BELLS, THEIR ORIGIN, USES, AND INSCRIPTIONS.[1]

By J. J. DOHERTY.

The origin of Bells must be sought for in the records of Egypt. Recent discoveries have made it clear that Bells were known to the Assyrians, Etruscans and Chinese.[2] They were used in Hindoo Temples to frighten away evil spirits, long before they were known in Europe. The first mention we have of Bells, however, occurs in the Old Testament; and we read that little bells of purest gold, ornamented the robes of Aaron when engaged in his sacerdotal office.[3] The ancient Greeks and Romans were evidently acquainted with bells, or their prototypes, and very probably derived their knowledge of them from the Egyptians. At Athens the priests of Proserpine employed them when inviting the people to the sacrifices. The ringing of bells during eclipses is recorded by Juvenal. Pliny[4] says that bells were used long before his time, and were called Tintinnabula; Strabo tells us that market time was announced by their sound. The Romans announced the hour of bathing by Tintinnabulum. Suetonius informs us that Augustus caused one to be hung before the temple of Jupiter.[5] The feast of Osiris is known to have been announced by bells. Aeschylus and Euripides tell us that the Greek warriors had small bells concealed within the hollow of their shields, and that when the captains went their rounds of the camp at night, each soldier was required to ring his bell in order to show that he was on the alert, and watchful at his post. In triumphant entries of con-

[1] Read at the Monthly Meeting of the Institute, April 17th, 1890.

[2] Mr. Layard discovered several small bronze bells in the palace of Nimroud. They contained ten parts of copper to one of tin.

[3] Exodus xxviii, 33-35.

[4] C. Plin. Hist. Natur., i, 36, c. 13.

[5] Vide Suetonius in August. c. 91.

querors, bells were hung on the chariots; and Diodorus Siculus informs us that they were attached to the car which conveyed the body of Alexander from Babylon to Egypt. Plutarch says that when the city of Xanthus was besieged the inhabitants tried to escape by swimming and diving through the river, but a snare was laid for them, by nets with small bells attached, being spread across the stream under the water, and thus by coming in contact with those artfully contrived nets, the bells jingled, and so led to their capture. The Kings of Persia, when administering justice to their subjects, had a bronze bell suspended over their heads to which a chain was fixed: every time the bell tolled the officers in attendance introduced to the presence of the King, those who had any complaints to make, or who sought redress at his hands.

Bells have been called by various names. First, we have Tintinnabulum, a small bell so called from its tinkling sound. Second, Petasus, from its resemblance to a broad-brimmed hat. The Greeks and Romans are said to have used this particular bell. Third, Codon, from the Greek signifying the open mouth of a trumpet. Fourth, Nola, which name is derived from the city where church bells were first used in Europe; and lastly, Campana, from Campania in Italy, the district in which Nola is situated, now known as Terra di Lavoro. The shape of bells probably originated in cymbals, or basins; and, doubtless, in successive ages their shape was gradually altered.

From what has been said above, it is evident that the use of bells implied a high degree of civilization, and is closely interwoven with the civil and religious history of Europe. It is conjectured that ancient bells were struck from the outside by a wooden hammer, similar to the way in which gongs are sounded. After Constantine's time monastic communities used to signify the hours of prayer by blowing a trumpet or by rapping with a hammer at the cells of the monks. For a long time the Eastern Church employed clappers instead of bells, as the latter according to Kraus were not introduced till the ninth century. So far for our knowledge of bells among the ancients.

In Europe bells were not known until about A.D. 400, when Paulinus, Bishop of Nola, in Campania, is said

to have cast the first bells for God's service. Hence it seems that they derive their Latin name Campana. St. Jerome, a contemporary of Paulinus, also mentions a bell. Campania must have been intimately connected with Church bells, as their Latin name implies. Speaking of bell-founders reminds me of a very remarkable man who lived in the early part of the sixteenth century. In Bowen's MS. collection for Shropshire, among Gough's Topographical books in the Bodleian Library, Oxford, is the following extract from the Register of Thos. Botelar, Vicar of Wenlock, Temp. Henry VIII., Ed. VI., Mary and Elizabeth. "1546. May 26. buried out of two tenements in Mardfold Street, near St. Owens Well, Sir William Corvehill priest of the Service of O. Lady in this Church &c. He was well skilled in geometry, not by speculation, but by experience. Could make organs, clocks, and chimes: in kerving in masonry, and silk weaving and painting: and could make all instruments of music, and was a very patient and gud man, borne in this borowe, and sometyme monk in the monastery, &c. All this country had a great loss of Sir Wm. Corvehill, for he was a good bell founder and maker of frames."[1]

Old bells are remarkable for their melodious sound. Various reasons are given for this tunefulness. One author on bells ascribes their superiority to the following: First, to the larger weight of metal than is given now to a bell of the same note. Second, to a better admixture of metals. Third, in the method then adopted of fusing the metals, viz., by a wood fire, which not being so hot did not sublimate the tin. Good bell metal according to one author should consist of copper and tin, in the proportions of one of tin to three of copper.

