1683 DRc/Ftv/14

Paid J. Gamball (22 Nov. 1683) and chinching* windows;

*(Chinse (chinch) 1887 Kent Glossary - to point or (1) fill up interstices between bricks, tiles, etc. with mortar (2) to caulk to stop seams which do not admit of regular caulking. Chinsing iron - a caulker's tool for chinsing seams. O.E.D. Vol. II C 1933)

1 6 8 5

25 July 1685 DRc/FTv/22 Receipted bill J. Huggins glazier £1.17.9d. for Cathedral glass: 18' repairing; 194 quarries of glass

1 6 9 1

3 April 1691DRc/FTb/26To J. Huggins for repairing Church windows£12.3.2d

1692

2 June 1692 DRc/FTv/21 Receipted bill Mr. Huggins for work: leading 23 ft glass: 5s 9d; repairing 10 lot glass: 1s 8d; 106 quarries of glass: 8s 10d.

1 6 9 4

REMOVAL OF IVY 20 January 1694 DRc/FTb/29 To J. Gamball for pulling down the ivy about the Church and chinching ye windows 13s 7 June 1694 DRc/FTb/29 For glazing work about the Church - to John Huggins £1.3.6d 7 June 1694 DRc/FTv/22 Receipted bill £1.3.10d J. Huggins: for new leading 16 lot of glass: 4s; 88 quarries of glass: 7s; leading 28 lot of glass 7s; 66 quarries: 5s 6d.

1 6 9 5

E.END 12 April 1695 DRc/FTv/23 Paid J. Gamball £1: bill of worke and stouffe don at Cathedral Church in Chinching ye window over ye Tabell 2s

23 November 1695 DRc/FTv/23 Paid J. Huggins £6.10s for work done as follows: 25 October 1694 11 quorris; 3'8" new leaded;

27 November 1694 4'2" new leded; 40 quoris of glass; 26th May 1695 17' 3" new leded; 249'10" glass repeared; 7' new glass; 690 quoris of glass; 11 old quoris stoptin; 2 large squares; 22 November 1695 6' new leded; 6' 6" glas repeared; 19 quoris and half of glass.

31 January 1699 Drc/FTv/32 Geo. Huggins bill of glaseing: 6' repeared; 12 quoris. 20 March 1699 DRc/FTv/32 Geo Huggin's bill of glaseing: 50' old glass new leded 12s 6d; 36' repeared 6s; 16 quoris 1s9d. 24 June 1699 DRc/FTv/29 Paid 18s 3d J. Gamball and son for worke and stouff don at the Cathedral Church for chinchin of windows . 6 March 1699 DRc/FTv/29 Paid £2.16d. Geo. Huggins for glazeing done at ye Church: 70 ft. new leaded; 45 ft. repeard; 375 quories. Eighteenth century 1700 24 January 1700 DRc/FTv/32 Geo. Huggins' bill for glaseing: 37' new leded 9s 3d; 45' repeared 7s 6d; 164 quoris 13s 8d; 1 March 1700 DRc/Ftv/32 Geo. Huggins' bill for glaseing: 72' 2" new leded 18s; 52' repeared 8s 8d; 252 quoris £1. 1s 5d; 16' new quore glass 8s; (paid 31.5.1701) 1701 4 June 1701 DRc/FTv/32 J. Huggins' bill for glaseing: 6½' new leded 1s 7½d; 3' repeared 6d; 3 large squares 1s; 50 quoris 4s 2. 17 July 1701 DRc/FTv/32 J. Huggins' bill for glaseing: 11'8" new leded 2s 11d; 2'4" repeared 5d; 26 quoris 2s 2d; nayles 2d; 1702 6 January 1702 DRc/FTv/33 Geo. Huggins' bill: 14' new leded 3s 6d; 12' repeared 2s; 36 quoris 3s. 26 March 1702 DRc/FTv/33 Geo. Huggins, glazier, bill: 18' new leded £2.6.3d; 11' 8" repeared 19s3d; 818 quories £3.8s 2d 8 October 1702 DRc/FTv/35 J. Gamball's bill: chinching 3 windows, cleaning guter and mending paveing: for worke and stouff 6s.6d. 2 December 1702 DRc/FTv/33 Geo. Huggins, glazier, bill: 180' new £2.5s; 72' repeared 12s; 179 quoris. 1703 2 January 1703 DRc/FTv/33 Geo. Huggins' bill: 72'4" new led 18s 1d; 30' repeared; 495 quoris 5s. 9 January 1703 DRc/FTv/35 J. Gamball's bill for: chinching the South and Este windows; for lime and hair: 7s 6d. 28 April 1703 DRc/FTv/33 Geo. Huggins' bill: 12'1;0" new quore glass 6s5d; 19'10" new leded 2s8d; 6' repeared 1s; 58 quoris 4s1;0d; 2 casements pindin 6d;

