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DEEDS CARILLON

NCR factory news

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NCR factory news

DEEDS CARILLON

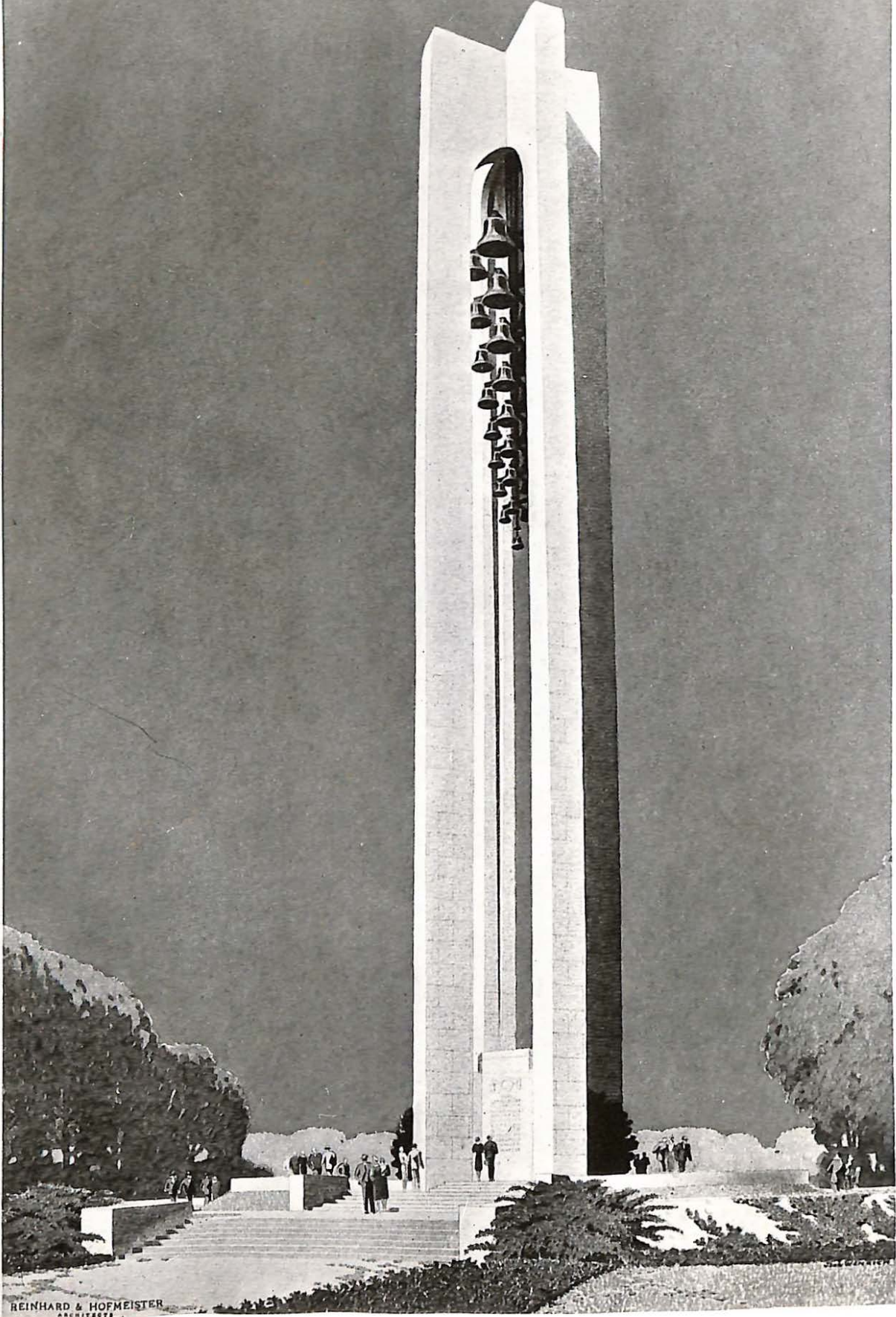
Music over NCR

"Finest carillon bells in existence" to be made by Meneely Co.

