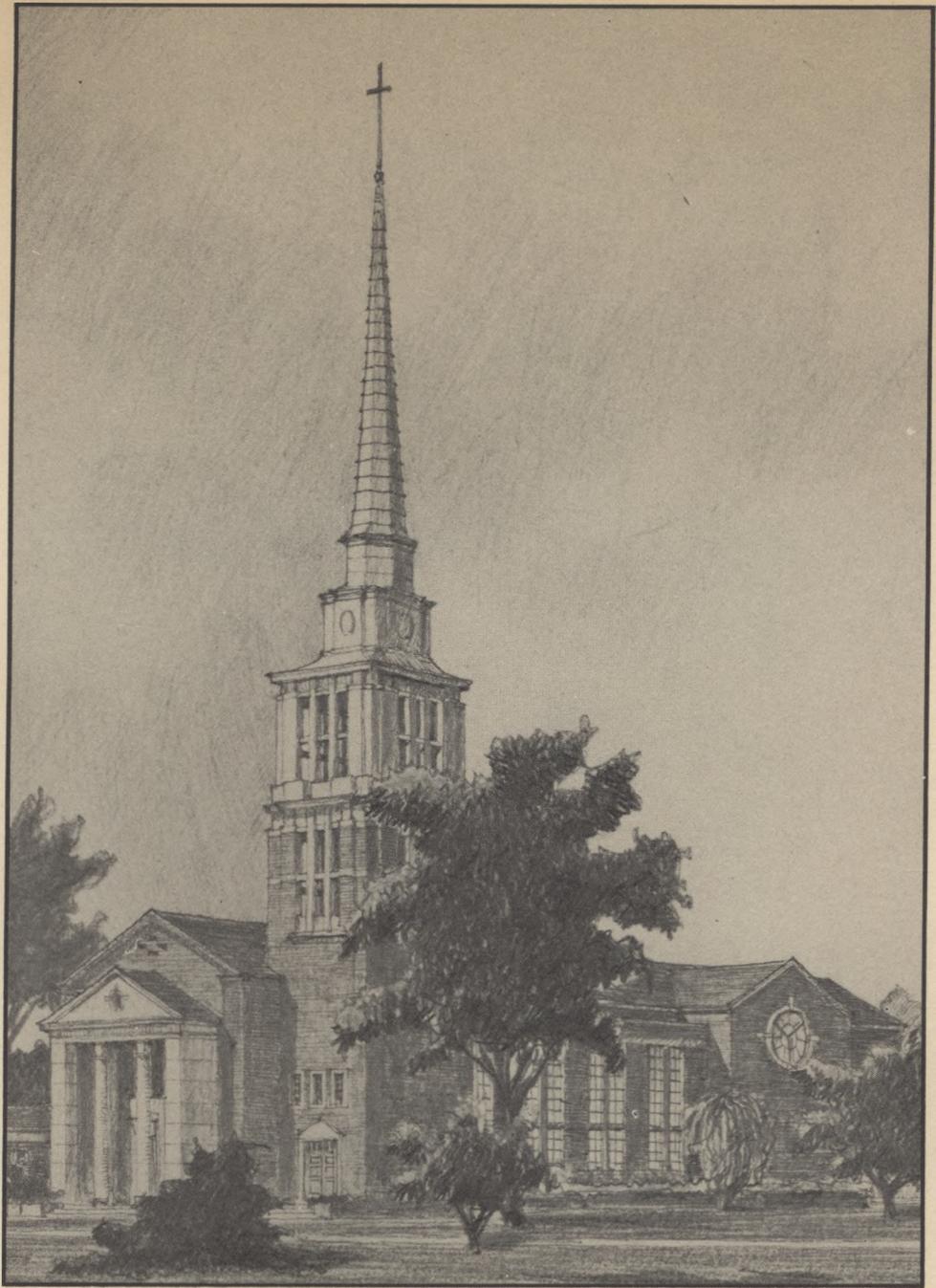


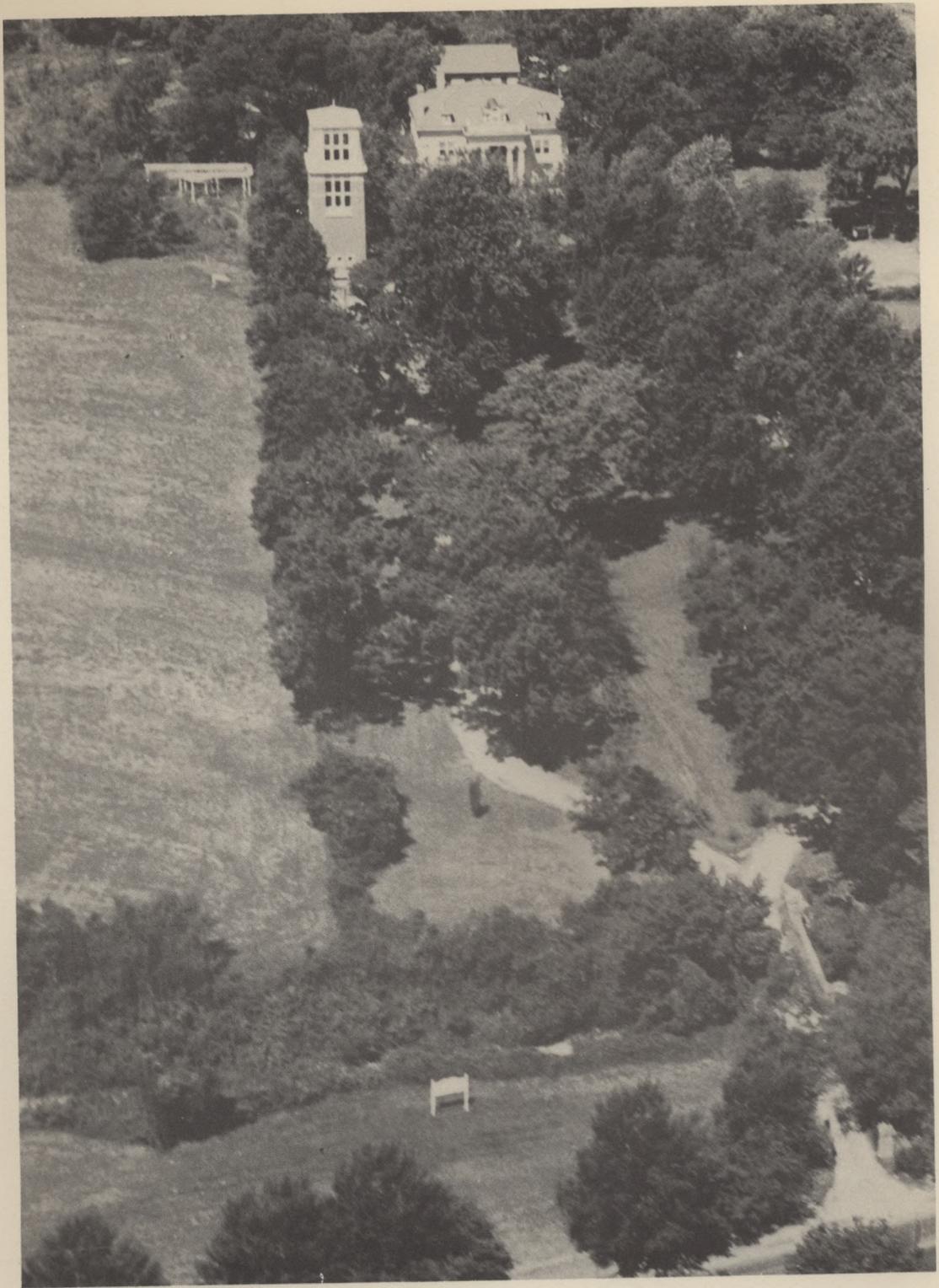
*Lord God of Hosts,  
Be with us yet,  
Lest we forget,  
Lest we forget!*

*Kipling*



# Jackson Memorial Carillon

JACKSON, TENNESSEE



*"I come here to find myself -- It is so  
easy to get lost in the world."*

*Burroughs*

*The Jackson Memorial Carillon  
and  
The Carillon Tower  
of the  
First Presbyterian Church  
Jackson, Tennessee*

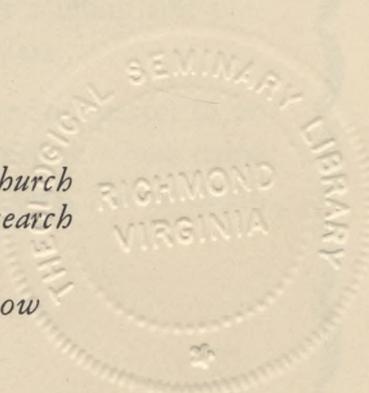
*"For bells are the voice of the Church  
They have tones that touch and search  
The hearts of young and old."*