GREAT STORM 26 November 1703 DRc/FTb/37 Violent storm of wind 1704 1 June 1704 DRc/FTv/33 Geo. Huggins' glaseing bill: £26.16.10½d.: 60' new quore glass £1.10s; 288' new led £3.12s; 361' repeared £3; 4 large squares ls; 2664 quoris. 17 February 1704 DRc/FTv/37 Henry Turner's bill:... 70' window barrs; 1705 29 June 1705 DRc/FTv/39 Glasier G. Huggin's bill: 11' new leded; 15' repeard; 92 quoris. 3 August 1705 DRc/FTv/39 Glasier G. Huggins' bill: 12' new leded; 12' repeard; 58 quoris. 23 November 1705 DRc/FTv/39 Glasier G. Huggins' bill: 11' new leded; 20' repeared; 70 quoris. 1706 2 April 1706 DRc/FTv/39 Plumber Thos. Barker's bill 2qrs. 17 lb. lead for ye window 1707 25 October 1707 DRc/FTv/40 Thos. Barker, plumber, bill: 10' new leded; 72' repeared; 180 old quoris stopt in. £1.2s 1709 1 April 1709 DRc/FTv/42 Geo. Huggins: 199' new leded; 361' repaird; 2249 quoris; £14.17s.4d. 1710 12 January 1710 DRc/Ftv/45 Bill: 40'3" new leaded; 61' repeared; 310 quoris. 1 7 1 1 19 January 1711 DRc/FTv/45 J. Gamball, bill, for chinching windows at severall times; lime and hair; 2 men. 8s 6d 23 June 1711 DRc/FTv/45 Bill: 16' new leded; 7 quoris 1712 4 April 1712 DRc/FTv/45 48' new leaded; 26' repeared; 146 quoris; 1 large square. 2 June 1712 DRc/FTv/45 Bill: 2 large squares; 1 quore 14 July 1712 DRc/FTv/45 31' new leaded; 29' repaired; 46 quoris (final bill paid 6.12.12) £4.16s. 83d

5 April 1712 DRc/FTv/45 J. Gamball's bill: work and stouff and chinching ye windows... 5 August 1712 DRc/FTv/45 John Gamball's bill: chinching S. window, lime, haire and work 3s 6d 1 7 1 3 14 February 1713 DRc/FTv/46 J. Gamball's bill: work and stouff don for chinching of windows. lime and haire: 3 men 9s 6d

Geo. Huggins' bill: 14' new leaded; 27' 26' new leaded; 9' repaird; 34 quoris 10' new leaded; 8 quoris 9 November 1713 DRc/FTv/48 9 November 1713 DRc/Ftv/48

Geo. Huggins, glasier, bill for 13' new leaded; 20' repaird; 64 quoris.

1714

19 January 1714 DRc/FTv/47 J. Gamball, mason, bill for chinching windows and other work; 3 men 7 days; lime ½ lode, haire 4 bushell.

Ironwork 22 January 1714 DRc/FTv/47 Simon Lambe, smith, bill for making 3 new Barrs for the window over the N. Door waying 12 lb.

23 January 1714 DRc/FTv/47 Simon Lambe, smith, bill for alltring 4 window Barrs, lenthening; alltring one large window barr and lenthening it.

6 February 1714 DRc/FTv/47 Simon Lambe, smith, bill for 4 new Barrs over the Pantile Ruff waying 15 lb.

16 July 1714 DRc/FTv/48 Geo. Huggins, glazier, bill for 13' new leaded; 20' repaird; 64 guoris.

1715

Glazing 14 February 1715 DRc/FTv/48 Geo. Huggins, bill, for glaising. 14' new leaded, 27' repaird; 75 quoris. 26' new leaded; 9' repaird; 34 quoris 7 March 1715 DRc/FTv/48

1716

Glazing21 February 1716DRc/Ftv/50G. Huggins, bill: 11' new leaded; 4 large squares58' new leaded; 16' repaird; 116 quoris28 March 1716DRc/FTv/506' new leaded; 33 quors16 May 1716DRc/FTv/50DRc/FTv/50SURVEY of fabric by Mr. Dickinson26 June 1716DRc/Emf/14Glaziers estimate 17161716DRc/Emf/14

To take down and repair and new lead and make good all ye glass round ye Church may cost upward £70.0.0d Smiths estimate 1716 To make good window barrs and other works £15.0.0d 4 September 1716 DRc/FTv/50 Glazing G. Huggins, bill: 5'4" new leaded; 33' repaired; 2 casements pind; 30 quoris. Ironwork 3 October 1716 DRc/FTv/50 S. Lambe, bill: new Iron barr for Church use for glaysers waying 4 1b. 4¹/₂d a pound 1s 6d. Glazing 8 October 1716 DRc/Ftv/50 G. Huggins, bill: 71' new leaded; 52' repaired; 522 quoris. Years bill: £5.15s.4d. Chinching 17 October 1716 DRc/FTv/50 J. Gamball, bill: chinching windows, lime, haire & work: 3 days 5s 1717 Ironwork 4 September 1717 DRc/FTv/50 S. Lambe, bill: ... first window and new bar 1s; pecing 12 barrs 3s; 2 window 2nd new barrs 1s 3d; pecing 10 barrs 2s 6d; 3rd window pecing 12 barrs 3s; 4th 2 new barrs 1s; pecing 12 barrs 3s; 5th window pecing 6 barrs 1s 6d; 6th pecing 6 barrs 5s 6d; 7th new barrs 5s 4d; 8th window 1 upright new barr 1s. 12 new barrs 1s. 5 new large barrs over ye Altar 5s; 7 days work myself 10s 9d. Glazing 4 October 1717 DRc/FTv/50 Geo. Huggins, bill: 67 new leaded; 123' repard; 570 quoris; 1 large square. £4. 5s. 1718 Glazing 22 January 1718 DRc/FTv/54 S. Huggins: bill: 55' new leaded; 28' repaired; 198 guoris. £1.4.11 19 February 1718 DRc/FTv/54 7' new glaising; 15' repaird; 49 quoris. 8s.4d 12 March 1718 DRc/FTv/54 12' new leaded; 26' repaird; 58 quoris; 12s 3¹/₂d 3 June 1718 DRc/FTv/51

