

Bells:p 687 Encyclopaedia Britannica, 11th edition, Vol 11, Aus to Bis.

Early bellsThe earliest Latin word for bell campana is late Latin of the 4th or 5th century A.S. and the first application of bells to churches has been ascribed to Paulinus, bishop of Nola in Campania about A.D. 400.

..Of bells before the Christian era there is no trustworthy evidence. The instruments which summoned the Romans to public baths or processions or that which Lucian, A.D. 180 describes as set in motion by a water clock, clepsydra, to measure time, were probably cymbals or resonant plates of metal like the timbrels, used in the worship of Cybele, or the Egyptian sistrum which seems to have been a sort of rattle.

words campana and nola (a small bell)

It has been maintained that Pope Sabinianus, 604, first used church bells but it seems clear that they were introduced into France as early as 550. In the 7th century Bede mentions a bell brought from Italy by Benedict Biscop for his abbey at Wearmouth and speaks of the sound of a bell being well known at Whitby Abbey at the time of St. Hilda's death, 680. St. Dunstan hung many in the 10th century and in the 11th they were not uncommon in Switzerland and Germany.

It is said that the Greek Christians were unacquainted with bells till the 9th ; but it is known that for political reasons after the taking of Constantinople by the Turks in 1453 their use was forbidden lest they should provide a popular signal for revolt.

Several old bells are extant in Scotland, Ireland and Wales, the oldest are often quadrangular, made of thin iron plates hammered and riveted together. A well-known specimen is Phatraic, "the bell of St. Patrick's will (co) . It is 6 in high, 5 inches broad, 4 deep and adorned with gems and gold and silver filigree work; it is inscribed 1091 and 1105 but it is probably alluded to in Ulster annals in 552.

(Scottish bells see illustrated catalogue of Archaeological Museum, Edinburgh for 1856)

first ad.

The four sided bell of the Irish missionary St. Gall, 646, is preserved at the monastery of St. Gall, Switzerland. In those early times bells were ~~possibly~~ small, even in the 11th century a bell presented to the Church at Orleans weighing 2600 pounds was thought large. In the 13th century larger bells were cast. The bell Jacqueline of Paris, cast in 1400 weighed 15,000 pounds; another Paris bell of 1472 weighed 25,000 pounds and the famous Amboise bell at Rouen, 1501, 36,364 pounds.

To these scanty records of early history of bells may be added the enumeration of different kinds of bells by Hieronymus Magius in his work De Tintinnabulis--Tintinnabulum, a little bell otherwise called tinniolum, for refectory or dormitory according to Joannes Belethus but Guillaume Durand names Squilla for the ~~medd~~ refectory. Petasius or larger broad brimmed hat bell. Codon, orifice of trumpet, a Greek hand bell; Nola, a very small bell used in the choir; campana a large bell first used in the Latin churches in the steeple; We read of cymbalum for the cloister, or campanella for the cloister; nola or ~~66~~ dupla in the clock; signium in the tower, eg in the excerpts of St. Egbert, 750, the Portuguese still call a bell sino.

Bell founding

The earliest bells were probably not cast but made of plates riveted together like the bells of St. Gall or Belfast. The bell founder's art originally practiced in the monasteries passed gradually into the hands of a professional class by whom in England and the Low Countries especially were gradually worked out to the principles of construction, mixture of metals, lines and proportions, now generally accepted as necessary for a good bell.

In England some of the early founders were peripatetic artificers, who travelled about the country setting up a temporary foundry to cast bells wherever they were wanted. Miles Graye, 1650 a celebrated East Anglian founder, carried on his work in this fashion in the old churchwardens account

3rd

accounts are sometimes found notices of payment for casting of bells at places where no regular foundry is known to have existed.

The chief centers of the art in medieval times were London, York, Gloucester and Nottingham ; and bells by eg. John of York, 14th century; Samuel Smith, father and son, York, 1680-1730; Abraham Rudhall and his descendants of Gloucester, 1684-1774; Mot, 16th Century; Lester and Pack 1750; Christopher Hodson of London , who cast Great Tom of Oxford 1681 and Richard Phelps 1716 are still in high reput.

The White Chapel bell foundry, now Mears and Stainbank, established by Robert Mot in 1570 incorporated the business of the Rudhalls, Lester and Pack, Phelps, Briant and others and is now one of the leading firms of bell founders; others being Warner and Sons of Spitalfields and Taylor & Co., Loughborough, the founders of Great Paul for St. Paul's Cathedral, 1881. Of Dutch and Flemish founders the firms of van den Gheyn, 1550 , Hemony 1650, Aerschodt and Wagheven at Louvain and others have a great reputation in the Low Countries especially for carillons, such as those at Antwerp or Bruges, a form of bell music which has not taken much root in England despite the advocacy of the Rev. H.R. Haweis who proclaimed its superiority to English change-ringing.

