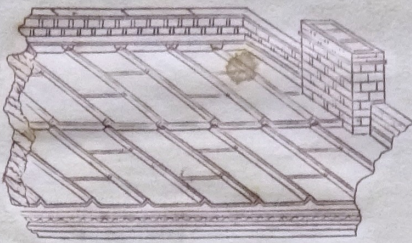


CONTRACTORS TO
H.M. OFFICE OF WORKS, ADMIRALTY,
WAR OFFICE.
INDIA OFFICE AND THE L.C.C.

EWART & SON, LIMITED.

16 GOLD MEDALS AND AWARDS.



EWART'S PATENT COPPER ROOFING
WITH CONICAL ROLL.

ESTABLISHED 1834.
Museum 2570
TELEPHONE NO. ~~XXXXXX~~
TELEGRAMS. "GEYSER, LONDON."

**346, 348 & 350, EUSTON ROAD,
LONDON, N.W.**

22nd September 1925.

- Bolwell Esq,
Clerk of Works,
St Paul's Cathedral,
E.C.

Dear Sir,

re Copper Ball & Finial.

Referring to my letter of the 4th July, and your kind promise to help me with information, I am sorry I have not yet been able to see you owing to holidays &c.

I recently came across some manuscripts in St Paul's Library, however, which may interest you if you have not seen them, and I enclose copies. The first (A) is the contract with Andrew Niblett for the construction of the Ball and Cross; (B) is a comment of my own showing how the prices agree; (C) is the contract with Roberts for the main roof in eleven and nine pound lead, while (D) is the contract for the Dome, which mentions twelve pound lead.

Apparently it was after this contract was placed that the question was raised in Parliament about the use of Copper, in April 1708 (E). One of the reasons given for not using Copper was that the lead was already cast and it was too heavy to use for other buildings. (F) gives the estimated cost for repairing the steeple in 1608, and also mentions that 194 tons of lead were recovered from the rubbish after the Great Fire.

I trust these extracts will be of interest to you, and that I may have an opportunity of seeing you at an early date,

Yours faithfully,

A. H. Haicart

Contracts for Rebuilding St Paul's in Library, C. Press. Article of Have

14th May 1708.

Then agreed with Andrew Hiblett, Citizen and armour^{er} of London for the ornaments of Copper which are to be put on the Lantern of St Paul's Cathedral, London viz; the sd. Andrew Hiblett shall at his own cost and charges find and provide the best and finest British Copper for the Ball, Crofs and other parts of the said ornaments excepting the scrolle which are to be of harder Copper, as being more proper for that purpose, and the sd. Andrew Hiblett promises and agrees to make work, and perform the said ornaments in the best, most artful, substantial and workmanlike manner, and according to a model, that is or shall be prepared for that purpose, or as shall be otherwise directed and be, the sd. Andrew Hiblett also promises to finish and deliver the whole at the office of the works of the sd. Cathedral sometime before the fifteenth day of September next and to submit as well the thickness of the Copper as the whole performance to ye directions and judgment of Sr. Chr. Wren. IN CONSIDERATION whereof the sd. Andrew Hiblett is to be paid for the said Copper work (one sort and part with another) after the rate of three shillings and sixpence per pound avoirdupois and payments to be made from time to time in proportion to the progress of the work til the whole be completed as aforesaid.

IN Witnes whereof the sd. Andrew Hiblett hath hereunder set his hand the day and year first above mentioned.

Andrew Hiblett.

Witness.

William Dickinson.
Thos. Cooke.

D
B

BALL & CROSS OF ST PAUL'S.

The illustration above shows the famous Copper Ball and Cross on St Paul's. This must be one of the largest finials in the world, being 30-ft high, the Ball measuring 6-ft in diameter, and weighing $2\frac{1}{2}$ tons and the Cross weighing $1\frac{1}{2}$ tons.

In the old documents preserved in the famous Library of St Paul's various receipts can be seen by Mr Andrew Niblett, amounting to £1538. for the Copper work on the Lantern. The original contract for this work is also preserved giving the price as 3/6d per pound, and as we know the weight of the complete article, it will be found that the figures agree to a remarkable extent, as 4 tons of Copper at 3/6d per pound, would be £1568.

The final receipt was given on the 8th April 1709, in the following form:-

Recd. the summe of Four hundred and Thirty Eight pounds, One shilling & Sixpence in full payment for the Copper work of the Lanthorn of St Paul's, I say recd. £438-1-6d.

(signed) A.Niblett.

(Copy of Contract here)

For some unexplained reason (possibly death) Sir Christopher Wren did not employ his usual coppersmith, Robert Bird - an exceptionally skilled craftsman - for this work and the Copper work of St Paul's was carried out by three different craftsmen, who were not essentially copper workers. Mr Niblett who did the Ball and Cross being described as an Armourer, while the Pineapple on the North West Tower was executed by John Tijou, the famous iron worker, while Mrs Jane Brerven (?) apparently a brass founder, was responsible for the South West Tower.