24' new leads; 112' repaird; 155 quoris

1719

Chinching 22 January 1719 DRc/FTv/52 J. Gamball, bill: chinching windows... plaices; lime, haire.. 13 February 1719 DRc/Ftv/52 J. Gamball, bill: chinching windows... Ironwork 22 February 1719 DRc/FTv/54 S. Lambe, bill: 4 barrs for glaiser waing 14 lb.; for putting 5½ lb.

Chinching 19 February 1723 DRc/FTv/65 D. Jones, bill: chinching the Glass, 3 hods lyme and hair Glazing 1 March 1723 DRc/FTv/61 G. Huggins, bill: 72' new leaded; 82' repaird; 246 guoris Chinching 14 October 1723 DRc/FTv/61 D. Jones, bill: chinceing ye winddows 4s 6d Ironwork 31 October 1723 DRc/FTv/64 S. Lambe, bill:...lengthening 6 bars for S. window 1724 Ironwork 24 March 1724 DRc/FTv/64 S. Lambe, bill: ... lenthening 2 bars for ye windows going to ye Chapter House ... PRIMARY VISITATION p.206 18 July 1724 DRc/Arb/2 The windows are kept in good repair 1725 Chinching 12 January 1725 DRc/FTv/65 D. Jones, bill, chinching the glass 35 1727 Glazing 1727 DRc/FTv/73 G. Huggins, bill: 12' new leaded; 4' repaird; 88 quoris; £1.11.7d 1728 27 April 1728 DRc/FTv/73 G. Huggins, bill: 21' new leaded; 19' repaird; 149 quoris. 1729 Glazing 25 March 1729 DRc/FTv/73 G. Huggins, bill: 28' new leaded; 63' repaired; 394 quoris; 4 large squares (paid for 1728 and 1729 £3.11.9d) 28 April 1729 DRc/FTv/72 G. Huggins, bill: 49' new leaded; 277' repaird; 1909 quoris. £10.17.6d

\$

1730

Stonework 29 August 1730 DRc/FTv/75 W. Martin, mason, bill: 8' of New ?mullion for a window ; for making 9'; cutting ye grove for ye glass £2 of new iron upon ye Barrs of ye N. windows; $3\frac{1}{2}$ lb. iron wedges for ye Locktt Barrs.

1720

Glazing 4 February 1720 DRc/FTv/54 G. Huggins, bill: 38' new leaded; 4' repaired; 130 quoris. £1.0.2d 26 March 1720 DRc/FTv/54 140' new leaded; 208' repaired; 824 quoris. £6.18s Chinching 5 April 1720 DRc/FTV/54 J. Gamball, bill: chinching windows.... 2 men 4½ days.

Ironwork 6 April 1720 DRc/FTv/54 S. Lambe, bill: 3½ lb. iron wedges for ye Locktt Barrs lenghening 12 Barrs 3s. 4 new Barrs waing 6 lb. 2s 3d;

Glazing 18 June 1720 DRc/FTv/58 Geo. Huggins, bill: 41' new leaded: 10s 4d; 50' repaired: 8s 4d; 108 quoris: 9s. 1 large square 4d.

24 October 1720 DRc/Ftv/58 24' new leaded: 6s; 70' repaired: 11s 8d; 117 quoris 9s 9d.

1721

Ironwork 3 January 1721 DRc/FTv/57 S. Lambe, bill: Barr for ye Eaistt end of ye Church waying 21/2 lb. Glazing 4 April 1721 DRc/FTv/58 G. Huggins, bill: 57' 8" new leaded: 14s 5d; 95½' repaird: 5s 9d; 254 quoris: £1.1.2d. 6 large squares Ironwork 4 May 1721 DRc/FTv/58 S. Lambe, bill: iron barr for Glasier 2 lb. 9d.. Chinching 19 December 1721 DRc/FTv/58 J. Gamball, bill: chinching windows, lime and haire: 4s 6d. Glazing 22 December 1721 DRc/FTv/61 G. Huggins, bill: 45' new leaded; 40' repaird; 108 quoris; 3 large squares. 1722 Glazing 23 March 1722 DRc/FTv/61

G. Huggins, bill: 28' new leaded; 34' repaird; 46 quoris; 2 large
squares
Ironwork
11 June 1722 DRc/FTv/56

S. Lambe, bill: ... 8 saddell barrs..

1723

15 January 1731 DRc/FTb/66 Paid Wm. Martin (stonemason) for work done about ye windows. £2 16 November 1731 DRc/FTv/76 J. Shepherd, bill: 16' new leaded; 48 quoris; 1 Crowne square in the lamp; 30 November: 4' new leded; 12 quoris.