Hand-bells seem to have been first used in the Western Church; and some examples are still extant, and belong, it is believed to the sixth century. They are made of thin plates of hammered iron, and are four-sided, fastened with rivets, and bronzed. A bell known as the Clog-an-eadhachta-Phatraic, or "the bell of Patricks will" is preserved at Belfast in a shrine of brass, enriched with gems, and with gold and silver filagree, and made between the years 1091 and 1105. It is said to have belonged to

[1] Quoted from Lukis.

St. Patrick, and is mentioned in the Annals of Ulster as early as the year 552; it is six inches high, five inches broad, and four inches deep. Some of the Scotch bells are of a primitive type, and are described and figured in the Illustrated Catalogue of the Archæological Museum of Edinburgh (1886). The bell of St. Gall, an Irish missionary, who died about 646, is still shewn in the Monastery of the city which bears his name in Switzerland.

Venerable Bede, the great ecclesiastical historian and Saxon chronicler, tells us of bells being used in a church about year A.D. 680.[1] An abbot of Croyland started the ringing of a peal of five bells in or about the year, 1000.[2]

Pope Sabinian in 604 first ordered that the hours of the day should be proclaimed by striking the bell, in order that the people might attend to the horae canonicae, the hours set apart for the Divine Office. King Clothair, in the year 610, besieged Sens, when Lupus Bishop of Orleans, ordered the bells of St. Stephen's to be rung. The sound so terrified Clothair that he relinquished the siege.[3]

Bell founding like many other great and noble pursuits was carried on in the monasteries in early times. It will be remembered that St. Dunstan, Archbishop of Canterbury was a skilled worker in iron and brass.[4] Amongst mediaeval bell founders the following names are found on old bells, viz: John of Gloster, Sandre of Gloster, Wm. Henshawe, John Adam, John Barbur, Thos. de Lenne, Jno. Godynge de Lenne, Thos. Darby, Wm. Revel, Wm. Schef. There are many others whose initials and localities have proved an enigma to antiquaries. Michael de Wymbis was another old founder, the 2nd and 3rd bells at Bradenham, Bucks are inscribed with his name. He lived in the latter part of the thirteenth century, and his foundry was, we believe, in London. Bell founders in old days were important persons, and had their seals and crests like other great people. One of these

[1] Bedæ Hist. Eccl. lib. 4, c. 23.

[2] A.D. 1109. Ingulphus, Abbot of Croyland, tells us that the first abbot of Croyland gave six bells to that Monastery, *i.e.* two great ones which he named Bartholomew and Beladine, two of middling size called Tuketullum and Beterine, two small ones denominated Pega and Bega; he also caused the great bell to be made called Gudla which was tuned to the other bells and produced admirable harmony not to be equalled in England.

[3] Vincent in Spec. Hist. i, 23, c. 9.

[4] Dunstan on the re-consecration of Abingdon Abbey, presented the Abbey with its two first bells, made by himself and Ethelwold, its new Abbot.

seals was found in the Thames some years ago, the date of which is assigned to about the year 1330. Upon it are emblems of the founder's craft, viz., a laver pot or ewer, above that a bell, and around this legend, S. Sandre, Gloucester. A learned author on bells notices that the second bell of Gloucester Cathedral bears this inscription "Sancte Petre, ora pro nobis" and the initials J. S. which he surmises refer to Sanders just mentioned. This bell is said to belong to the fourteenth century (1350).

The Blessing or baptism of bells is an ancient and interesting ceremony. The bells about to be blessed are placed in a convenient position in the church. The Miserere and other psalms are recited or sung, after which the Bishop washes the bells within and without with a linen cloth previously dipped in Holy Water, the choir in the meantime singing the 145th, 146th and following psalms; the bells are then anointed with Holy Oil, the choir chanting the Antiphon "Vox Domino super aquas multas," together with the 28th psalm, after which the bells are again anointed exteriorly in the form of a cross seven times, and then at four equal intervals with the "oil of Chrism," the "Oleum Infirmorum" being used prior to this. Incense is then put in the thurible and placed under the bells. The Antiphon "Deus in Sancto via tua," &c. is sung, and certain prayers having been said, the Deacon sings a portion of the Gospel according to St. Luke (ch. x). The Bishop makes the sign of the cross on the bells, which ends the ceremony.