Bird's work seems to have lasted wonderfully well, ~~as~~ but Niblett did not carry out the work so well, as it was necessary to remove and rebuild both Ball and Cross in 1821, and the existing terminal is only about 114 years old, emphasizing the fact that highly skilled craftsmen are necessary to ensure durability, even when using a metal with the outstanding qualities of Copper.

D
C

Contracts for Rebuilding St Paul's in Library G. Press. S. Aisle of Nave

21st August 1703.

Agreed then with Joseph Roberts, Plumber for covering a further part of the Great Roof from the place to which he carried the same last year so far as the carpenter shall prepare and make the said roof fit for covering with lead this year, the same to be performed according to the orders and directions of Sr. Chr. Wren and at the rates following viz:

The sd. Joseph Roberts agrees to find and provide lead for the sd. roof of the best sort and to cast, raise and lay the same in workmanlike manner, as well in the Gutters as upon the Flatts and to be at all other charges about the same (except nails) at FIFTEEN SHILLINGS PER HUNDREDWEIGHT returning all cuttings at eleven shillings per hundredweight. The lead to be cast even, and workmanlike. The gutters at eleven pounds per foot and the flatts at 9-lbs per foot in weight.

The seams to be 2½ foot asunder well turned and tacked, and no solder to be used, but where and as Sr. Chr. Wren shall direct.

The sd. Mr Roberts to finish the sd. covering with all expedition after and as the carpenter shall make the sd. roof ready for him and to submit the performance and despatch to the judgment of the sd. Sr. Chr. Wren.

Jos. Roberts.

Witness.

Thos. Bateman.

Lon. Spencer.

Similar Contract 12th July 1704 @ SIXTEEN SHILLINGS PER
HUNDREDWEIGHT and TWELVE SHILLINGS PER HUNDREDWEIGHT.

D

Contracts for Rebuilding St Paul's in Library, C. Press. S. Aisle of Nave

29th August 1707.

Agreed then with Joseph Roberts, plumber for covering the Cuppola with the best Derbyshire Lead to be cast smooth and even, and at twelve pounds to the foot square, The sheets also to be of such gauge as may cover the breadth of the pannels without any seare, and as may best suit the Ribbs, mouldings and Embowments.

The said Joseph Roberts at his own charge to find and provide the lead for the sd. Cuppola and to cast, raise and lay the same in workmen-like manner on these terms viz: at fifteen shillings per hundredweight for all plain work and for all mouldings and embowments to submit to such further recompense and allowance as Sr. Christopher Wren shall think fit.

All the cuttings to be returned, and discount at eleven shillings per hundredweight and payment for the said work to be made as it goes on, the whole to be performed with all expedition after and as the carpenter shall make ready the Timber work of the said Cuppola and the said Joseph Roberts to observe the directions and submit to the judgment of the sd. Sr. Chr. Wren for, in and above the whole performance.

Jos. Roberts.

Witness,

Wm. Dickinson.
Richard Jennings,
Tho. Cooke.

Extract from "JOURNALS OF THE HOUSE OF COMMONS"
in the Library of St Paul's Cathedral. 1st April 1708

"Amendment to Act in first year of Her Majesty's Reign for the finishing and adorning the Cathedral Church of St Paul's :-

1st. Because it did appear to the Commons, upon examination, that Copper is preferable to any other covering, both in respect of duration and lightness, and it did likewise appear that the best British Copper is in all respects equal both in goodness and fineness to that of any other country; and that there is yearly very considerable quantities of such Copper made in Great Britain, more than can be used here, and in the Plantations, and of which there is about One Hundred Tons in Town, and less than Twenty Tons will answer this occasion, and therefore the Commons are of opinion the manufacture of Copper deserves encouragement.

2nd. Because it did appear that Lead is subject to very frequent repairs, and that the necessary scaffolding for that purpose, at any one time will exceed the difference of the charge between Lead and Copper, and that frequent scaffolding must very much prejudice the Building. Resolved - that a conference be desired with the Lords upon the subject. "

Extract from St Paul's Cathedral, by J.P. Malcolm.

St Paul's Library, Sl. B. 32.

Estimate for the repair of St Paul's in 1608.

The total cost would be £22536. the steeple to cost £12015.
The Tower was 51-ft by 50-ft and the roof covered with lead.

"The estimate to amounte aboute to 17 tonnes and 10-cwt
the casting thereof att 12d the hundred, 50-cwt of new lead in
addition @ 15/6d per cwt for foure workmen one month to cast and
lay the same at 20d per day".

Page 101 states that 194 tons of lead were refined from
the rubbish after the Great Fire.