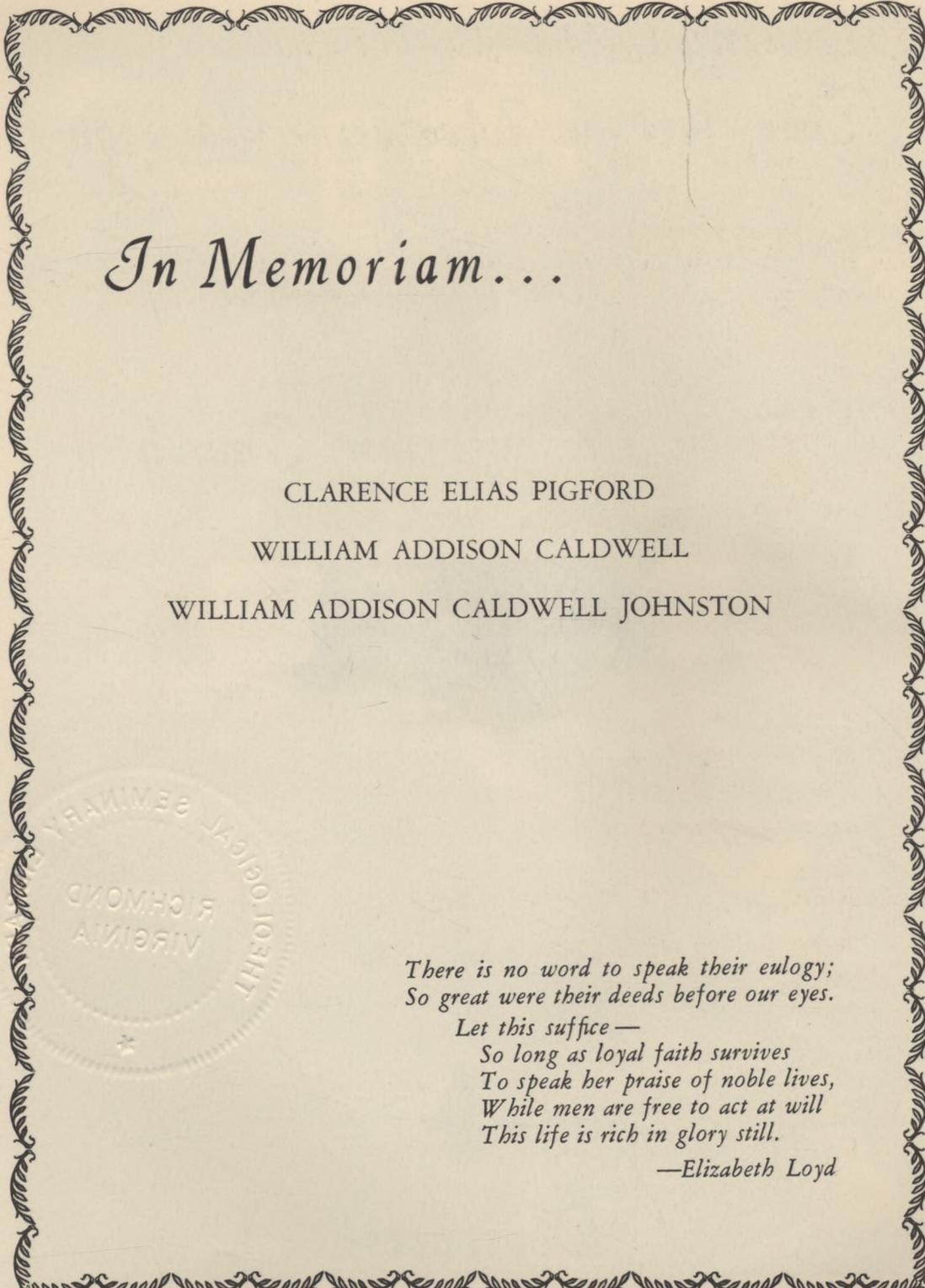
*Longfellow*



*Dedication*

*September 11-12, 1954*





*In Memoriam...*

CLARENCE ELIAS PIGFORD

WILLIAM ADDISON CALDWELL

WILLIAM ADDISON CALDWELL JOHNSTON



*There is no word to speak their eulogy;  
So great were their deeds before our eyes.*

*Let this suffice —*

*So long as loyal faith survives  
To speak her praise of noble lives,  
While men are free to act at will  
This life is rich in glory still.*

*—Elizabeth Loyd*

## Dedication . . .



HIS MEMORIAL CARILLON was erected by members of the First Presbyterian Church and citizens of Jackson and Madison County in honor of those who served their country in the two world conflicts, 1914-1918 and 1940-1945. The Carillon is hereby dedicated to the soldiers who offered and gave their lives for their Country.