A curious antithesis to the above occurred at Marlborough about forty or fifty years ago. One of the old bells having been recast, it was thought fit by the churchwardens, bell-ringers, etc. to baptize it, or at least to celebrate the event, by the nearest approach to that ceremony. Before the bell was hoisted up to its home in the belfry, it was filled with beer, which was ladled out to the surrounding bucolics. Whether the bell was hoisted into position on that auspicious day, history does not say. But those somewhat profane days are past, and a more decorous ritual is accorded to the introduction of bells into tower or belfry.

In days of old to deprive a town of its bells was a

sign of degradation. Henry V. removed a bell from Calais, which is still said to be hung in a steeple in his native town, Monmouth. The ringing of bells upon a person's coming into a town, was anciently a sign of dominion, and often stipulated by Charter. *The Mot Bell* used to be rung to assemble the people in the Burgh-Mote. The office of Bellman, whose duty it was to prevent fires and felonies, was not usual in some of our chief cities till the fifteenth century. A similar office was instituted in Rome by Augustus.[1]

Church towers were not only places in which bells were hung, but also the parochial fortresses, where the parishioners resorted in times of danger. (Sir C. Hoare, Whitaker and Mitchinson). When Cromwell appeared before Cork, whose inhabitants adhered to the royal cause, he ordered all the church bells to be taken down and converted into artillery. The clergy and citizens of course remonstrated with the stern Cromwell, who, in spite of his rigid puritanism was pleased to make a grim joke. He simply replied "that since gunpowder was invented by a priest, he thought the best use for the bells would be to make 'canons' of them."

The use of the alarm bell has been for centuries common to continental cities. We are all familiar with the ringing of the "Tocsin" during troublous times. We may recall the following beautiful lines regarding the alarum bell from Edgar Poe's poem on Bells :—

"Hear the loud alarum-bells!
Brazen bells!
What a tale of terror now their turbulency tells!
In the startled ear of night.
How they scream out their affright!
Too much horrified to speak,
They can only shriek, shriek,
Out of tune."

What a vivid picture these verses convey of that terrible signal of civil war at the great French Revolution, the horrors of which defy description. The great bell of St. Mark's, Venice, was used for a similar purpose. "Sound your trumpets, and we will ring our bells," was the defiant

[1] The pre-Reformation bellmen of London as they made their rounds proclaimed the following: "Take care of your fire and candle, be charitable to the poor, and pray for the dead."

reply of the Chief Magistrate of the Florentine Republic to a German Emperor. We all remember, too, the history of the famous Roland of Ghent, whose ominous boom often summoned its citizens to arms. We can imagine how the people came rushing hither and thither, demanding from each other in excited tones the cause of its awful tolling; until the towering form of Jacques van Artevelde, clad in armour, appears among the turbulent crowd, to address them, and lead them forth to repel some sudden attack of the enemy. This old bell has indeed played its part in the history of Flanders, and its name, Roland, is doubtless taken from the brave follower of Charlemagne. Around this old bell the following haughty legend was inscribed:—

"I am Roland,
When I toll, it is fire;
When I thunder, it is victory."

Its war note, which many a time rang out "in the startled ear of night" was at last silenced for ever. Charles the Fifth commanded it to be unhung and destroyed when he subdued the doughty and warlike citizens of Ghent.

The Curfew that "tolls the knell of parting day" is still kept up in many old towns of England, though the obligation it was meant to enforce has long since passed away. We must not forget the "passing bell" which in times of yore was tolled to remind the passer by that a soul was about to depart for another world, and its deep solemn tone was a warning to him or her that a prayer of propitiation should be offered up for the person in the hour of death.[1] It is now used as a gracious tribute to a departed friend or neighbour. The custom of muffling bells may have been first introduced out of regard to the nerves of the expiring hearer, houses formerly being, as a rule, in close proximity to churches—especially monastic churches, and so this custom came to be looked upon as a mark of respect to deceased friends and others. A story is told of a sexton of Lambourne church, Berkshire, who was ringing the passing bell as some neighbour was

[1] Ven Bede mentions a proverb which was common in his time anent the "passing bell:"

"When the bell begins to toll,
Lord, have mercy on the soul."

An old English poet, Heywood, alludes to it as follows:

"Come list; hark the bell doth towle
For some, but now departing, soul."