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Dayton, O.
National Cash Register Company
1940

NCR FACTORY NEWS May 1940



REINHARD & HOFMEISTER
ARCHITECTS

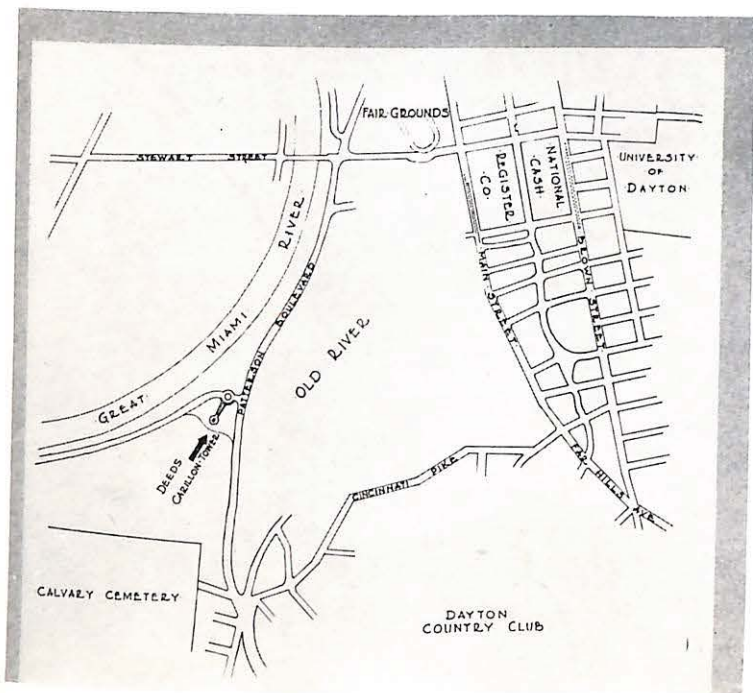
Music OVER NCR

A shaft of granite, steel and limestone will rise beyond Old River, through generosity of Mrs. Edward A. Deeds. People of Dayton to enjoy "World's most unusual concerts" in years to come from "Chandelier of Bells."



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The site for the Deeds Carillon was selected by Mrs. Deeds because she felt that it was ideal from the standpoint of visibility and acoustics.



TEST borings for the foundation are being made as the first move toward construction of the Deeds Carillon, as announced in the newspapers of the city on April 28 by Mrs. Edward A. Deeds.

