THE STORY OF GREAT PAUL

By W. T. COOK

THE latter part of the 19th century was a period during which many influential people apart from bellringers themselves took an interest in bells. It was also a period of intense activity in church and cathedral restoration, and one cannot help getting the impression that a good deal of rivalry existed, particularly among larger churches and cathedrals, each trying to outdo the others in the splendour, size or cost of their fittings—a rivalry in which they were encouraged by the generosity of donors, and the large number then existing of amateur "experts" in various subjects.

Such seems to have been the influences which prompted the Dean and Chapter of St. Paul's Cathedral, London, first to equip St. Paul's with what was at the time the heaviest peal of twelve ringing bells in the country (opened in 1878), and three years later to decide to add a large Bourdon bell. In making these arrangements they were largely guided by Dr. John Stainer, the organist of St. Paul's, who was ignorant of change ringing, but was prepared to listen uncritically to the advice of Sir Edmund Beckett (later Lord Grimthorpe). So it came about that Beckett was appointed chairman of the committee to act as referees on the specifications for, and casting of, the peal of twelve, the work being entrusted to John Taylor & Co. Beckett's specification was for a tenor of the present weight (62 cwt.), but in D instead of B flat, as it now is. Mr. Taylor, however, considered this to be impossible, so he "made a mistake" in the casting of the peal! Fortunately, Sir Edmund was satisfied with the result; in a letter to "The Times" on November 20, 1878 (the same letter as the one in which he described Messrs. Mears & Stainbank as "the oldest and worst of the foundries in England", which resulted in the libel action of Stainbank & Beckett), he said of the bells of St. Paul's, "This is unquestionably the grandest ringing peal in England, and therefore in the world".

Sir Edmund was again chairman of the referees when it was decided to go ahead with the project for a Bourdon bell. Apparently the Dean and Chapter envisaged ringing in the continental style; as one of their supporters put it, the bell would "give forth a deep bass sound, and add to the effect of those of a more silvery tone", and it was originally planned to place it in the north-west tower, where the ringing peal already hung. A subscription list was opened, and donations towards the estimated cost of £3,000 for casting, transporting and hanging the bell were received from many sources, including some of the City Companies; but a resolution moved at a meeting of the Common Council of the City of London in June 1881 to donate £300 was defeated.

14-TON BELL ORDERED

The order for the bell was placed with John Taylor & Co. in June or July 1881; apparently the order was for a 14-ton bell instead of the 16 tons the present bell weighs, so perhaps the committee changed their minds later. They certainly had ample time to do so, for the bell was not cast until Wednesday, November 23, 1881. Three furnaces were used, of which one had been specially constructed, and the bellmetal (over 20 tons of it) was about 81 hours in course of melting, being poured into the mould at half-past ten at night. The referees then waited anxiously until the evening of Tuesday the 29th for the metal to cool sufficiently for the bell to be removed from its mould and examined. I say "anxiously", for there had recently been considerable controversy over the casting of large bells, some "authorities" maintaining that a bell of such a size was very liable to crack owing to the difficulty of avoiding porosity. This, it was maintained, was the reason for the cracking of Big Ben and the cracking a year previously of Manchester Town Hall's Hour Bell, which weighed 6 tons 9 cwt. However, according to Dr. Stainer, "the casting proved to be as smooth and as delicate in surface and outline as if it had been a little 'treble' of 5 cwt... The 'skin' of the casting showed no flaw of any kind whatever, and when the tone was produced by swinging a heavy ball or iron against the soundbow a musical note boomed out which was impressive beyond description. . . . It has been decided to use the bell for the first time on Easter Sunday next, when I shall be surprised if Londoners do not realise the fact that 'Great Paul' is worthy alike of their ancient city and splendid cathedral."

ARMS OF DEAN AND CHAPTER
It had originally been thought that Great
Paul would weigh over 17 tons, but its
weight is in fact 16 tons 14 cwt. 2qrs. 19 lb.
When testing the bell at the Loughborough
Foundry, Dr. Stainer pronounced the note
to be "E flat, the upper partials B flat,
E flat and G being just audible with the
sonorous ground-tone". Its diameter is
9ft. 6½ ins and its height to the top of the
canons 8ft. 10ins. It is inscribed,

canons 8ft. 10ins. It is inscribed,
"JOHN TAYLOR AND CO. FOUNDERS
LOUGHBOROUGH MDCCCLXXXI
VAE. 9 MIHL 9 SL 9 NON 9