Bell metal is a mixture of copper and tin in the proportion of 4 to 1.

In Henry III's reign it was 2 to 1. In Layard's Ninevah bronze bells it was 10 to 1.

Zinc and lead are used in small bells. The thickness of the bell's edge is about one tenth of its diameter and its height is twelve times its thickness.

4th

Bells, like viols, have been made of every conceivable shape within certain limits. The long narrow bell, the quadrangular ~~000~~ and the mitre-shaped in Europe at least indicate antiquity and the graceful curved-inwardly midway and full trumpet mouthed bell indicates an age not earlier than the 16th century.

The bell is first designed on paper according to the scale of measurement. Then the crook is made which is a kind of double wooden compass, the legs of which are respectively curved to the shape of the inner and outer sides of the bell, a space of the exact form and thickness of the bell being left betwixt them. The compass is pivoted on a stake drive into the bottom of the casting-pit. A stuffing of brickwork is built around the stake, leaving room for a fire to be lighted inside it. The outside of this stuffing is then padded with a soft clay (fine) well mixed and bound together with calves hair, and the inner leg of the compass run around it, bringing it to the exact shape of the inside of the bell.

Upon this core, well smeared with grease, is fashioned the false clay bell, the outside of which is defined by the outer leg of the compass.

Inscriptions are now moulded in wax on the outside of the clay bell; these are carefully smeared with grease, then lightly covered with the finest clay, and then with coarser clay until a solid mantle is thickened over the outside of the clay bell. A fire is now lighted and the whole baked hard, the grease and wax inscriptions steam out through holes at the top leaving the sham clay bell baked hard and tolerably loose between the core and cope or mantle. The cope is then lifted, the clay bell broken up, the cope let down again enclosing now between the core and itself the exact shape of the bell.

5th

The metal is then boiled and run molten into the mould. A large bell will take several weeks to cool. When extricated it ought to be scarcely touched and hardly require tuning. This is called its maiden state and it used to be sought after that many bells were left rough and out of tune in order to claim it.

Bell tones and tuning--A good bell, fairly struck, should give out three distinct notes, a fundamental note or tonic and octave above or nominal; and the octave below or hum note. It also gives out the third and fifth above the fundamental, but of these it is less necessary to take notice. Very few of these bells have any two of these notes, and hardly any all three in unison--the hum notes being generally a little sharper and the fundamentals a little flatter, than their respective nominals.

In tuning a "ring" or series of bells the practice of the founder has hitherto been to take one set of notes, in England usually the nominals, on the continent the fundamentals, and put the rest into tune leaving the other tones to take care of themselves. Thus when bells are struck at intervals the fundamental notes being fuller and more persistent are more prominent; but when struck in rapid succession, as in English change-ringing or with the higher bells of a Belgian carillon which take the air the higher tone of the nominal is more perceptible.

The quality of a bell depends not only on the casting and the fineness and mixture of metals but upon the due proportion of metal to the calibre of the bell. The larger the bell the lower the tone; but if we try to make a large E bell with metal only enough for a smaller F bell, the E bell will be puny and poor. It has been calculated that for a good peal of bells to give the pure chord of the ground tone or key note, third, fifth and octave, the diameters are required to be as thirty, twenty-four, twenty, fifteen, and the weights of eighty, forty-one, twenty-four

...Bells , influence upon architecture, usually summoned soldiers to arms, Christians to church. Sounded alarm in fire or tumult; rights of the burghers in their bells were jealously guarded. Thus the chief bell in the cathedral often belonged to the town not to the cathedral chapter.

The curfew, the Carolus and St. Mary's bell in the Antwerp tower all belong to the town; the rest are the property of the chapter. He who commanded the bell commanded the town; for the more by that sound, at a moment's notice, he could rally and concentrate his adherents. Hence a conqueror commonly acknowledged the political importance of the bells by melting them down; and the cannon of the conquered were in turn melted up to supply the garrison with bell metal to be used in the suppression of revolts.

