Noyes Memorial Carillon

What is a carillon?

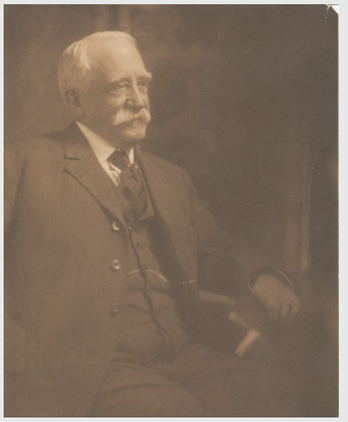
A carillon is a musical instrument composed of 23 or more cast bronze bells, arranged in chromatic sequence. The bells are tuned to produce harmony when several bells sound together. Carillon bronze contains copper and tin in a ratio of approximately 4:1.

Bells are thought to be a product of the Bronze Age (3300 to 1200 BC). The bells were likely crudely made and the tone was undoubtedly abrasive. It was in the 15th century that Flemish bell founders discovered a method of accurately tuning bells after a bell was cast at the foundry. By the 20th century bell tuning was revived, refined and elevated to a new quality for modern carillons. The most unfortunate consequence to carillon bells was during World War II as Nazi forces claimed nearly 150,000 bells across Europe for armaments production.

Carillons are found in enclosed tower spaces or contemporary architectural design of open space. Carillons have been built of various sizes of only 23 bells, to the largest at Hyechon College Carillon, Seo-ku, Taejon, South Korea, with 78 bells. Instruments are located in North America, South Africa, Brazil, Australia, and New Zealand. There are approximately 1,200 carillons throughout the world of varying age and tuning. There are three carillons in Minnesota: Mayo Clinic (56 bells), House of Hope (49 bells), and Central Lutheran Church, Minneapolis (47 bells).

The Keyboard

The bells are played from a mechanical keyboard by means of a series of direct mechanical linkages from the keyboard to the bell clappers. The console is pictured to the right and is close to the bells. There is a practice console in a room beneath the main console.
The carillon's mechanical playing action, similar as that of the piano, allows the performer to control dynamics and phrasing solely through variation of touch. The keyboard (clavier) is about 6½ feet long, with a double row of wooden "keys" that resemble wheelbarrow handles. This type of mechanism requires the carillonneur to play largely with the side of the fists. Lower bells are duplicated in the pedals. Adjustments to the metal rods which connect the keyboard to the bell clappers are controlled by the turnbuckles (as seen above the music rack in the photo above). Turnbuckles allow the player to adjust the length of the linkage to the clapper for clarity of sound.



The Noyes Memorial Carillon

Charles Phelps Noyes (pronounced 'noise') was a member of House of Hope beginning in 1868. A veteran of the Civil War, Noyes was president and co-founder of Noyes Brothers & Cutler, a wholesale druggist in St. Paul which supplied pharmacies and hospitals throughout the Midwest. He served as a board member for several companies and banks. At House of Hope, Charles Noyes was president of the Board of Trustees, treasurer, and chairman of the committee that built the present church at the corner of Summit Avenue and Avon Street. He also gave the first pipe organ. Following his death in 1921, his wife, Emily, provided funds for a carillon as a lasting memorial to her husband. A small carillon was completed and installed in 1923 (with enlargement following in subsequent decades). In the summer and early autumn of 2023, the carillon celebrated its centenary with an expanded Summer Carillon Recital Series celebration to July and August. The celebration concluded with a special recital in October by David Johnson and Timothy Short featuring commissioned carillon music by national composers and published carillon music by local composers Theophil Rusterholz, Stephen Paulus, and Aaron David Miller.

The carillon is played each Sunday following the conclusion of the worship service, and for memorial services, weddings, special holiday celebrations, and other community events at House of Hope.

Bells of the Noyes Memorial Carillon

The original bells, dedicated on Sunday, November 4, 1923, were cast by the Michiels Foundry at Tournai, Belgium but the bells were musically unsatisfactory due to the inferior tuning. In 1948 a committee studied the problems and created a plan to improve the instrument. Advice was obtained from Professor Arthur Lunds Bigelow, bellmaster of Princeton University and the world's leading authority on bell acoustics.

In 1951, eighteen of the original bells were replaced by new bells given by the children of Charles Phelps Noyes. In addition, another twelve treble bells were given by Julian Noyes Kirby, nephew to Charles and Emily Noyes. The renovated and enlarged carillon was now an instrument of 40 bells and a vastly improved instrument. The carillon was rededicated with a recital played on Sunday, October 28, 1951, by Professor Bigelow.