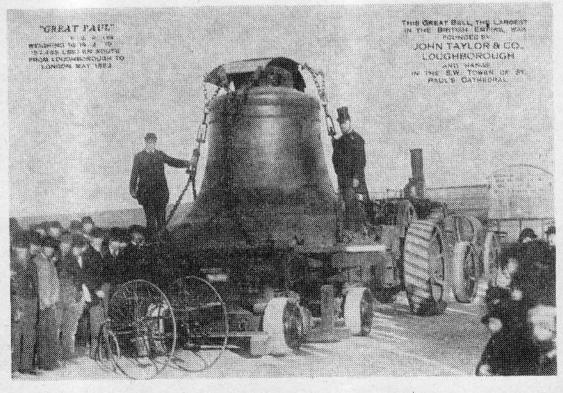
VAE o MIHI o SI o NON o EANGELISAVERO"

and is decorated also with the arms of the Dean and Chapter. The Latin text is taken from 1 Corinthians 9, xvi: "Wee is unto me, if I preach not the gospel."

Dr. Stainer's estimate that the bell would forthing the product of the core of the core

Dr. Stainer's estimate that the bell would first be used on Easter Sunday, April 9, 1882, proved over-optimistic; indeed, it was not until May 13 that it started from Loughborough on its journey to London. By then, it had been decided to hang the bell in the south-west tower of St. Paul's in the clock chamber, instead of in the lantern above the ring of twelve in the other tower, as was at first intended. It felt that this would be "a matter of no musical or other consequence", in the words of the "Standard", "as the great bell in a Bourdon, or service-bell, which will be rung for five minutes before service-time."

A considerable amount of work had to be done to prepare the South-west tower for



Great Paul en route from Loughborough Bellfoundry to London in May, 1882.

GREAT PAUL-continued.

housing Great Paul. In order to get the bell to the base of the tower, inside the spiral of the "geometrical staircase" masonry on each side of the six-foot wide outer doorway (the Dean's Doorway) had to be cut away, and, said the "Daily News",
" a good deal of ingenuity has had to be exercised in shoring up walls, the lower portions of which have had to be removed. . . . There is abundant space for the bell to pass up the well of the staircase until it reaches the dome of solid masonry at the summit. There was a circular space in this large enough to have admitted all the other bells, but for the newcomer one course of masonry has had to be removed all round, and this Mr. Penrose (architect to the Cathedral) has very ingeniously contrived to do without the rearing of scaffolding-has removed the massive rim of stone, that is to say, entirely from above. The total distance from the ground to the final resting place of the bell is 125 feet. This will bring the new arrival just up under the famous old bell (i.e. the 5-ton Hour Bell. . . . The quarter bells have had to be moved out of the way; they will be rehung just above Great Paul, a little on one side. . . . The clock will not be inter-fered with permanently."

This, by the way, is not the existing arrangement of the bells in the South-west tower. The works of the clock are immediately behind the clock faces, and more or

less in the centre of the tower, with Great Paul just above. The Hour Bell is well up above, in the lantern, and the two Quarter bells are up above this again.

EXPERIMENTS AT LOUGHBOROUGH While these preparations were being made, experiments were going on at Loughborough with swinging the bell. If we are to be-lieve the "Standard" of March 20, the original arrangements for hanging and ring-'The heading Great Paul were as follows: The weight of stock is 10ft. 9ins. long. the materials of the headstock is about 70 cwt., of which a little over 42 cwt. is iron. The bell is secured to the headstock by iron straps passing through its canons and bolted above the stock. The jointed clapper weighs $6\frac{1}{2}$ cwt. and is about two feet longer than the mouth of the bell; its upper portion passes through the top of the bell and is nutted to the top of the headstock. The two gudgeons are each 5% inches in diameter. Across the headstock there are temporarily fastened two long bars of wood projecting on each side to the extent of 11 feet 6 inches, and forming four levers for the ropes attached to the bell. Each of these levers has four ropes, and consequently sixteen men are the detachment required for its working. . . . It was exciting to see the vast bell move to the pull of the men, to see it swing through a vertical height of seven feet, to see the ponderous clapper rise up after the mouth of the

Then the clapper, falling clear immediately on striking, followed the bell up similarly on the opposite side and struck again. The bell . . . has made itself audible as far as seven miles." Apparently, however, the clapper did not always strike on both sides of the bell, "the clapper being slightly out of central adjustment, and the swing of the bell being a few inches short of what it ought to be, through the ropes being attached to straight levers which could not be pulled low enough. This will be rectified in the permanent swinging of the bell by attaching the ropes to a wheel or half-wheel."