The very bells themselves were born of war. Manufactured in France following World War II, the bells are a living and pulsating memorial to the soldiers of both World Wars.

They shall forever be a symbol of love and peace, to be cherished and adored by the valiant men and women in whose name they ring and by the endless human chain which shall follow them, down through the centuries.

*"Greater love hath no man than this, that  
a man lay down his life for his friends."*

—John 15-13

## *The Jackson Carillon Project...*

Born on Dec. 29, 1941, of a dream of beauty in the heart of the late Clarence E. Pigford, Jackson lawyer, publisher and civic and church leader, the Memorial Carillon at its dedication is the embodiment of the plans, work, money and determination of many people.

Now its unforgettable music will serve to express the community's gratitude for the service rendered by its sons and daughters in both world wars.

The late William Addison Caldwell and Addison Johnston shared with Mr. Pigford the burden of bringing this dream into reality. Their efforts inspired countless others to give of their money and time to assure the carillon for this area.

The First Presbyterian Church of Jackson on Dec. 15, 1946, assumed prime responsibility for the proper housing and maintenance of the Memorial Carillon.



The tower in which the 47-bell carillon is housed stands on ground which is a part of the Pigford estate, Chevy Chase, and which Mrs. Pigford gave in memory of her husband to the First Presbyterian Church for its new home.

Serving with Mrs. Pigford, chairman of the present carillon committee, are Hewitt Tomlin, Sr., Donald Weaver, Andrew T. Taylor, Sr., Merrill S. Wise, Sr., B. E. Walker, Dr. George Harvey, Jr., and Louis A. Zimm.

Harold E. Wagoner designed and Hart, Freeland & Roberts are architect-engineers for the tower which has been built by Hubert M. Owen Construction Co. under the direction of the church's steering committee composed of Ridley Alexander, chairman, Baxter Smith and Albert Noe III, vice chairmen, Robert Beare, Jr., Ben Hazelwood, Frank Proctor, Dr. Joseph Shumaker, Fred T. Smith, Louis A. Zimm, secretary, the minister, Dr. Norman B. Gibbs, ex officio, and Dr. Samuel Stanworth, pastor emeritus.

Of greatest assistance to the Carillon Committee has been Arthur Lynds Bigelow, Laureate of the Carillon School, Mechlin, Belgium, and Bellmaster, Princeton University. Mr. Bigelow supervised the forging of the bells in France and installed them in our Carillon Tower. He will play the Carillon in concert on September 11th and at the Dedicatory Service on September 12, 1954.



*Home of the Jackson Memorial Carillon and the site of the new First Presbyterian Church*

## *Bells and Carillons. . .*

In understanding a carillon, first consider the definition of the instrument drawn up at the Carillon Congress in Princeton in 1946:

"A carillon is an instrument of at least two octaves of cup shaped bells arranged chromatically and so tuned as to produce, when many such bells are sounded together chordally, concordant harmony; it is normally played from a keyboard for variation of touch."

Bells of one form or another have been known to most peoples from the earliest times. The ancient civilizations used any kind of an object—metal, wood, stone, even bone—to strike upon for their amusement or as a signal. The first bells were very small and cup-like in form and could be heard for only a short distance.

With the coming of Christianity to Western Europe, the monks used these small bells in their services and also as signals to folk living just outside their monastery walls; to call them inside in case of fire or flood, and in times of invasion. When the little communities became larger, larger and farther-reaching bells were needed. Little by little the bells grew in size and took on the form we know so well today.

Our type of bell is now used throughout the Christian world. It summons the faithful to service; it tolls for the dead; it rings joyously in time of victory. No longer the size of a tea-cup, it often attains the height of six or seven feet, and sometimes more, and may be heard for miles under favorable conditions.