1732

7 February 1732 DRc/Ftv/76 J. Shepherd, bill: 27' repared; 38' new leded; 148 new quoris... 12 squares in Chapter House ... 31 August 1732 DRc/FTv/76

J. Shepard, bill: 197' new leaded; 75' repared; 942 guoris, £6.19.3d

1733

Glazing 19 March 1733 DRc/FTv/77 J. Shepard, bill: 14' repared; 26 quoris. 14s 3d 6' new leaded; 39 guors 14 April 1733 DRc/FTv/77 8' new leaded; 12 quoris; 12' repared 2 May 1733 DRc/Ftv/77 5 October 1733 DRc/Ftv/78 16' new leaded; 69 new Quarrels 29 October 1733 DRc/FTv/78 6' new glass; 16 new Quarrels; new glass light; 6 squares 6' new leaded; 47 new Quarrels. 18 December 1733 DRc/FTv/78

1734

Ironwork 2 March 1734 DRc/Ftv/79 R. Shaw, bill: lenthen and mendeng 2 bares for winderes Glazing 9 July 1734 DRc/FTv/79 W. Shepard, bill: glaisers worcke done on or about the Colledge winders: 18' new leded; 15' repeard; 107 quories. 2 September 1734 DRc/FTv/79 20' new leded; 22' repared; 55 guories 2 squares in the lamps 3 December 1734 DRc/Ftv/79 Ironwork 26 September 1734 DRc/FTv/79

R. Shaw, smith, bill: new bar for winders; mending lock of bellrop Dore; lockeng after the Clock.

1735

Glazing 24 January 1735 DRc/FTv/79 W. Shepard, bill: 31' new leded; 6' repared; 125 quories. 14 February 1735 DRc/FTv/79 28' new leded; 10' repared; 143 guories 26 February 1735 DRc/FTv/79 16' repared; 54 quories; 21 June 1735 DRc/FTv/79 1 square. Paid to widow: Elizabeth Shepard £4.3.5d Ironwork 28 February 1735 DRc/FTv/80

R. Shaw, smith: makeng 5 bares for winderes waying 12 lb; lenthen 2 bares; tacking down clock and cleangeng and mending itt and setteng

1731

itt up a gane; 3s for a Cartt to fatch itt; 12 day work for I and my man £3.19s Chinching 1 May 1735 DRc/FTv/82 J. Cable, bill: chinching; 5 hods lime and hair; 2 men 2 days Ironwork 12 September 1735 DRc/FTv/79 R. Shaw, bill: ... Lenthen 2 bares for winderes 19 October - 6 December 1735 DRc/FTv/80 Glazing A. Scudamore, glazier, bill: 1050' new leded; 143' repared; 1510 Quorres; cleaning 10 lamps; 4 Crown squares; mending the Larntann. 1736 Ironwork 26 January 1736 DRc/FTv/79 R. Shaw, bill: lenthen a bar and welding on 2 ise. Mackeng 5 bars for ye winderes 12 February 1736 DRc/FTv/79 Glazing 19 September 1736 DRc/FTv/80 A. Scudamore, bill: 760' new leaded; 50' repaired; 1007 quorres; 5 December 1736 DRc/FTv/85 11' new leaded; 26 Quorres 1737 Glazing 4 January 1737 DRc/Ftv/85 A. Scudamore, kbill: 18' new leaded; 22 Quorres 6' new leaded; 20' rep'd; 50 Quorres 19 February 1737 DRc/FTv/85 10' repaired; 22 Quorres 4 April 1737 DRc/Ft/85 15' new leaded; 36 quorres 18 August 1737 DRc/FTv/85 1738 Glazing 11 January 1738 DRc/FTv/85 A. Scudamore, bill: 19' new leaded 22' new leaded; 14' repaired; 100 quorres 6 February 1738 DRc/FTv/85 1739 Glazing 10 January 1739 DRc/FTv/86 J. Cable, bill: chinching; lime and haire; ½ day 15 January 1739 DRc/FTv/85 A. Scudamore, bill: 19' new leaded; 60 quorres; 3 Crown sq. in lamps. 25' new leaded; 65 quorres 10 February 1739 DRc/FTv/85 20' new leaded; 50 quorres 11 October 1739 DRc/FTv/85 Grammar School 11 October 1739 DRc/FTv/85 72' new leaded; 120 quorres. 23 October 1739 DRc/Ftv/85 J. Chubb, making 3 windows 1742