Dr. Zouch calls it the "soul bell," and Donne says "Prayers ascend to Heaven in troops, at a good man's passing bell."

going by; the latter went into the church to interrogate the sexton as to the ringing of the bell. "Who is dead?', queried the inquisitive neighbour. "Oh! no one is dead," asked the sexton, "its only Jack Smith going to be buried."

I may add that the large bell of St. Paul's Cathedral is only tolled at the death of a member of the Royal family, and the Dean of St. Paul's. Truly bells have had many avocations and have largely shared in the sorrows and joys of mankind, as the old latin motto has it, "Gaudens gaudentibus Dolens dolentibus."

It may be well to record the various bells, which were in use in this country for sacred purposes alone. First, the "Sanctus Bell" or as it is now called the parson's or priest's bell. This bell was, previous to the Reformation, rung at the Elevation of the Host at the Parish Mass, it was fixed outside the church, frequently on the apex of the eastern gable of the nave; and sometimes it is found hung separately in the tower or belfry. Then there was the "Sacring" or Sacramental Bell, which used to be rung within the chancel at the elevation of the Host, and to give notice of the Host approaching when carried in processions. The Elevation Bell is mentioned by William of Paris. It was usually made of brass and occasionally of silver, although the latter metal is bad for sound. Shakespeare makes mention of this bell in Act iii, sc. ii of Henry the Eighth. The "Lyche Bell" or "Corse Bell," was usually rung before the corpse on its way to burial. All the above named bells are mentioned in the inventories of church furniture and ornaments, which were made throughout England in the reign of Edward VI. At Christ Church, Oxford, the bell sounds daily at nine p.m. as many times as there are students on the foundation.

Who has not heard the music of the village bells, "falling at intervals upon the ear—in cadence sweet—now dying all away, now pealing loud again, and louder still, clear and sonorous as the gale comes on"; but few perhaps have heard the delightful chimes of the "Carillons" of foreign towns. In the city of Bruges with its queer gables and unthought-of houses, so dear to the heart of the archaeologist, is the tower of Les

Halles, with its forty-eight bells, whose silver chimes ever and anon float over this quaint and silent city. It was these splendid chimes which inspired Longfellow's beautiful lines, as he lay—

> "In Bruges at the Fleur de Blé,
> Listening with a wild delight
> To the chimes that through the night
> Rang their changes from the Belfry
> Of that quaint old Flemish city."

Sweet indeed are the harmonies which come softly down on the ear of the listener, as Longfellow has said—

> "Low at times, and loud at times,
> Changing like a poet's rhymes
> Rang out the beautiful wild chimes
> From the Belfry in the market of the
> Ancient town of Bruges."

But at night when all is still, there is something entrancing in the sound of those bells, as their soft floating melodies waft their heaven-like harmonies over this old world city, and gradually dying away amidst the stars, "the forget-me-nots of the Angels." These grand and melodious peals are sounded by means of a cylinder, on the principal of a barrel organ, but are sometimes played by keys like the manual of an organ by a musician. All the tones and semitones are perfect, and the most choice and delicate harmonies can be executed on these bells. Franz Hemony, who lived about the year 1600, must have been a master of bell founding, for it is to him we owe the colossal peals of Bruges, Antwerp, Ghent, and Utrecht.

In this age when curiosities of all kinds are so eagerly sought after, a few inscriptions found on bells in this country may not be uninteresting. The oldest are inscribed in the Lombardic or in the black letter character. The custom of naming bells and dedicating them to patron Saints began about the eighth century. The second bell of Gloucester Cathedral bears, as we have said, "Sancte Petre ora pro nobis." In Bristol Cathedral the treble bell has the arms of John Newhead Abbot, of St. Augustines, who died in 1486. There are four of these shields with the initials J. N. The inscription is; "Sancte Clement, ora pro nobis." In Hughenden parish church one of the bells bears this legend:

"Sancta Maria, ora pro nobis." Another bell in the same church is inscribed thus: "Christe Baptista. Campana Gaudiat ista." In the eastern counties, St. Barbara seems to have been a favourite saint with bell-founders. On a bell is this invocation: "O Martyr Barbara, pro nos deum exora." A bell in Durham Cathedral is said to have the following triplet:—

> "To call the folks to Church in time, I chime;
> When mirth and joy are on the wing, I ring;
> When from the body parts the soul, I toll."