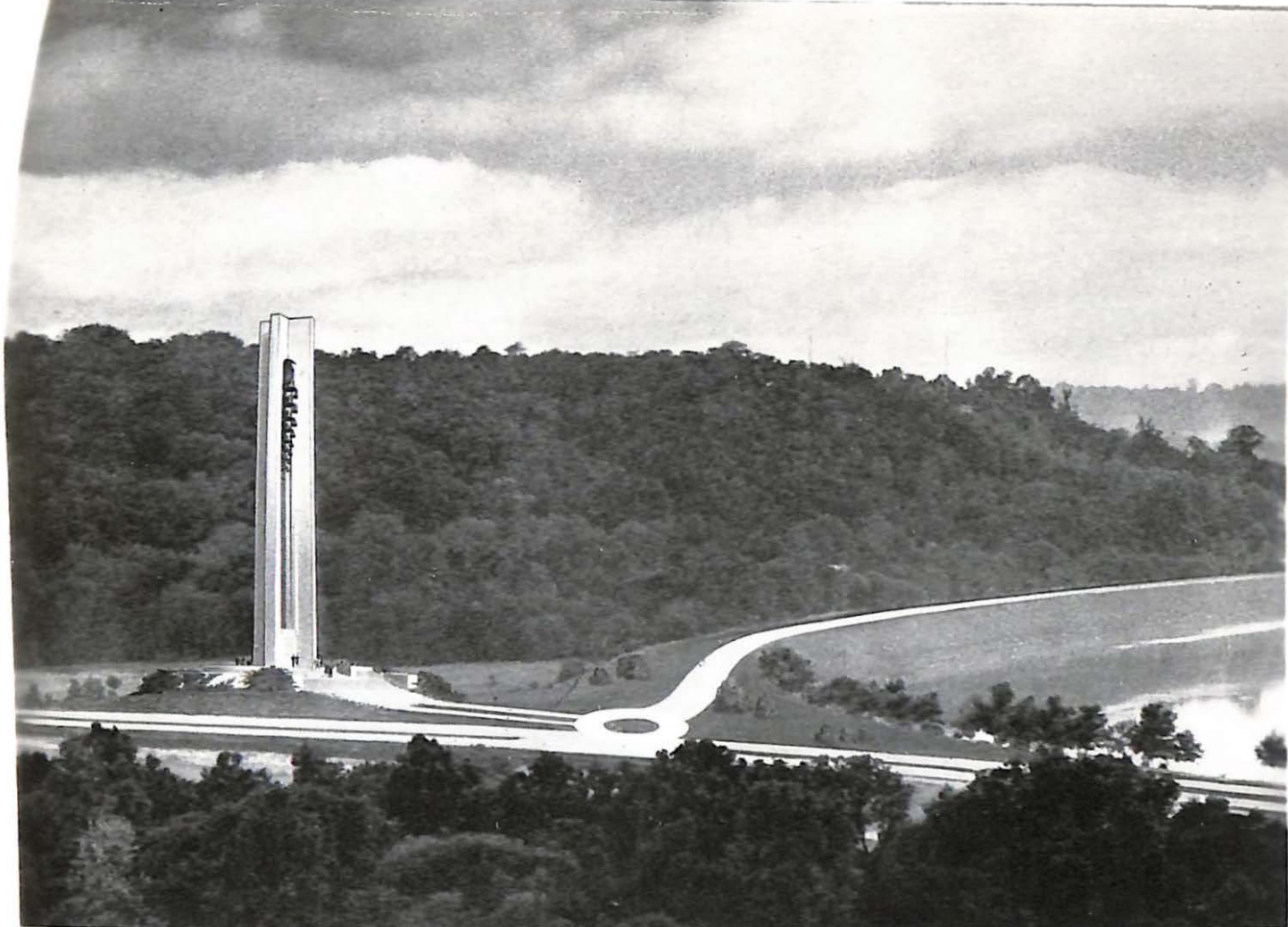
Termed by the press as "one of the most impressive public-spirited enterprises in the long and colorful history of Dayton," the Deeds Carillon is to be erected and endowed for concerts through the years as a result of the vision and generosity of Mrs. Deeds.

The exact location, as indicated by the map on these pages, is in the triangular area bounded by Patterson Boulevard and the Miller's Ford Road beyond Old River.

Thus, on Sunday afternoons of the future, and on special summer holidays, the thousands of NCR employees and their families will enjoy "the world's most unusual outdoor concerts" in the air about them as they swim, picnic, and otherwise relax on the Old River grounds.

Carillon Towers Are Rare

Including both large and small, there are only six true carillon towers in the United States. Of these, two are on college grounds, two are on private estates, and one



"A shaft of granite, steel, and limestone, towering 170 feet above a park at the base of a great, green hill . . . a shaft of great beauty, in full sight from all directions . . . that will be the Deeds Carillon." This photograph is a "composite" made to show approximately how the Carillon will actually appear when completed. (Carillon is pronounced CARE-il-lon.)

in a cemetery. This leaves only one, the well-known Bok Tower in Florida, of the same free public nature as the Deeds Carillon. Furthermore, nowhere is there a carillon tower that will equal it. It will be absolutely unique, not alone because of its simple dignity of tower design, but—most importantly—because of its entirely new method of bell mounting and operating, giving the finest musical effects ever produced with bells.

A carillon, correctly speaking, must have a minimum number of twenty-three bells, providing the tones and semitones to encompass two full octaves. Therefore, Mrs. Deeds chose the carillon because she felt that its musical breadth would most fully contribute to the musical and cultural appreciation of the Dayton community, as well as bring a rare national prominence to the city.