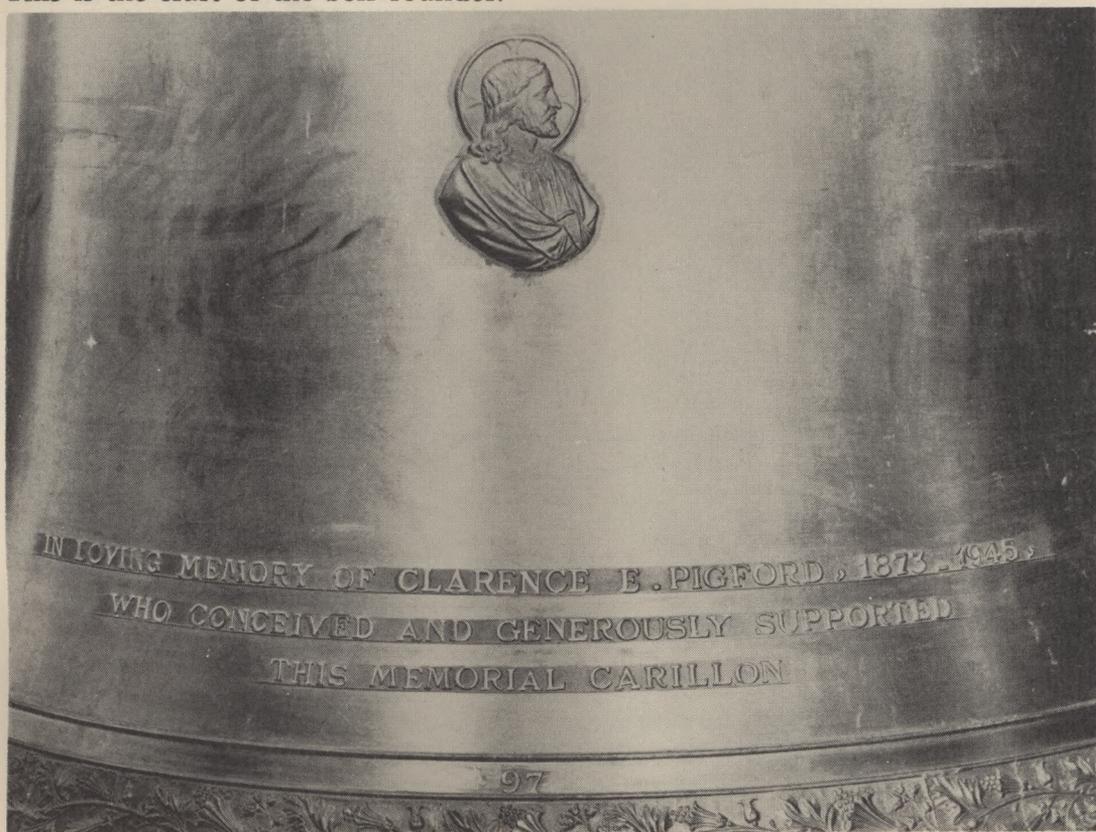
Long before Columbus sailed for the New World, towers in England, France and especially the Low Countries of Flanders and Holland, possessed many large bells. These were used either to ring or as clock-bells for the striking of the hours. Where there were several bells in tuneful series in a belfry, striking hammers were connected to great drums studded with pegs—much the same as a Swiss music box—and complete tunes were played on the quarter hours and preceding the strike of the hour. However, it was left to the people of the Low Countries to develop this primitive chime into the carillon as we know it today, and for fully four centuries this strangely beautiful music has been heard from their towers. England rings 8 or 10 bells, one after the other, "a merry peal"; Italy, Spain, France and Germany customarily ring two or three large bells all together. But until recently, only in Flanders and Holland could complete tunes and full harmony be heard from the belfry. Today, however, many carillons are to be found in France and in the United States.

The oldest carillon bell in use was cast in Mechlin, Flanders, in 1446, the second largest bell of a forty-seven bell instrument in Louvain. It embodies the study of proportion necessary for musical bells and bears the marks of prim-

itive tools used in tuning. From this time on, the science of the carillon developed. The Waghevens, also of Mechlin, founded in the latter fifteenth century. The Van Den Gheyns, originally from Mechlin but later of Louvain, first founded in the thirteenth or fourteenth century; their descendant is still casting bells in Louvain today. The Hemonyys from Lorraine, in France, settled in Holland around 1650 and gave us some of the finest carillons of that era. The Dumerys of Bruges, in Flanders, were the founders of several extremely harmonious carillons.