These lines are almost a translation of the Latin inscription on the bell in Longfellow's "Golden Legend;"—Sabbato Pango, Funera Plango, Solemnia Clango. Sir Henry Spelman in his glossary also quotes an old Latin couplet which describes the uses of Church Bells: "Laudo Deum verum, plebem voco, congrego clerum: defunctum ploro, pestum fugo, festa decoro," which may be translated, "I praise the true God, call the people, convene the clergy, I mourn for the dead, drive away pestilence, and grace festivals." In the belfry of a church at Devizes, there is a conceited little bell, which says:—

> "I am the first, altho' but small,
> I will be heard above you all."

In the ancient borough of Newbury, there is a bell named "the pan-cake bell," so called through being rung on Shrove Tuesday. An old writer makes mention of this in the following distich:—

> "Hark! I hear the pan-cake bell,
> And Fritters make a gallant smell."

A bell used to be rung every Saturday in Newbury, at three o'clock, which is said to have originated through the celebrated cloth-worker, "Jack of Newbury," who built, or partly built, the fine church of St. Nicholas, in the same town, and who died in 1519. It was supposed to be rung as a summons for the weavers to receive their weekly wages; but this is not the true tradition regarding it. It is simply a survival of the old custom of ringing the bell on each Saturday, which was known as the "morrow mass bell," Before the Reformation, the people of England, in every parish, responded to the

sound of their parish bell which was an invitation to confession, as Shrovetide implies.

A historian of Newbury tells us of a remarkable bell at Tadley parish church, on the borders of Berkshire and Hants. He says, "Campanology possesses few more remarkable inscriptions than that on the third or tenor bells at Tadley, which is in Lombardic characters, each letter and device being raised upon a separate quadrangular tablet or patura, placed between fillets encompassing the bell. The execution is exceedingly good, without bearing the slightest sign of injury or wear from age..... The letters point to the fourteenth century or early part of the fifteenth century. Numerous and quaint as the devices are on bells of this period, there are few that cannot be read or comprehended; but the meaning of the strangely mysterious lettering on the bell at Tadley cannot be satisfactorily deciphered."

Pre-Reformation bells were as a rule dedicated to God, the Blessed Virgin or the Saints. Out of fifty-seven mediæval bells found in Wilts, twenty-four have inscriptions in honour of the Blessed Virgin; thirty-two of the Leicestershire bells are also inscribed with various inscription referring to the Virgin Mother. Most of these inscriptions are taken from the Angelic Salutation, and sometimes consist of the first two, and very often of the first four words. In some cases the Dominus Tecum is added. On the eighth bell at Oxford Cathedral is a different inscription which runs thus; "Stella maria maris succurre piissima nobis," "Sancta maria virgo intercede pro toto mundo" is the inscription on the fourth bell at Stowe, in Staffordshire. Numerous saints are invoked on numbers of old bells throughout the different counties of England. St. John the Baptist, St. Catherine, and St. Gabriel seem to have been special favourites with our ancestors. The Gabriel bell was no doubt rung at the morning and evening "Aves."

Bells as a rule were not dated previous to the sixteenth century. The oldest dated bell is supposed to be that of St Chad's, Lichfield, which is inscribed "O. Beate (*sic*) Maria A.R. 1255." Post Reformation bells possess inscriptions which are noted for their facetiousness more than for their literary merit. Some of them are very quaint

and amusing. At Heyford, Northamptonshire, is the following :—

"Thomas Morgan Esqueir gave me
To the Church of Heford frank and free 1601."

On the third bell at Calne is this :—

"Robert Forman collected the money for casting this bell
Of well-disposed persons as I do you tell."

A bell at Alderton sings of a generous female donor thus :—

"I'm given here to make a peal
And sound the praise of Mary Neal."

On the fourth bell at Albourne, Wilts, is the following :

"Humphrey Symsin gave xx pound to buy this bell
And the parish gave xx more to make this ring go well."

At Binstead, Hants, is this inscription :—

"Doctor Nicholas gave five pound
To help cast this peal tunable and sound."

At Broadchalk is a self-opinionated bell, which says :—

"I in this place am second bell,
I'll surely do my part as well."

The fire bell at Sherbourne has this epigraph :—

"Lord ! quench this furious flame
Arise, run, help, put out the same."

At Northfield there must have been considerable squabbling over the addition of a bell, for on them we find the following :—

1st bell. "We now are six tho' once but five
2 „ And against our casting some did strive
3 „ But when a day for meeting they did fix
4 „ There appeared but nine against twenty six.
6 „ Thomas Kettle and William Jarvis did contrive
To make us six that was but five."

The eighth bell at Abingdon sings the praise of the nuptial right as follows :—

"In wedlock bands all ye who join
Your hands with hearts unite
So shall our tuneful tongues combine
To laud the nuptial rite. L & P. 1764."