But—picture to yourself the Deeds Carillon, and picture its setting—

A shaft of granite, steel, and limestone, towering 170 feet above a park at the base of a great, green hill . . . a shaft of precise beauty, dramatic in its simplicity, terminating in soaring arches. And suspended from the cross-shaped intersection of those arches, in full sight from all

directions, a veritable "Chandelier of Bells"—a total of thirty-two in all.

And picture even further—on a Sunday afternoon in 1941—or even in 1991—the crowds at Old River as well as more than a thousand motor cars gathered around the Carillon, their occupants enjoying what is authoritatively termed "the world's oldest and most simple form of musical expression."

Excavation Soon To Begin

This project is going forward for Mrs. Deeds under the stewardship of "Educational and Musical Arts, Incorporated," an administrative subsidiary of The Dayton Foundation, incorporated several weeks ago as the first step in creating this perpetual monument for the people of Dayton and the Miami Valley.

Construction and a perpetuation plan are to be carried out through a group of Dayton's civic leaders who accepted the responsibility for Mrs. Deeds because of the inspiration represented by her beautiful idea. This group is composed of the following, who are officers and directors of "Edu-

ational and Musical Arts, Incorporated": Ezra M. Kuhns, President; Harry B. Canby, Vice-President; Don D. Battelle, Secretary and Treasurer. E. D. Smith is Consulting Engineer. The Directors are: Harry B. Canby, Donald Kohr, Ezra M. Kuhns, H. B. Ohmer and Milton Stern.

The entire cost of this structure, the property, and endowment for maintenance and operation will be met through the generosity of Mrs. Deeds. For, it is her belief that music has always and always will play a vital part in the world's crusade against harsh and destructive influences, and against cultural decay.

Mrs. Deeds purchased the three-acre tract of land for the Carillon site from the Company, deeding it to "Educational and Musical Arts, Incorporated." The site she selected is ideal from the standpoint of accessibility, visibility, and acoustics. No one can predict how far the sound of the bells will carry. Only actual tests can finally determine the best point from which to hear them. However, under favorable conditions they should be audible at a considerable distance.

Concerts Also On Special Occasions

The Carillon will not only provide regular concerts weekly or semiweekly through each summer, but will contribute appropriate music on such occasions as Easter, Christmas, Memorial Day, and the Fourth of July.

Mrs. Deeds is well known for her aggressive interest in music appreciation. For many years she was a member of the Women's Auxiliary Board of the Philharmonic Symphony Society of New York City. She believes in the good influences of music for old and young alike. In this connection it is interesting to note that, some years ago, she undertook to encourage a

Reinhard & Hofmeister, internationally-known New York City architects, and designers of Rockefeller Center, designed the Deeds Carillon. Left—Henry Hofmeister. Right—L. Andrew Reinhard. The model of Rockefeller Center appears on the table behind them.



What Longfellow Said About Bells

"And in despair I bowed my head;
 "There is no peace on earth," I said,
 "For hate is strong
 And mocks the song
 Of peace on earth, good-will to men!"
 Then pealed the bells more loud and deep;
 "God is not dead, nor does He sleep!
 The Wrong shall fail,
 The Right prevail,
 With peace on earth, good-will to men!"

love for music in children and organized what was called "Dayton's first harmonica orchestra" among children of the Dayton schools. Only recently, she received a letter from a man who is now an orchestra leader, reminding her that he had been a member of one of her "harmonica orchestras" years ago.

A Hobby of Bell Collecting

Mrs. Deeds confesses to the belief that, of all music of the carol type, the pure, clear melody of bells is the sweetest and most singularly

impressive. As a matter of fact, Mrs. Deeds has in her Moraine Farm home a rare collection of bells from many countries of the world—old bells, with tradition behind them.

She believes that in this hurly-burly world of today, something permanent is needed as a reminder of the finer, esthetic things of life, the cultural fundamentals . . . fundamentals in tune with the spiritual. Thus, through Deeds Carillon, she will make her sincere and generous contribution in that direction.

The Deeds Carillon will represent the very latest, not only in structural design and size, but in the perfection of the bells themselves, in their mode of playing, and in their far-carrying fidelity to tone.