21 January 1742 DRc/Ftv/91 A. Scudamore, bill: 6' new leaded; 32 Quorres; 4 Crown square in ye lampes 27' new leaded; 88 Quorres 16 February 1742 DRc/Ftv/91 8' new leaded; 30 Quorres 4 May 1742 DRc/Ftv/91 1743 16 March 1743 DRc/Ftv/94 A. Scudamore, glazier, bill: 22 lb. soder, 2 men 1 day. West End 13 May 1743 DRc/FTv/90 J. Cable, bill: Pointing windows... 15 August 1743 DRc/FTv/94 A. Scudamore, glazier, bill: 82 lb. soder; 1 qr. 18 lb. lead; 2 men 5½ days. Choir and W. End 1743 DRc/FTv/90 A. Scudamore, bill: 220' new leading in the Choir; £2.15s; 1686' repaired £14.1s; 245' Quarry glass £4.3.8d; 6 pound putty 2s; 810' new leading in W. part £10.2s.6d; 1873' repaired £15.12.2d; 520' Quarry glass £8.13.4d; £34.8s.0d. 1745 7 April 1745 DRc/FTv/94 A. Scudamore, glazier, bill: 2' new leaded; 10 Quorris. 23 November 1745 DRc/FTv/94 A. Scudamore, bill: 1 casement framed in 3 Crown square; mending ye Tin and Lead.. 28 November 1745 DRc/FTv/95 12' repaired; 4' new leaded; 16 quorres; cleaning 17 lamps. 1746 Carpentry - 2 new windows 8 July 1746 DRc/FTv/96 J. Chubb, bill: Macken of tow New Window frames for the Church: 40' 4" Oke quarter 16s; slitt deal Cutt for Middle of the Windows: 9 leaves slitt deal Cutt for shetter. 16 iron hold fasts; myself and my man $3\frac{1}{2}$ days. Ironwork 19 July 1746 DRc/FTv/96 W. Penn, bill: 7.. window bars; menden 3 window bars Glazing 15 July 1746 DRc/FTv/96 A. Scudamore, glazier, bill: 86' new leaded; 48' repaired; 422 Quorres; 12 lb. mill lead; Painten ye frames. 3 large squares in Chapter House. 1747 16 February 1747 DRc/FTv/97 A. Scudamore & Griff. Rowland: bill: 5' new leaded; 12 Quorres; 4 squares in Chapter House; 3 crown square in Lamps; 1 out Dooer Lamp. 22 November 1747 DRc/FTv/97 A. Scudamore, bill: 8' new leaded; 24 Quorres.

15 December 1747 DRc/FTv/99

W. Penn, bill: 4 window bars

1748

19 February 1748 DRc/FTv/98 A. Scudamore, bill: 16' new leaded; 36 Quarrys. 26 June 1748 DRc/FTv/98

A. Scudamore, bill: 4' new leaded; 18 quarrys; 8' repaired. 22 December 1748 DRc/FTv/100

A. Scudamore, glazier, bill: 16' new leaded; 96 Quarres. Mending tin work of Lamps and ye Fountains; 4 Crown square in lamps. (FTv/98)

1749

4 February 1749 DRc/FTv/100 A. Scudamore, bill: 10' repaired; 18 Quarrys. 6 September 1749 DRc/FTv/99 W. Penn, bill: ... 4 bars to casements;

1750

A. Scudamore, bill: 10' new leaded; 8' repaired; 34 quarryes.

A. Scudamore, bill: 41 new Quarryes stopin; 10' new leaded; 20' repaired.

1 7 5 1

26 Jan.-21 Nov. 1751 DRc/FTv/105 A. Scudamore, bill: new leaded 58'; 8 squares in Chapter House and up the Bellferey stairs; repaired 12'; Quarrys 176; cleening 15 lamps; 5 Crown sq. in ditto; 2 new fountains;.

Ironwork 25 January 1751 DRc/FTv/108 W. Penn, smith, bill: lenthening window bars..

1 7 5 3

18 Jan.- 2 Nov. 1753 DRc/FTv/107 A. Scudamore, bill: 30' new leaded; 5' repaired; 83 Quarrys;

1 7 5 4

1 Jan.-5 Aug. 1754 DRc/FTv/109 A. Scudamore: 312' new leaded; 20' repaired; 1995 Quarries; 1 sq. in a lamp. ?W.window J. Harrison: work done to the window that was Clen'd downe; 6' slitt deal; 16' Caulk.

24 December 1754 DRc/FTv/110 J. Scudamore, bill: 6' repaired; 18 Quarys.

1756

Glazing 20 Jan.- 6 Nov. 1756 DRc/FTv/111 A. Scudamore, glazier, bill: 74' leaded; 14' repaired; 204 quarries

Ironwork 17 Feb.- 1 Nov. 1756 DRc/FTv/112 W. Penn, smith, bill: lenthining 2 window bars; a large stapel; 3 lb. window bar; 53 lb ditto; numerous saddle bars. 1 7 5 7

Glazing 7 Jan.-22 Nov. 1757 DRc/FTv/112 A. Scudamore, bill: repaird 33'; 15' leaded; 118 quarries; 1 casement pind; 15' new glass; 3 squares in lamp; cleaning 15 lamps

1 7 5 8

Glazing 25 Jan.-9 Oct.1758 DRc/FTv/114 A. Scudamore, glazier, bill: 94' leaded; 25' new glass; 360 quarries; 2 sq. in Chapter Room. £4.10s.