A bell at Bradfield sounds its subscribers' praise thus :—

"At proper times my voice I'll raise
And sounded to my subscribers' praise."

The first bell at Shaftesbury is amazed at finding additional companions in the belfry, and expresses itself thus :—

"I wonder great my eye I fix
Where was but three, you may See Six 1684,"

At Himbleton, Worcestershire, the third bell has this epigraph :—

"John Martin of Worcester he made wee
Be it known to all that do wee see. 1675."

This smacks of provincial English.

On the sixth bell at Quatt, in Staffordshire, is this curious epigraph :—

"I call the quick and dead
Prepare to church and bed } 1700."

The seventh bell at Wolverhampton has the following :

"The clapper hung too long in mee
My founder's loss pray think of hee."

This reminds us of the Berkshire dialect in which the nominative is substituted for the objective case.

The bells of Great Bedwyn, Wilts, bear the following inscriptions on the one, two and three :—

"Henry Knight of Reading made mee. 1671." [1]

On the fourth bell :—

"William Burd, Robert Wells 1671. H.K."

The fifth bell has the names of the churchwardens and the date 1656. W. P. N. B. On the sixth bell is inscribed :—

"In the Lord do I trust, T.W.D. 1623."

The bell-ringers of bygone days must have been convivial sort of fellows, judging by the amusing inscriptions on various old jugs belonging to them. The fraternity had a great many laws of its own, in case of any one committing a breach of discipline. The offending person generally had to replenish the "jug," which seems to have been a necessary appendage to their laborious duties. An inscription on a jug in the Norwich Museum, dated 1676, is :—

[1] The Knights of Reading were celebrated bell founders, the same family having cast bells from 1587-1693.

"John W
J. F
"Come brother, shall we join?
Give me your twopence—here is mine."

The ringer's jug at Swansea has this couplet: —

Come fill me full with liquor sweet, for that is good
When friends do meet: When I am full, then drink about:
I ne'er will fail till all is out."

There is a very old earthenware pitcher at Hadleigh which holds four gallons. It bears on it these doggerel rhymes:—

"If you love me do not lend me;
Use me often and keep me cleanly:
Fill me full or not at all,
If it be strong, and not with small."

In the old towers and belfries, which stud our land, are found many quaint and facetious inscriptions written years ago by the old bell-ringers, whose ghosts seem still to haunt the scenes of their former labours. As one mounts the rugged well-worn steps into the home of the bells, we cannot help recalling these men of a past generation. who often rang many a joyous peal on these very bells, but whose bodies now lie mouldering beneath the green sward below. But they have left their footprints on the sands of time in the curious jingling rhymes which are to be found engraved on stone, in many an out of the way country church. A few of these may be found amusing.

In the parish church of Andover is the following:—

"But if that you do swear or curse,
Twelve-pence is due, pull out your purse."

It seems the old bell-ringers were not only addicted to strong ale, but also to strong language. In a church at Shaftesbury is the quaint inscription:

In your ringing make no demur
Pull off your hat, your belt and spur."

These lines refer to gentlemen bell-ringers, who lived in days when hats were of the cavalier type. The invariable fine for wearing hat and spur was a jug of beer, and if all the jugs were like the one at Hadleigh, it is to be

feared that very little bell-ringing could be accomplished after their contents had been exhausted. An inscription in a church in Shropshire runs thus :—

"If that you ring with spur or hat
A jug of beer, must pay for that."

On the south side of the belfry of Hornsey Church, Middlesex, are these lines :—

"If that to ring you do come here,
You must ring with hand and ear
If that you ring in spur or hat
A quart of ale must pay for that;
And if a bell you overthrow
Sixpence is due before you go
And if you curse or swear I say
A shilling's due without delay,
And if you quarill in this place
You shall not ring in any case."[1]

Bells like churches in olden times were as a rule, the outcome of pious donations. We read that a peal of five bells was presented to King's College, Cambridge, by Pope Callixtus III, in 1456; and from this period peals of bells became more common in the towers and belfries of our churches. Peal ringing, however, was not practised as an art till the seventeenth century, when Fabian Stedman, a printer, of Cambridge, introduced peals on five and six bells, since called Stedman's method, and this, it is said, was first used at St. Bene't's, Cambridge, and afterwards at a church on College Hill, Doctor's Commons. Stedman published a book entitled Tintinnalogia, or the art of bell-ringing. The number of changes that can be rung on bells is, perhaps, surprising to the uninitiated. If we take for instance three bells, we shall find that six changes can be rung on them viz : on—

1 : 2 : 3
2 : 1 : 3
2 : 3 : 1
3 : 2 : 1
3 : 1 : 2
1 : 3 : 2

A peal of four bells would ring four times as many changes as three, viz., twenty-four ; five bells five times as many as four, viz., 120; six bells six times as many as five, viz., 720 ; seven bells seven times as many as six, viz ;

[1] These verses may have been erased of late years.