Famous Bell-Makers

The design and making of the bells are being entrusted to the internationally-known firm of bell-makers—The Meneely Bell Company, of Troy, N. Y., whose officials represent the fifth and sixth generations of the Meneely family to produce the world's finest bells.

In reference to this assignment, Mr. Chester Meneely, President of the Meneely Bell Company, said,

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Chester Meneely, of The Meneely Bell Company, Troy, N. Y., is the fifth generation of Meneelys to make bells. Mr. Meneely is shown at a console, playing bells. The bells will be played through an elaborate electrical system, although the effort on the player will be no greater than in the playing of an organ.



Music Over NCR

(Continued from Page Four)

"It will be our pleasure to produce what I believe will be the very finest set of bells in existence." And Mr. Meneely should know whereof he speaks, for Meneely bells send music out into the air of many countries of the world. There is hardly a village in the United States that does not have its Meneely bell.

As an example of their bell-making history, it is interesting to note that, in the centennial year of 1876, Meneely made a bell weighing 13,000 pounds to represent the thirteen original states. This still hangs in the tower of the Old State House, above Independence Hall, just where the old Liberty Bell was formerly suspended. Like the old bell, it has cast, in a circle above the rim, the inscription, "Proclaim Liberty throughout all the land unto all the inhabitants thereof." Meneely also cast a replica of the famous "Old Liberty Bell" (minus the crack), weighing 2000 pounds, for Henry Ford, and placed it in the tower of the Institute of Technology at Dearborn.

Bell Music At Its Best

In designing the bells for Deeds Carillon, Meneely will avoid extremely large or extremely small bells, confining them to a range that has been definitely established to give "bell music at its best." This is the largest single order ever placed for bells.

The bells will range in size from six feet in diameter, with a weight of 7000 pounds (the "King" bell), to the smallest twenty inches in diameter, weighing 150 pounds. And yet - regardless of their size (for size merely establishes pitch control), the music from the smallest will penetrate the air over Dayton as far as will the largest bell.

To gain an idea of the largest bell's size, it is pointed out that the required momentary electric current to strike it will be over 100 horsepower! Yet, this same bell can be struck four times within one second!

Aside from its beauty of design, Deeds Carillon will have another feature of distinction. It will be the first tower to have the bells mounted entirely out in the open, providing greater carrying power, and purest, unrestricted beauty of tone. Such a departure required a complete re-checking of the science of carillon tower design, as to the structure itself, and the bell placement.

New Scientific Basis

For hundreds of years, architects have struggled with the problem of providing structures to support carillons which will elevate them to a height at which they can be adequately heard over the surrounding countryside. The solution invariably has been to erect an enclosed tower in which the bells are hidden from view and covered with louvres or grilles

which screen the bells from sight and tend to muffle the sound.

Except in rare instances, such as when hung in gabled arches of Spanish missions, or outside of oriental temples, the bells are rarely to be seen. Starting with the premise that the bells should not be hidden but should be exposed to view, the architects for the Deeds Carillon began studies which, after months of preparation, comparison and rejection of sketches, models and photographs, were developed into the unique structure which will crown the terraced levels of the beautiful park in which it will be located.

Where the arches of the Tower intersect, the four buttresses will hold suspended an inverted stem fifty feet in length with projecting arms from which the bells will hang. And all of these suspensions and supports will be of steel covered with bronze, to harmonize with the metal of the bells and to contrast with the limestone piers and arches themselves. Utilizing engineering principles of tension and cantilever, the architects have kept this support for the heavy bells surprisingly light.

Architects Who Designed It

Architects who designed the Tower are Reinhard & Hofmeister of New York City, whose great works include Rockefeller Center itself. The landscaping to surround the Tower will be done by Olmsted Bros., of Boston, who treated similarly the park around the Bok Tower in Florida.

The steel work for the Carillon is being designed by James L. Edwards, of the firm of Edwards & Hjorth, of New York City. The technical knowledge and skill of Mr. Edwards was also responsible for the steel work of such famous buildings as Empire State, Rockefeller Center, Chrysler Building, and the Waldorf.