When House of Hope enlarged its building in the late 1950s, it was decided to enlarge the carillon as space allowed. The Noyes' daughter, Julia, gave six additional bells. Professor Bigelow once again supervised the renovation by replacing four bells, adding eight bells and the enlargement of the clavier to accommodate the larger bells. Bigelow rededicated the instrument on Sunday, October 25, 1959.

To bring the carillon closer to the reality as a concert instrument of four full octaves, the bell firm of Paccard (France) cast three bass bells in 1985. These three bells were possible through the generosity of House of Hope members, Sarah-Maud and Robert Sivertsen.

In 1991-1992, another gift from the Sivertsens, allowed for a complete renovation of the playing cabin, updating to the practice room and the installation of the final bell (a low C#) which was cast by the Verdin foundry of Cincinnati, Ohio. In its present state, the Noyes Memorial Carillon is now a fully functioning chromatic carillon of four octaves, 49 bells.

The Noyes Memorial Carillon is unusual as it contains the bells of five different bell foundries: six of the original bells in the instrument were cast in 1922 by Marcel Michiels and Son of Tournai, Belgium; ten bells of the middle register were cast by Petit and Fritsen of the Netherlands; eleven bells are from the Founderie Paccard of Annecy, France; twenty-one treble bells were personally made by Professor Bigelow; and the Verdin Foundry of Cincinnati created the final bell. As an instrument which showcases the bells of five foundries, the blending of the sounds are seamless from one octave to the next.

House of Hope's Carillonneur Emeritus David Johnson and House of Hope's Carillonneur and Music Associate Timothy Short are pictured next to the C# bell outside of the playing room where the carillon console is located.

Inscriptions

Each bell bears the name or initials of its foundry. Some of the bells contain inscriptions.

C I sing do. Glory to God in the highest and on earth peace to men of good will.

C# Je m'appelle Sarah-Maud

D I sing re, and upon my note solemn but beautiful music is based.

D# I sing re-sharp. There is satisfaction in completeness.

E I sing mi. The major note to the deepest triad.

F I sing fa. My importance cannot be overestimated.

F# To the glory of God and in loving memory of Charles Phelps Noyes, born April 24, 1842, died April 30, 1921. I passed on with the throng and led them to the House of God with voice of joy and praise, a multitude keeping holy day. Psalm XLII:4.

G My note is sol. I was given together with my five new sisters by Julia Noyes deForest in memory of her parents in 1956.

G# To the glory of God and in honor of Theophil Rusterholz, Lifetime Carillonneur, House of Hope Church. 1985

A To my note the whole orchestra tunes.

A# To the glory of God given by Sarah-Maud & Robert Sivertsen.

C2 Des monts de la Savoie aux lacs du Minnesota, je chantes do. (From the mountains of Savoy to the lakes of Minnesota, I sing do.)

D2 I am the octave of the bourdon and with my largest sister I agree on every issue (*This inscription is now incorrect. The bell was inscribed at a time when there was reason to believe that the carillon was completed with a bourdon of D.*
F2 At the sound of my voice, brighten up!
G2 Je suis la plus petite de les nouvelles cloches. (I am the littlest of the new bells.)

Practice Carillon Console

The Bell Tower

The carillon is located high in the bell tower and some of the bells can be seen though openings in the chamber. The console is on the same level as the bells but is enclosed in a cabin to shelter the carillonneur from both the full sound of the bells and the weather conditions.
There are 108 steps from the street level to the playing cabin and bells.
Halfway up the tower there is a practice room with a clavier (allowing the carillonneur to practice without disturbing the neighbors) and a music library. The practice keyboard is an exact replica of the keyboard in the playing cabin. Rather than bells, the keys hit xylophone bars to confirm pitch and dynamic levels.
Although the carillon belongs to House of Hope it is also an instrument of the community and the voice of House of Hope in this neighborhood.
The tower rises 114 feet from its base to the tower finials. The height of the bell tower is nearly the same as the length of the nave and chancel.

The 2026 July Summer Sunday Carillon Recital Series will include:

All Concerts begin at 4 p.m.

Saturday, July 4
Annual Independence Day concert
Tim Short, House of Hope

Sunday, July 5 – no concert

Sunday, July 12
Amy Hamburg-Mead
Indiana University Bloomington, Indiana

Sunday, July 19
John Gouwens
Retired Carillonneur of Culver Academies
Culver, Indiana

Sunday, July 26
Margaret Pan
Boston, Massachusetts