5,040, and so on. It has been calculated that it would take ninety-one years to ring the changes upon twelve bells; at the rate of twenty strokes to a minute; and to ring the full changes upon a peal of twenty four bells, would occupy at the above rate, a hundred and seventeen thousand billions of years! We may rest assured that the above feats will never be executed, although we live in days of such keen competition.

The principal methods of change-ringing are: Plain Bob, Grandsire, Treble Bob, and Stedman's principle. The changes rung

on	5	bells	are	called	.. Doubles
,,	6	,,	,,	,,	.. Minor
,,	7	,,	,,	,,	.. Triples
,,	8	,,	,,	,,	.. Major
,,	9	,,	,,	,,	.. Caters
,,	10	,,	,,	,,	.. Royal
,,	11	,,	,,	,,	.. Cinques
,,	12	,,	,,	,,	.. Maximus

These names are no doubt rather puzzling to the inexperienced in campanological art. To look at a book on change-ringing is like looking over a series of logarithmic tables. In fact, the art of change-ringing is quite mathematical. Grandsire triples—the first peal was rung on January 17, 1689 or 90, at St. Sepulchre's Without, Newgate, in three and a quarter hours. Grandsire Cators—the first known peal took place at St. Bride's, Fleet Street, Friday, January 11th, 1716-17, and was performed by the Society of London Scholars, which company, at a subsequent date, changed its name to the Cumberland Youths. Grandsire Cinques—the famous College Youths rang at St. Bride's, Fleet Street, 5060 Grandsire Cinques, being the first that ever was done on eleven bells. Grandsire Major—The first peal of Grandsire Major was rung at St. Peter and Paul's, Aston near Birmingham, on July 30th, 1792, 7552 changes in four hours and thirty-four minutes. Grandsire Royal—the first peal was rung August 6, 1815, at Painswick; 5099 changes. Grandsire Maximus—from the Cumberland Youths' records, we find they rang a peal of 5112 Grandsire B Maximus in four hours and ten minutes at St. Saviour's, Southwark. The standard methods in the art of change-ringing are: 1, Plain Bob; 2, Grandsire; 3, Treble Bob; 4, Stedman's principle.

Under the head of Plain Bob, we have the following: Bob Doubles, Bob Minor, Bob Triples, Bob Major. Under Grandsire we have: Grandsire Doubles, Grandsire Minors, Grandsire Triples, Grandsire Major. Under the head of Treble Bob we have on six bells: Violet, New London Pleasure, Duke of York, Woodbine, College Pleasure, College Exercise, London Scholars Pleasure, City Delight, London, Westminster, Imperial, Cambridge, Surprise, Superlative Surprise, London Surprise. It will be seen that bell-ringing has its nomenclature like other arts and sciences. It is well to be reminded that bell-ringing is not at all an easy recreation, on the contrary it requires a certain amount of physical exertion and scientific skill to ring a bell properly. The management of the rope is, no very slight accomplishment.

There are some very fine peals of bells in many of the London towers and belfries; and on various occasions their merry peals are heard far above the din and turmoil of the busy streets. St. Paul's has a peal of twelve bells, tenor three tons. St. Bride's, Fleet Street, has a splendid peal of twelve bells. The bells date from 1710, tenor twenty-eight hundredweight. Bow Church, Cheapside, is famous for its bells. We have all heard of the "Bow Bells" of Chepe. St. Giles' Church, Cripplegate, has also a peal of twelve bells, tenor thirty-six hundredweight; there is a carillon attached. St. Michael's, Cornhill, has a fine and musical peal of twelve bells, tenor forty-one hundredweight. This ancient parish is intimately connected with the famous antiquary Stowe.

There are various Diocesan Guilds of Bell-ringers and the Master of the Oxford Diocesan Guild informs me that the first and only peal of 5040 changes ever rung by clergymen took place at Drayton, in Berkshire. Peal-ringing is believed, to be entirely confined to England.