The design of the Deeds Carillon presents unusual problems in wind pressure because of the large surfaces presented by the "Chandelier of Bells."

Other Features Of Carillon

The height of the Tower from the lower, or parking, area is 170 feet. The structure is thirty feet square at its base. From the high level, or the base of the Tower itself, the height is 150 feet. The Tower will rise twenty-five feet higher than the hill on which "Sugar Camp" is located. This height will make the Deeds Carillon visible for miles, and will give to visitors entering or leaving Dayton a close and stimulating view of this monument that will live through the generations.

At the base of the Carillon will be the Console Room and it is from here that an elaborate electrical system will play the bells, through the touch of the operator's fingers at the Console.

The door to the Console Room will be of bronze. The Console Room will be beautifully fashioned, with a carpeted

floor. Below will be service rooms, for power control units, repair shop, and storage of equipment.

The steps leading to the Carillon base will be of granite, the terrace surrounding the Carillon paved with blue flagstones.

The skeleton construction of the tower will be of steel to carry the tremendous weight, and will be encased in Indiana limestone. The base will be of granite.

Mrs. Deeds Explains

In discussing the motivations that led to her decision to create and perpetuate the Deeds Carillon for Dayton and Dayton's posterity, Mrs. Deeds expressed her long interest in the bell as a source of music. "In no other way," she said, "can simple, inspiring music be spread among an entire populace.

"Of course, one who cares to read the history of the bell as a source of music will find that, at first, it was a means of warding off evil. Many early superstitions gathered around bells. It was believed that bell music drove away storms and pestilence, and even put out fire. But through religious customs, bells early acquired a sacred utility and it was in such a way that they became a part of churches, cathedrals, and other places of worship.

"Today, I doubt if anyone, even though he lacks a real feeling for music in a technical sense - can help but respond to the uplifting sound of music simply and carefully created - music sent across the hills and valleys, the roof tops and tree-tops of a city such as Dayton.

"In addition to the complete set of 'speaking bells,' there will be six 'silent,' memorial bells," says Mrs. Deeds. "Each of these six," she said, "will take their place among the 'speaking' bells as memorials to deceased members of Colonel Deeds' and my families. These six inscriptions, cast in the bells themselves, will read as follows:

- Dorothy Deeds - 1906. (A daughter who died in her first year.)
- Edward Andrew Deeds, Jr. - 1909-1917. (A son.)
- Charles Deeds - 1846-1931. (Colonel Deeds' father.)
- Susan Green Deeds - 1849-1938. (Colonel Deeds' mother.)
- Samuel Walton - 1838-1891. (Mrs. Deeds' father.)
- Mary Amelia Walton - 1845-1931. (Mrs. Deeds' mother.)

"The Deeds Carillon," concluded Mrs. Deeds, "will ultimately become a memorial to my husband."

It is impossible to set a completion date for Deeds Carillon, although it is hoped that concerts will begin some time during the latter part of the summer of 1941. It will require at least fourteen months for the bell-makers to cast, tune, and install the bells.

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IN REFERENCE to their assignment, the Meneely Bell Company told Mrs. Deeds, "It will be our pleasure to produce what we believe will be the very finest set of bells in existence."

And that statement means much, for the Meneely family—for six generations back—have been making many of the world's finest bells.

The science of bell-making is a long story, to tell it in detail, but there are interesting facts about it which every NCR employee will doubtless like to read.

Sometimes it is necessary to cast twenty or thirty bells to fill an order for a ten-bell chime, for Meneely is as particular about matching bells for a set as a gem merchant is in selecting the matched pearls for a necklace.

Only when each bell is entirely in harmony with all its fellows is true perfection achieved. After all, there is no little responsibility in the selection of a set of chimes to which a whole community will listen.

Processes Are Unique

The processes used at the Meneely Bell Co. are unique in nearly every respect, much to the chagrin of "foundry supply" men who come there only to learn that their products are not even used.