On the third day of Easter 1282 at the ringing of the Sicilian vespers which have given their name to the affair, 8,000 French were massacred in cold blood by John of Procida who had thus planned to free Sicily from Charles of Anjou. On the 24th of August , St Bartholomew's day, 1571, bells ushered in the massacre of the Huguenots in France to the number it is said of 100,000. Bells have rung alike over slaughtered and ransomed cities; and far and wide throughout Europe in the hour of victory and irreparable loss. At the news of Nelson's triumph and death at Trafalgar, the bells of Chester rang a merry peel alternated with one deep toll..

Old customs, one of oldest the curfew, couvre-feu, first enforced though perhaps not introduced by William the Conqueror in England as a signal for all lights and fires to be extinguished at 8 p.m., in many shops it survived into the 19th century as a signal for closing shops at 8 or 9 and is still kept up in various places as an old custom; thus at Oxford the familiar boom of Tom's 101 strokes is the signal for closing college gates at 9.

Among secular uses...the Mote or Common bell summoning to municipal or other meetings. In some places known as Cestry Bell. The Pancake Bell still rung here and there on Shrove Tuesday originally the summons to confession before Lent; the Harbest bell and Seeding bell, called laborers to their work, while the Gleaning Bell fixed the hours for beginning or leaving work, so that everyone might start fair and have an even chance. The Oven bell gave notice when the lord of the manor's oven was ready for its tenants to bake their bread; the market bell was a signal for selling to begin and in some country districts a church bell is still rung at dinner time.

The general diffusion of clocks and watches has rendered bells less necessary.

Passing bell, rung for the dying, now generally rung after death; the ancient mode for indicating sex, two pulls for a woman and three for a man common; tenor bell for bishop or member of the royal family; Burial Peals, scare away evil spirits, discouraged in 14th century, muffled peals now rung as mark of respect to deceased of importance. The Sermon Bell, rung in Reformation times to give notice that a sermon was to be preached; early morning bell relic of the Ave Maria or Angelus bell, inscription on some old bells, Lectum fuge, discute somnum (Away from bed, shake off sleep)

Large bells..Great bell at Moscow, Tsar Kolokol, cast in 1733, was in earth 103 years and was raised by the emperor Nicholas in 1836. Cracked in furnace, stands on raised platform, middle of square. Weighs about 180 tons, 19 feet 3 inches in ^{height} diameter, & 60 feet 9 inches circumference, 2 feet thick, weight of broken piece 11 tons.

Second Moscow bell largest in actual use, weighs 128 tons. In pagoda, Upper Burma bell 16 feet in diameter, weighing about 80 tons; Great bell at Peking weighs 53 tons; Nanking 22 tons; Olmutz 17 tons; Vienna, 1711, 17 tons; Notre Dame, 1630, 17 tons; Exbury 12 tons; Great Peter, York Minister recast in 1845

12 $1\frac{1}{2}$ tons; Great Tom, Oxford 7 $1\frac{1}{2}$ tons; Great Tom at Lincoln 5 $1\frac{1}{2}$ tons; Big Ben at Westminster Clock Tower 13 $1\frac{1}{2}$ tons; it was cast by George Mears under the direction of the First Lord Grimthorpe (E. Beckett Denison) in 1858. Its four quarters were cast by Warner in 1856. The Kaiserglocke of Cologne cathedral, recast in 1875, with metal from French cannon captured in 1870-1871, weights 27 $1\frac{1}{2}$ tons.

These large bells not moved at all or only slightly swung to enable the clapper to touch their side. In some cases they are struck by hammer or beam from outside. The heaviest ringing peals in England are those at Exeter and St. Paul's cathedrals, towers 72 cwt and 62 cwt respectively.

Washington existed as a territory for nearly 36 years.

Enabling Act: An act to provide for the division of Dakota into two states and to enable the people of North Dakota, South Dakota, Montana and Washington to form Constitutions and state governments, and to be admitted to the Union on an equal footing with the Original states and to make donations of public lands to such states.

that all persons who are qualified by the laws of said territories to vote for representatives to the legislative assemblies thereof are hereby authorized to vote for and choose delegates to form conventions

First....That perfect toleration of religious sentiment shall be secured and that no inhabitant of said states shall ever be molested in person or property on account of his or her mode of religious worship.

Second--That the people inhabiting said proposed states do agree and declare that they forever disclaim all right and title to the unappropriated public lands lying within the boundaries thereof, and to all lands lying within said limits owned or held by any Indian or Indian tribes; and that until the title thereto shall have been

first ad.

extinguished by the United States, the same shall be and remain subject to the disposition of the United States, and said Indian lands shall remain under the absolute jurisdiction and control of the Congress of the United States..