N. side timber frame 17 April 1758 DRc/FTv/114J. Harrison, carpenter, bill: Macken of a Larg window frame at the N. side of the Cathedral that was blowed down: 33' oak $3\frac{1}{2}x3\frac{1}{2}$; 3 men 1 day; Puting up the scaffoulding, pining in ye window frame 3 men $\frac{1}{2}$ day; 50 nales; 24 holdfasts; puting up ye Iron work and stricking the scaffoulding and claireing it away; to fitting the barrs $\frac{1}{2}$ day.

1759

Glazing 4 Jan. - 6 Dec . 1759 DRc/FTv/117 Pd. to A. Scudamore's widow Eliz. Scudamore for glazeing work: 249' new leaded; 390 Quarries; £5.12.4d.

Pointing 6 January 1759 DRc/FTv/116 G. Cable, bill: pointing windows...

WINDOWS GENERALLY (continued)

1760

Glazing 7 Jan. - 25 Nov. 1760 DRc/FTv/117 J. Pluckwell, bill: 201' new leaded; 302 quarries; 30 yds. painting; 2 sash squares in Chapter Room; Pointing 8 January 1760 DR/Ftv/116 G. Cable, bill: pointing windows; 2 hods mortar and lime. 2 men 1 day. 4s 8d. 1761 Pointing 16 April 1761 DRc/FTv/118 Claud Hogsflesh, bricklayer: pointing of windows. 2 men 1 day 6s 6d Glazing 2 Jan.-1 June 1761 DRc/FTv/118 J. Pluckwell, plumber and glazing work: 52' new leaded; 44' repaired; 142 quarries; 2 casements pind; 82 lb. sorder, 4 bushell charcoal, 2 men 3 day; 3qr.1 lb. sheat lead, 12 wall hucks, 2 men 2 days 2 bushell charcoal. 1762 13 January 1762 DRc/FTv/119 J. Pluckwell, bill, ... glazing works Verey Neadfull to be Done: 70' new leading; 51' repearing; 257 quarries. Pointing 19 January 1762 DRc/FTv/118 C. Hogsflesh, bill: pointing windows: 4 hods fine stuff; 2 men l_2^1 days. 7s 11d. Pointing 20 August-3 November 1762 DRc/FTv/119 C. Hogsflesh, bricklayer, bill: ... pointing the windows, 4 hods lime/hair, 2 men 1 day; Glazing 6 - 20 September 1762 DRc/FTv/119 J. Pluckwell, bill: 38' new leaded; 50 squares; 38 quarries; 6' leaded; 18 lb. sorder; 23 lb. sheat lead. 1763 19 February-31 December 1763 DRc/FTv/120 Glazing J. Pluckwell: 235' new leaded; 42' repaired; 789 Quarries. £10.4.10d Pointing 5 March 1763 DRc/FTv/119 C. Hogsflesh, bricklayer: pointing of windows, 2 hods fine stuff; 2 men 1 day. 30 July- 5 December 1763 DRc/FTv/120 C. Hogsflesh, bricklayer: pointing windows: 7 hods lime/hair; 2 men 3½ day. 1764 Glazing 16 January-11 April 1764 DRc/FTv/121 J. Pluckwell, plumber, bill: 118' new leaded; 30' repaired; 518 quarries. 19 July 1764 DRc/FTv/121 J. Pluckwell, bill: 54' new leaded; 110 quarries. Pointing 2 March-6 December 1764 DRc/FTv/121 C. Hogsflesh, bill: pointing windows: 29 hods lime/hair; 4 hods fine stuff; 2 men 7 days