A most spectacular step in bell-making comes when the copper and tin are melted and mixed in the oil furnace, brought to just the proper temperature, and then carried in a huge ladle from which the molten alloy is poured into the mold.

Larger bells are kept buried in dirt for days after the casting to retard their cooling. Sometimes weeks go by before the bell can be "shaken out" and the founder gets the final check on the accuracy of his calculations.

"Old and New"

The Meneely Bell Company foundry represents a curious mixture of the old and the new. There is the main foundry with its large modern oil melting furnaces in which is blended the age-old mixture of copper and tin which is known in the text books as "bell-metal" . . . Out in the next shop are the blacksmith and his helper skillfully working iron into the special bell mountings. Immediately behind this is the finishing room where large and small bells are cleaned and buffed, while finished ones are being set into their mountings for final tests before shipment. . . . Upstairs, patterns and cabinets are fashioned from wood; complicated looking electrical machines are being set up and assembled, while on a nearby drafting board a chime takes form as it will fit in the tower.

The men working in the Meneely bell foundries are men who have devoted their lives to learn their complicated tasks. Just as at NCR, these workmen take personal pride in their work. Eight of the key men at the Troy foundry have a combined experience of over

(Continued on Page Thirty-one)

(Right)—"Shaking out." Sometimes the inner mold sticks, due to shrinkage of the metal as it cools. This hammering loosens up the half-burned sand until the metal flask drops out.

"FINEST CARILLON BELLS IN EXISTENCE" TO BE MADE BY MENEELY CO.



Closing the molds. The "case" is dropped over the "core." Special care has to be taken that the two molds, which weigh as much as the bell itself, are not bumped together during this process.



"Pouring" the bell. The metal has been melted and mixed into the alloy in a furnace.



been named Patricia Ann and Phyllis Nan. Both weighed five pounds at birth.

Another proud father, Grover Dadisman, announced the arrival of a baby girl on April 8th. She weighed 8 pounds at birth and has been named Yvonne Marie. We extend our congratulations to these proud fathers.

Manager Kercher reports that Punch No. 2 should have a "whopper" of a ball club this season as they finished second last year and have signed some new players which should strengthen the club a great deal. Here's hoping you take first place this year.

Tillie Stewart has proved himself somewhat of a checker player by finishing third in the individual checker tournament that was held throughout the plant. Nice going, Tillie!

The fellows interested in horseshoe pitching have been out limbering up their glass arms every chance the weather permits. As yet no league has been formed, but is expected to be organized later on.

Someone was telling me that Spencer, on the arc-welder, has a new hobby in taming wild cats. How about that?
- "Red" Stewart.

Sales Promotion

Bill O'Bryan, the Barney Oldfield of the Sales Promotion Department, is writing "The Memoirs of a Motorist."

The inspiration came to O'Bryan about a month ago when he ventured out in the family chariot without friend wife to instruct him.

As Bill started his Chevrolet he thrilled at the power in the engine. For once he was going to venture out alone . . . unaided . . . out into the speed-mad world. The idea was there but the flesh was weak.

As he gave the car the gun it chugged, jumped, spit, and wheezed. Finally wild with excitement, Bill threw out the clutch and let it coast. He tried again and again to get the car into smooth movement . . . but no dice. Finally in disgust "Barney" O'Bryan pulled over to the curb and climbed out . . . a beaten man.

As he started up the street Bill spotted Fred Jones, a mechanically-minded neighbor. "Hey Fred," said Bill, "come here and tell me what the — is wrong with my car?" Fred came across the street.

"What do you mean?" asked Fred.

"Well," said O'Bryan, "every time I start the car it won't take the gas . . . it just chugs and wheezes and threatens to stall."

"OK," said Fred, and he climbed into the car, turned on the switch, stepped on the starter and away it went.

O'Bryan was amazed. "What did you do," he asked.

"What did YOU do?" queried Fred.

O'Bryan went through his paces showing Fred how he had driven the car.

"No wonder it wouldn't run," said Jones, "you tried to start out in high with the emergency brake on."

O'Bryan was floored. "Well, I guess I ought to take a few more lessons," he retorted.