What makes a carillon bell different from other bells? It is the series of overtones that a bell possesses. Unlike the string and the pipe, endowed by nature with a harmonious series of overtones, the bell is a man made instrument and the series of overtones it possesses is due entirely to his design and tuning. If a bell sounds sour, tinny, or out of tune, it means that the series of overtones within it are not in harmonious relationship. The tones of a carillon bell, to the contrary, are so harmonious that they form—in each bell—a complete and beautiful chord, the main tones being octaves, which determine the note of the bell.

Man must first proportion his musical bells such that they will embrace the only series of overtones a bell may have to be pure; then he must tune these overtones into the bell by a long and careful shaving off of metal on the inside. This is the craft of the bell founder.



<i>Carillon Bell</i>	<i>Name of Tone</i>	<i>String and Pipe</i>	<i>Name of Tone</i>
	<i>2<sup>nd</sup> Octave</i>		<i>3<sup>rd</sup> Octave</i>
	<i>2<sup>nd</sup> Fifth</i>		<i>Seventh</i>
	<i>2<sup>nd</sup> Third (Maj)</i>		<i>Fifth</i>
	<i>Octave</i>		<i>Third</i>
	<i>Fifth</i>		<i>2<sup>nd</sup> Octave</i>
	<i>Minor Third</i> <i>STRIKE &amp; Prime</i>		<i>Fifth</i>
<i>Hum Tone</i> <i>(Fundamental)</i>		<i>Octave</i>	<i>Fundamental</i>

The heyday of the carillon can be dated from 1655 to 1785. Then came the French Revolution with such ensuing economic distress that no more instruments were cast until the middle of the nineteenth century. By that time the art of tuning was lost through non-practice. Then from a country hitherto unknown for its carillons—France—came the first timid attempts to tune a series of bells. Toward the end of the century, an English firm conducted experiments with bell enthusiasts to determine why the Low Countries' bells were so musical. The studies of the proportions of bells in Flanders and Holland, combined with their own experiments, resulted in the many fine instruments cast in England from 1823 until this day.

Also, at the turn of the century, the foundries of Paccard, in France, were studying the science of bells from their side of the Channel. It is they who were the first, in this latter epoch, to cast and tune a series of bells that could truly be called a carillon. Several of the instruments from that period are to be heard on both sides of the Atlantic.

Subsequently, in Belgium and Holland, the lands where the carillon was born and developed, there was a revival of the art.

The old founders and those of a recent day proportioned their carillons such that the bells formed a fairly musical series from bass to treble. But they did not take into consideration the fact that medium and small bells, if they are to be an integral part of the instrument and possess a strength of tone at all comparable to the basses, must be specially studied and proportioned. So many times we hear it exclaimed, "Play more on the larger bells; we like the larger bells best." This is not said for a piano or an organ. Why should it necessarily be true of a carillon?

Paccard, however, was concerned with the tonal balance of the carillon. In 1835 the young founders in Annecy began to experiment with the musical properties of medium and small bells, experiments which resulted in the reinforcing of the more important overtones in the bells of these registers. To the ancient art of proportion and tuning, Paccard has added new knowledge, resulting in carillons totally different musically from those of any of his predecessors. Now we have carillons upon which music may be expressed with

perfect balance throughout the compass of the instrument, where the treble bells are equally as effective as the bass. Until his development the upper bells were what the French call "les pique-feu," or "prick fires," small pinpoints of flame, like sparks, with no afterglow. Resonance and body of tone, matched, balanced, from the deepest bourdon to the highest treble, is Paccard's contribution to an ancient and noble craft.

In the lands of the carillon across the sea, the bells play for the people in the streets on market day to enliven their buying and selling; they play on Sunday morning, while the townfolk stroll about and greet their friends after church or enjoy a quiet glass in a cafe beneath the tower; they play in concert late on long summer evenings, when all traffic is stopped in the streets below; and they joyously ring out their Old World melodies just before midnight mass on Christmas Eve.

In the New World, however, the carillon is for the most part a luxury instrument. Located in churches in the suburbs rather than on the market place in the center of town, its music is for the few who live close by and for those who journey long distances just especially to hear it. Yet, it may be because it is a luxury and, more times than not, situated to best advantage for enjoying its enchanting music, that the ultimate in the carillon will be appreciated in our country rather than abroad.



# *The Jackson Carillon...*

The carillon was founded by Les Fils de G. Paccard in Annecy-le-Vieux, France, in 1949.