Fourth--That provision shall be made for the establishment and maintenance of systems of public schools, which shall be open to all children of said states and free from sectarian control.

Land grants..

Approved: Feb. 22, 1889....

State Constitution: Adopted in convention at Olympia, Aug. 22, ratified by a vote of the people on Tuesday, Oct. 1, 1889, the woman suffrage and prohibition articles being rejected.

Preamble: We, the People of the State of Washington, grateful to the Supreme Being of the universe for our liberties, do ordain this constitution.

Article 1-Declaration of rights Section 1. All political power is inherent in the people, and governments derive their just powers from the consent of the governed, and are established to protect and maintain individual rights.

In its place, the state of Washington, the 42nd state in the union

Ferry--The Territory of Washington was established March 2, 1853. Its boundaries were then the British possessions on the north, the summit of the Rocky Mountains on the east, the Columbia River and the forty-sixth parallel of north latitude on the south and the Pacific Ocean on the west.

Those boundaries, an empire, remained until the formation of the territory of Idaho on March 3, 1863, when the eastern boundary was changed to the one hundred and seventeenth meridian, where it now remains.

A decade before population 75,000, now 300,000

Ferry: The state Constitution is only a limitation upon legislative power, differing in this respect from the Constitution of the U.S. which is a grant of power.

Ex-governor Miles C. Moore

"the most important in the history of Washington

Seven months passed as Washington's last Territorial governor. Stevens first, 1853 to 1857

~~Grover Cleveland 1885 to 1889 Benjamin Harrison 1889~~ —

U.S. Debt under Cleveland \$1,134,062,258

Geo Washington, 1706 \$83,762,172

Other territories 1889...

North Dakota Nov. 2, 1889

South Dakota Nov 2, 1889

Montana Nov. 8, 1889

'They the first since Colorado 1876

Wasgubtib ~~ebud 96~~ entitled to 3 electoral votes

16 territorial governors, Stevens first, 1853 to 1857

two, J. Patton Anderson 1857 and James F. Legate, 1872 did not

qualify. Miles C. Moore, seven months to statehood.

10/16/63

Rep

With art.

3-1 col cuts

Rev. Erle Howell 2

Chapin D. Foster 2

Rev. James H. Wilbur 2

A quest leading deep into the roots of Methodism in the Northwest brought Rev. Erle Howell, Seattle, on his first research trip to the Yakima Valley. The trip, made by the retired Methodist minister, his wife, and Miss Mai Brown of Mississippi, a friend of the Howells, will be followed by others within the year.

The pastor is field representative of Wesley Gardens and Terrace, and chaplain and counsellor for Wesley Gardens. Additionally he is now embarked upon a writing project, the story of Methodism in the Pacific Northwest.

Yakima and the Valley have strong ties with the work.

First, the editorial adviser for the Pacific Northwest Conference is Chapin D. Foster. He is president of the conference's historical society, and former publisher of the Grandview Sentinel and Selah Optimist.

Second, the long-time ~~Indian~~ agent for the Yakima Indian Nation, the Rev. James Harvey Wilbur (he signed his official communications "your obedient servant James Harvey Wilbur"), came to the Oregon country from New York before the Treaty with the ~~Indian~~ Yakimas in 1855, and was a Methodist. He is recognized as one of the four greatest

second ad..Methodists

The writing is being undertaken through Methodist conference action. The Rev. Mr. Howell, a coast pastor for 50 years including 18 before retirement as staff member of the First Methodist Church, Seattle, has been working with Foster on a subject outline. Wilbur's name emerged early in the work as an important figure.

The production will be a single volume.

The Rev. Mr. Howell said the writing will not go into complete historical details, but will deal with the contribution of Methodism to the Pacific Northwest. It will also include a brief history of the 300 Methodist churches in Washington and North Idaho.

Foster retired as director of the Washington State Historical Society in 1958 and was succeeded by Bruce LeRoy. He is living at Tacoma. He was publisher of the Grandview Herald for 15 years and of the Chehalis Advocate for 20 years. He was director of the Washington State Historical Society 15 years, was a member of the state's first Advertising Commission and is a life member and past president of the Washington State Newspaper Publishers Association.

On the Yakima Valley trip, made in a mobile living-in vehicle, the Rev. Mr. Howell contacted only a few of the persons and visited only a few places where research will eventually lead.

(more)

Second
third ad Methodists

He went to Grandview to consult ~~with~~ Rev. Earl ~~Edlander~~ Reisner, retired ~~xx~~ Methodist pastor who has a collection of historial pictures and information ~~xxx~~ spanning a 40-year career.