Jones walked away muttering through his beard.

Mr. and Mrs. G. D. Vaughan announced the arrival of a daughter, Judith. Mr. Vaughan is a member of the Accounting Machine Division of the Sales Department.

Repair

The following men have completed their training and have reported to the field:

E. Hester	Lynchburg, Va.
R. E. MacNearney	Halifax, N. S.
J. C. Harston	Newark, N. J.
L. A. Wassenich	Louisville, Ky.
T. W. Hunter	Atlanta, Ga.
C. A. Manlove	Lexington, Ky.
W. E. Winter	Wheeling, W. Va.
C. M. Wood	Butte, Mont.
W. G. Taylor	Edmonton, Alberta

Earl Hawker has just undergone an appendectomy. We all wish him a speedy recovery and hope to see him back on the job again before long.

Donald I. Potter lost his bachelor status recently, making up another victim for Dan Cupid. We extend him our congratulations and best wishes, and our thanks for the cigars.

We wish Robert L. Hines the best of luck in his new position in the Sales Service Division. Bob was formerly serviceman in Baltimore and just recently reported to the School for additional training.

- N. Anspach.

"Finest Carillon Bells In Existence" To Be Made By Meneely Co.

(Continued from Page Five)

250 years there. Eddie Kehn, foreman and rigger, has placed over 2,500,000 pounds of bells in towers over the continent during more than fifty years' experience.

In making bells, there must be a complete understanding of the technical elements that make a bell ring true. Meneely's men know that a pure tone is a definite number of vibrations per second as sensed by the ear.

Blending of Pure Tones

The sound of a single tone is pleasant but colorless. The usual tone is made up of a number of different pure tones, blending together, with the dominant one giving the tone its pitch. Practically everything that will vibrate will produce a tone, but only certain combinations will have the musical qualities which distinguish them from unpleasant "noise."

How Does a Carillon Differ?

In this country, the commonest form of chime is that found in clock towers.

Principally used to strike the quarters and hours, there are seldom more than four or five stationary bells, and no complete airs can be played with them.

Chimes usually contain a minimum of ten bells, which give enough tones in the diatonic scale to permit the rendering of hundreds of complete hymns, folk songs, etc., in simple harmonies. Chimes are typically an American form of art and are found in our churches in every part of the country. The bells do not move, but the clappers are operated from manual claviers, or by modern electrical methods employing small piano-like keyboards.

From the chime we lead into the carillon simply by adding tones and semitones enough to give us the compass of two full octaves. The carillon thus becomes distinguished for its size and scope. Few towers are large or strong enough to contain a complete carillon; and it becomes a unique and complicated musical instrument, requiring special care in its manufacture and use.

Frank Oswald Honored

(Continued from Page Nine)

every time we met a farmer we asked how far it was yet to New Carlisle. The first one said: 'About 3½ miles down the road.' We walked and walked, and the next farmer we asked replied: 'New Carlisle? Wall, now, let's see. I reckon it's about five miles from here as the crow flies.' We arrived in New Carlisle about 2 o'clock in time for the game. We returned to Dayton on the train via Troy."

Mr. Oswald is a charter member of the NCR Gun Club, and is the only charter member of that club still on the payroll. One of his most prized possessions is the Fred Gilbert trophy. Mr. Gilbert was a professional shooter for one of our large fire arms companies. Another prized possession is the gun F. B. Patterson gave him as a Gun Club prize in 1921. Mr. Oswald has attended every one of the 18 Grand American Handicap Shoots held at Dayton. The first two were held on the NCR Gun Club grounds, 1913-1914, and in the 1913 meets Mr. Oswald was the runner-up with a score of 94 out of 100. Hunting and fishing are his hobbies, and Stillwater is his favorite bass stream.

Mr. and Mrs. Oswald recently completed a lovely new home on Dorothy Lane. They moved into it last November and shortly after Mrs. Oswald became seriously ill. She is still confined to her bed in the hospital. We join in wishing Mr. and Mrs. Oswald many more years together in the enjoyment of their new home and among their many old friends.