Bars 4 June 1764 DRc/Ftv/121 J. Harrison, bill: macking window barrs; 6' deale. 1 man ½ day.lslld 1765 Pointing 9 January-9 November 1765 DRc/FTv/123 C. Hogsflesh, bricklayer: pointing the windows: 23 hods lime/hair; 11 January-20 October 1765 DRc/FTv/123 Glazing J. Pluckwell, plumber: 372'new leaded; 49' repaired; 593 quarries. ?protect window S.E.Transept 14 January 1765 DRc/Ftv/123 J. Harrison, carpenter, work done in side the Cathedral: Puting up barrs to window at S. side of Cathedral, work and stofe: ls 9d. 1766 Glazing 19 February-24 November 1766 DRc/FTv/125 J. Pluckwell: 86' new leaded; 16' repaired; 253 quarries. Pointing 24 November 1766 DRc/Ftv/125 C. Hogsflesh: pointing windows: 6 hods lime/hair; 2 men 1 day. 1767 Glazing 1 January 1767-10 October 1767 DRc/FTv/125 J. Pluckwell: 140' new leaded; 39' repaired; 540 quarries. Pointing 20 February 1767 DRc/FTv/125 C. Hogsflesh: pointing windows; 5 hods lime/hair; 6 10" tiles; 2 men 1 day. Glazing 15 November 1767 DRc/FTv/126 J. Pluckwell: 60' new leaded; 43' repaired; 177 guarries. 1768 Glazing 7 December 1768 DRc/FTv/124 J. Pluckwell: 12' new leaded 4' repaired; 58 quarries. 1769 Glazing 10 February-2 October 1769 DRc/FTv/124 J. Pluckwell: 203' new leaded; 37' repaired; 831 quarries Pointing 13 February 1769 DRc/FTv/124 J. Nicholson: pointing church windows.. lime/hair 1770 Glazing 24 December 1770 DRc/Ftv/128 J. Pluckwell: over W. Dore: 120' leaded; 348 quarries 12' repaired; E. window: 24' leaded; 89 guarries; N. windows 36' leaded; 172 quarries; S.W. Windows 63' leaded; 164 quarries. 1 7 7 1 Glazing 1 January 1771 DRc/FTv/128 J. Pluckwell: over N. Dore: 76' leaded; 224 quarries; to painting new window etc; Earley Prayere: 12' leaded; 94 quarries; Quire: 26' leaded; 36 quarries; E. window: 24' leaded; 24' repaired; 99 quarries; C. Ruine(?Gundulph Tower): 3 square. Next the C. Ruine: 10' leaded; 94 quarries; Ladye Oile: 12' new leaded; 48 quarries. S.side Quire: 40' leaded; 160 quarries; 12' leade over N. dore; 60

quarries; S.W. window: 24' leaded; 96 quarries.

12 December 1771 DRc/FTv/129

J. Pluckwell: plumbing, glazeing and Painting work Done:

S. window: 24' new leaded 74 quarries; E. window: 32' new leaded 96 quarries.

1772

13 February-24 September 1772 DRc/FTv/129 J. Pluckwell: plumbing, glazeing, painting work Done: Repearing Lead spouts 24 March: sash square Crown glass 15x10; Middle Aile N. side 44' leaded, 155 quarries 31 March: S. side going to Chapter House: 63' new leaded 36' repeared 139 quarries 3 April: Earley Prayers 18' new leaded 72 quarries 7 April: Over N. dore 18' leaded 84 quarries; 1 September: cleaning all windows inside Quire and Repearing 101' 83' new leaded; 551 quarries; 3 men 8 days. W. window 3 October 1772 DRc/Ftv/129 J. Pluckwell: W. window: 12' leaded 77 guarries 4 December 1772 DRc/FTv/130 To N. side of Church 24' new leaded 65 quarries 60' repaired E. window 30' new leaded 69 guarries 1773 2 February-9 April 1773 DRc/Ftv/130 J. Pluckwell: 39' new leaded; 162' quarries S. Cross: damage by the Hoy wind S. window: 64' leaded; 256 quarries; 24' repaired. W. Window: 56' new leaded; 48' repaired; 172 quarries; W. side of Quire: 24' new leaded; 60 guarries.

1774

?Chapter House 19 January 1774 DRc/FTv/131 J. Harrison, carpenter: 1 man 7 days repairing S. windows: deals for jams; oak; deal for Bars; slitt deals for inside lineings;

25 January 1774 DRc/FTv/131 S. Nicholson, bricklayer: pointing windows and making good jambs; lime, hair, bricks, plain tiles. 2 men 2½ days.

15 Jan.-16 April 1774 DRc/FTv/131 J. Pluckwell: plumber and glazier: Large S. window 36' new leaded; 128 quarries, sorder.

Large W. window 18' new leaded; 48 quarries S. Cross window: 48' new leaded; 136 quarries N. windows: 25' leaded; 27' repaired; 112 guarries Over Bishop Minton's Chappell: 24' new leaded; 102 guarries; Over N. door: 24' repaired

1775

Chancel windows 1 February 1775 DRc/FTv/133 J. Pluckwell: 220' new leaded; 204' repaired; 839 quarries. E.window 27 February 1775 DRc/FTv/133 S. Nicholson: making scaffold to E. window...striking scaffold S.side 3 April 1775 DRc/FTv/133 S. Nicholson: erecting scaffold for Masons to repair windows in S. side of Church and pointing the Lights. lime/hair. 2 men 1½ daysS.

1776

12 January 1776 DRc/FTv/132

J. Pluckwell: glazing:

E. window: 36' leaded; 89 quarries

N. windows: 40' leaded; 150 quarries

The Compass window: 44' leaded; 98 quarries

Early Prayer: 20' leaded; 50 quarries

Masonry 1776 DRc/FTv/132 F. Patten, mason: 9'9" cube Portland stone us'd in a window; 51' super work to do. 2 masons 4 days cutting the holes and Rabits for the Glass and letting in bars. (?in Ecclesiastical Court) E. Window 11 March 1775 DRc/FTv/133

E. Window 11 March 1775 DRc/FTv/133 J. Pluckwell: 92' cemented; to Lead for Stonemasion to Cramp the barrs; 196 quarries.