There are several large bells in this country. The largest is "Great Paul" in St. Paul's Cathedral, London; it weighs, with its fixtures, &c, eighteen tons. This stupendous bell was hung a few years since, and many will remember the event. The great bell in York Minster weighs ten tons; Great Tom, Oxford, weighs seven tons; Great Tom, Lincoln, weighs five tons; Big

Ben, Westminster, weighs thirteen tons and a half, and is said to be cracked. We read of a bell in the time of Edward III. weighing 33,000 lbs. The great bell at Moscow, cast in 1653, is computed to weigh 443,772 lbs, and according to some authorities, has never struck a note. A bell in the church of St. Ivan, in the same city, weighs 127,836 lbs. The bells in Olmutz, Rouen, and Vienna, weigh eighteen tons each. The Kaiserglocke, at Cologne Cathedral, weighs twenty-five tons. The famous bell at Erfurt, in Germany, called "Maria Gloriosa," which was cast in 1497, weighs thirteen tons, is more than twenty-four feet in circumference, and has a clapper of four feet, weighing 1232 lbs., and was the largest bell ever hung. Almost every temple in Burmah has a bell which is reverently struck by each votary at the particular shrine previous to offering prayers. At Mengoon, situated on the right bank of the Irrawaddy, opposite Mandalay, there is a bell weighing 195,000 lbs; its height is twenty-one feet, and its breadth eighteen feet. At the Temple of Ularo, in Kyoto, is said to be the largest bell in the world, hanging in a tower on the hill, being perfect in tone. It exceeds the bells of Pekin and Russia. It is not known who cast it, and is covered with Chinese and Sanscrit characters, but no modern Japanese priest can translate these mysterious letters. It is twenty-four feet high and sixteen inches thick at the rim. When it is sounded its boom is heard for miles down the valley. The bells in Japan have no clappers, being struck by suspended levers of wood, like battering rams.

In Spelman's History of Sacrilege, there are some curious stories relating to the sacrilege of bells, which may be worth recounting. "When I was a child," says Spelman, "I heard much talk of the pulling down of bells in every part of my country, the county of Norfolk, then common in memory; and the sum of the speech usually was, that in sending them over sea, some were drowned in one haven, some in another, as at Lynn, Wells or Yarmouth. I dare not venture upon particulars; for that I then hearing it as a child, regarded it as a child. But the truth of it was lately discovered by God himself; for that in the year.....He sending such a dead neap

(as they call it) as no man living was known to have seen the like, the sea fell so far back from the land at Hunstanton, that the people going much further to gather oysters than they had done at any time before, they there found a bell with the mouth upward, sunk into the ground to the very brim. They carried the news thereof to Sir Hamon L'Estrange, lord of the town, and of wreck and sea-rights there, who shortly after sought to have weighed up and gained the bell; but the sea never since going so far back, they hitherto could not find the place again. This relation I received from Sir Hamon L'Estrange himself, being my brother-in-law."

"At the end of Queen Mary's days (Calais being taken) Sir Hugh Paulet pulled down the bells of the churches of Jersey; and sending them to S. Malo's, in Bretagne, fourteen of them were drowned at the entrance of that harbour. Whereupon it is a bye-word at this day in these parts. when any strong east wind bloweth there, to say, 'The bells of Jersey now ring.' In the reign of King Henry VIII., there was a clockier or bell-house adjoining to S. Pauls' Church, in London, with four very great bells in it, called Jesus bells. Sir Miles Partridge, a courtier, once played at dice with the King for these bells, staking £100 against them, and won them, and then melted and sold them to a very great gain. But in the fifth year of King Edward VI. this gamester had worse fortune, when he lost his life, being executed on Tower Hill, for matters concerning the Duke of Somerset. In the year of our Lord, 1541, Arthur Bulkley, Bishop of Bangor, sacrilegiously sold the five fair bells belonging to his Cathedral, and went to the seaside to see them shipped away, but at that instant was stricken blind, and so continued to the day of his death. (Bp. Godwin, in vit ejus fol. 650). A sad peal at parting, and a judgment of blindness not unlike that wherewith Alcimus the high-priest was stricken, for offering some sacrilegious violence to the Temple (Jos. Ant. xii, 17). (Staveley's Hist of Churches, p. 234)." Spelman then relates his discourse when dining with "my lord of Canterbury" (viz., Dr. Abbot, 1632), who related how when he was in Scotland, he visited certain churches, but found the bells had disappeared from them. In Edinburgh, he tells him that there was no bell in that city,

"save only in the Church of St. Andrew." And enquiring what had become of the rest, it was told him that they were shipped to be carried into the Low Countries, but were drowned in Leith haven. Church bells, amongst their other vicissitudes, were often melted down and coined, as was the case during the French Revolution of 1792.

It will thus be seen, that there are more mysteries in a peal of bells than are dreamt of in our philosophy.