These, and other details reported in the "Standard", brought forth a letter of sharp "Standard", brought form a fetter of small eriticism from H. Earle Bulwer, which appeared in the "Bell News" of April 8. "I heartily congratulate Messrs. Taylor," he said, "on their great reverence for antiquity, as evinced in this instance by the rejection of the proved experiences of modern engineering science, and their preference for the old worm-eaten systems of the past, which have long ago been discarded and abandoned by practical engineers as useless and bad. . . . If 'Great Paul' is hung in the manner now proposed, it will be more by good luck than by good management if the work has not to be done over again in the course of a few years on an entirely dif-ferent principle." Earle Bulwer's prognostication seems to have turned out to be absolutely correct, as will be seen later.

(To be continued)

RETIREMENT OF CANON A. C. COMER STONE

Advent Sunday, November 28, was a sad occasion at St. George's Church, Barkingside, Essex, for after 44 years as vicar and 55 years in the ministry, ill-health forced Canon A. C. Comer Stone to retire. Prior to his last service a quarter peal of Cambridge Major was rung on the bells he loved and indeed in the tower of the church he founded.

It was in 1927 that the Bishop of Chelmsford asked him to tackle the task of building a parish in an area which was rapidly to develop from fields to a typical London suburb. His request to have a tower and bells in the church, which was largely his own design and based on the churches he knew as a boy in Staffordshire, in Essex and in Salonica, was refused by the Bishop. But, undaunted, he raised the money for a tower, and as more money became available so the bells went in—the front four in 1932, the fifth and sixth in 1937, the seventh (Thanksgiving) in 1947 and finally the tenor (Praise) in 1954.

Due to the lack of funds the vicar's dream of a typical Essex tower with small turret and flagpole on top, was stopped 20 feet short and with a temporary "top hat." It is primarily for this reason and the proximity of local houses that the bells have yet to be pealed.

The bells are a very handy octave in F sharp (tenor 10-0-9) and are rung regularly by a keen band of young people in methods up to Bristol. At the Tuesday evening practice the vicar was a familiar and very regular visitor. We will all miss him and his friendly words, and it is our hope that he will enjoy his retirement. As he is moving only a few miles from the parish we hope to keep in touch with him and to keep him informed of progress on his bells.

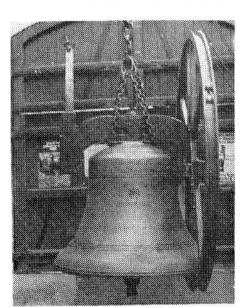
D. E.

STOKE-ON-TRENT, STAFFS

bell, to follow on when it became stationary,

and tap the inner side of the sound-bow.

The Parish Church of St. Peter ad Vincula is the parish church of the Potteries. In the chancel are memorials to many famous potters—Wedgwood, Spode and Copeland are all present. With changes in the methods of firing, the air is now clean, and into this clean air mounts the restored and white tower of Stoke Church. Until recently the tower was black with grime. An inspection revealed that the outer facing of the tower



THE TENOR BELL

was moving away from the brick kernel. Major work was obviously necessary. Definitely the bells must be rehung lower in the tower.

It was the ringing master, Mr. J. G. Burton, who had the foresight to realise that here was the opportunity to recast the bells and increase the ring from eight to ten. Early and full consultation between the ringers, the architect and John Taylor and Co. has produced the present splendid outcome. The architect, himself a ringer, is delighted with the improved stability of the structure. The ringers believe, rightly, that they have one of the most splendid rings in the land.

The melodious effect of the bells at any distance from the tower is most marked. They are of very evenly balanced tone, no one bell predominating above the other. The handling of the bells is of that standard of ease now expected of John Taylor and Co. It must give Mr. Paul Taylor great satisfaction to hear and see so magnificent a completion to the work started by his greatgrandfather, Mr. John Taylor, who cast the old octave in 1832. The bells were duly dedicated by the Archdeacon of Stoke with the usual ceremonies on November 3. will not be long before ringers from all over the county come to know this grand ring for themselves.

Specially printed peal forms are available (free) from R.W. Office, Seven Corners Press, Guildford, Send stamped addressed (9in. x 4in) envelope.