1777

E. Window March 1775 DRc/FTv/133 F. Patten: 12' 6" Portland stone to Repair Communion Window; 2 masons 6 days cutting out old stone and Cutting Rabitts for Glass and holes for Iron Barrs and setting new Stone. 12' 8" Portland stone in two windows: 50' superficial work to do. 2 masons 7 days

16 November 1777 DRc/FTv/135 J. Pluckwell: 108' new leaded; 382 guarries

1 7 8 2

12 January-27 Feb. 1782 DRc/FTv/140 J. Pluckwell: N. Side: 36' leaded; 78 Quarries; 2 men ½ day E. Side: 24' repaired; 30' leaded; 96 Quarries S. Side: 8' repaired; 90' leaded; 176 Quarries.

24 May 1782 DRc/FTv/140 J. Pluckwell: S. window: 10' new leaded; 30' repaired and parte leaded Cem. 80 Quarries. 2 men ½ day

13 August 1782 DRc/Ftv/140 R. Cackett: 10' old Glass new leaded over the N. Door; 38' repaired; 98 Qaries work and Stopt in.

1 7 8 5

4 January 1785 DRc/FTv/139(I) S. Nicholson, bricklayer, bill: pointing in the lights; 15 hods lime/hair; 76 bricks; 75 pan tiles; 6 days bricklayer and labourer. 3 September 1788 DRc/FTv/153 T. Noble: 72' new leaded; 210 quarries - Bishop's Chapple, Cross Isle N. and S. Sides

1799

Nave Alexander survey 1799 DRc/Emf/38 The sixteen windows above the roofs of the side Aisles only require some general inspection and repair as does also great west window. The several stone mullions of these windows, although considerably decayed will last many years, those above the side aisles have been formerly renewed by plain Portland stone uprights fitted under the old decayed molded parts in the arching of the windows. Whole of iron and wire work requires painting in and out. £211.

1 8 0 1Lady Chapel stained glass5 December 1801DRc/Ftb/133Paid Mr. Alexander J.C. Parker's bill for stained glass£15.17s.0d

1 8 0 2

8 January 1802 DRc/FTv/157 S. Baker: 5 squares glass Chapter room; 12' new leaded; 92'repaired; 104' cemented; 233 quarries.

Repairs and painting 1808 DRc/Ftb/139 Paid bills: ... Blenkinsop for leading ye Cathedral and painting windows etc. £49.15s.

Stained glass 1814 DRc/FTb/145 Paid bills Mr. Alexander for stained glass ...

West window of Nave Jan. 1825 to Feb. 1829 DRc/Emf/135 Entirely new

Chapter Room 31 July 1896 DRc/Ac/17 Window frames to be painted by Messrs. Parks. Dean to direct colour.

Twentieth century

War damage

Stained glass 7 September 1979 DRc/DE/209/X(yxz) F. Skeat: removal armorial stained glass bottom S. window broken by thieves. Correspondence repair, design, ovrhaul all stained glass, quotation, etc.

Repairs approved 2 January 1980 DRc/DE/209/XI(g) Envelope containing F.W. Skeat's references on plan of windows for repair. Est. £1100. Instructions proceed 15th January

Repairs delayed 14 January 1980 DRc/DE/209/XI(b) Delay expenditure £2000 repairs to clear and stained glass

MEMORIAL WINDOWS

MEMORIAL WINDOW 9 August 1869 p. 251 DRc/Ac 14 Request by Corps of Royal Marine Light Infantry to Dean and Chapter for leave to insert a Stained Glass Memorial in the Middle Small East Window of the Cathedral Church, and to place an inscription beneath the memory of Major Gen. Travers CB dec'd. Resolved that consideration of the design and the words of the Inscription be referred to the Canon in Residence and subject to that Dignatory's approval thereof

STAINED GLASS p. 381 26 June 1872 DRc/Ac/14 Letter from Rev.H.C. Day, Sec. Cttee. Cathedral Stained Glass Window Fund....f446.5.0d for filling with stained glass the E. windows of the Cathedral - removing and refixing the present centre window in the lower tier, and altering the brass plate to the Memory of Gen. Travers in the N. Transept of the Nave. Would wish that a brief record should be affixed to the E. window, either in glass itself, or on a brass plate, stating that the window is to the Memory of the late Dean Stevens. Dean and Chapter accept with pleasure the funds for stained glass and for removing and refixing window dedicated to Gen. Travers and will take care that a brief record shall be affixed to the central window in the lower tier dedicating to late Dean Stevens.

S. Aisle 9 October 1899 DRc/Ac/19 Permission granted for stained glass memorial to former King's Scholar F.S. Cobb to be placed in window in S. wall

28 October 1899 DRc/Ac/19 Request that stained glass window to be placed in S. wall should be designed by E. Frampton and not as requested by Chapter by Clayton & Bell. Ordered that designs be submitted to Mr. Hodgson Fowler, and if he approves may be erected.

Heraldry 26 May 1981 DRc/DE/209/XII(e) Interpretation report: Norfolk Herald Extraordinary.