The Seattle man also went to White Swan where the Methodist Church, founded by the Indian agent and minister, has Wilbur letters and other source information.

At Fort Simcoe State Park ~~Redacted~~ the Rev. Mr. Howell took photographs of the old agency buildings. Here Wilbur taught, resided and conducted agency affairs for nearly 18 ~~years~~ pioneering years. These buildings, now predominate at the state park, were built by ~~Redacted~~ Indian war era soldiers and became headquarters for the Yakima Agency, April 18, 1859. The Rev. Mr. Wilbur, already well established for his Methodist labors and later to be called "Father Wilbur," was assigned to the agency as superintendent of teaching in 1861. He soon became agent, a designation changed to superintendent at the turn of the century and resigned, Aug. 15, 1882, turning duties over to R.H. Milroy. Wilbur died Oct. 8, 1886 at Walla Walla. He and Mrs. Wilbur are buried near Willamette University, Ore., an institution in which he was instrument 1 in founding.

End

On his Yakima Valley trip, made in a mobile living in vehicle, the Rev. Mr. Howell ~~visited~~ contacted only a few of the persons and visited only a few places ~~add~~ to which research will eventually ~~lead~~ lead.

He went to Grandview to visit ~~add~~ Rev. Earl Reisner, retired Methodist pastor, who has a collection of historical pictures on which he has worked for 40 years, besides other information.

He went to White Swan, visiting the Methodist Church there founded by the Indian Agent and ~~pastor~~ minister. ~~add~~ Some Wilbur letters and other source information is ~~present~~ in the church's records.

At Fort Simcoe State Park the Rev. Mr. Howell took photographs of the old agency buildings, where in which Wilbur taught, resided and conducted agency affairs for nearly 18 years. These buildings, now ~~add~~ predominate at the state park, were built by soldiers and became the headquarters for the Yakima Indian agency, April 18, 1859. Wilbur The Rev. Mr. Wilbur, already well established for his Methodist labors, was assigned to the agency ¹⁸⁶¹ as superintendent of teaching in 1861 and became agent, a designation later changed to superintendent at the turn of the century.

779
third ad.

The Rev. Mr. Howell also spent one evening here with Chick Melander, a curator of the Washington State Historical Society, and scanned and obtained material from a historical collection containing more than 400,000 words of Wilbur and Fort Simcoe material alone.

The ~~ma~~ researcher said on future visits he hopes to contact Mrs. ~~On~~ Thelma Kimmel of the Top enish district, who has spent many years in research on Wilbur and Fort Simcoe; H. Dean Guie, historian and authority on Fort Simcoe; and George H. Martin, secretary of the Fort Simcoe at Mool Mool Restoration Society.

His research will also lead to Willamette University, and the archives of the College of Puget Sound, Tacoma, and the State Historical Society, Tacoma. Also on his list of contacts will be Dr. Robert H. Ruby of Moses Lake and Dr. Robert Brown of Wenatchee Valley College. They are co-authors of the first extensive writing dealing with Chief Moses, one of ~~Wilbur~~ the Rev. Mr. Wilbur's friends, at Fort Simcoe.

The Rev. Mr. Howell emphasized that the writing will not include a biography of Wilbur, such as would be possible from material possessed by Mrs. Kimmel, and that historians agree Wilbur is suitable ~~odd~~ biographical material.

(more)

4th ad..Methodists

The retired pastor lives at 3436 38th Ave., West Seattle, 99.

He said one of his first needs now that primary research is under way is to obtain information concerning Methodists who have contributed importantly to the Northwest 's cu0x0r00,Orn1xigian, 000 cultural, spiritual, moral and industrial history.

Pacific Power & Light's allocation of 171,000 kilowatts of power from the Priest Rapids and Wanapum dam projects will be brought into the company's system over a new heavy duty transmission line to be built from Midway to Union Gap, it was announced here today by D. B. Leonard, PP&L assistant general manager.

"The Pacific Company will receive initially 87,681 kilowatts from Priest Rapids," Leonard said. "This project is expected to be in production in about five years, and will be followed by the Wanapum dam, from which we will receive an allocation of 83,400 kilowatts.

"Detailed plans for our new transmission facilities will be worked out during the dam construction period and the line will be ready for service when power is available from the project."

Pacific Power & Light expects to sign a contract with the Grant County PUD for its share of Priest Rapids power within the next week, Leonard said. The contract will be placed in escrow until the district completes satisfactory arrangements for financing the project, expected to be before the end of June.