It is an instrument of forty-seven bells, beautifully cast and excellently tuned. The bells cover a range of four full chromatic octaves, from a Bourdon, or bass bell, of 5,060 pounds to a treble of twenty-five pounds.

Most carillons in the United States—and also abroad—have a range of from two to three octaves. It may thus be seen that Jackson's carillon ranks among the very large, possessing a range which will allow the interpretation of the finest in carillon music.

The bells are of the purest bronze, perfectly cast, without blemish or fault. They are richly ornamented with bas-reliefs symbolic to the Christian faith: the cross, the sheaf of wheat, angels' heads. Garlands and festoons are tastefully draped over the shoulders of the bells, while the waists are ornamented with designs in bands around the entire bell. The raised inscriptions on the largest bells are in readily legible, clear-cut letters. All the bells carry the medalion of the Paccard foundry. At their installation, the bells have that light, coppery glow—almost silver, which denotes bell metal having a high content of tin. As they age, they will take on a patina of deep copper-green, so familiar to visitors in Old World belfries.

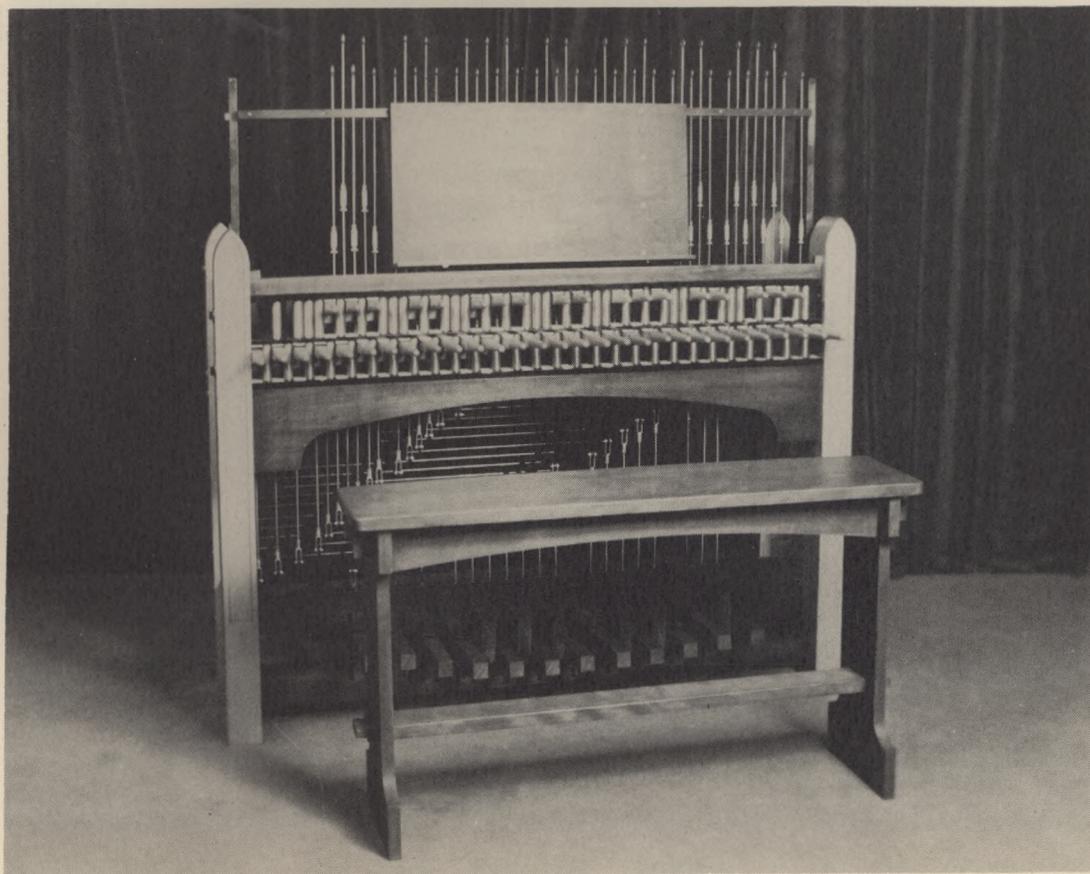
The Bourdon bell of the carillon is Middle C. The Hum Tone of the bell, resonating firmly a perfect octave below the Strike Tone, unites with the latter to give the bell a rich sonority, a deep, full, and round tone, a true foundation upon which the entire instrument is based. The Bourdon sounds the note "C" and is connected to "C" on the keyboard, one of very few carillons which sound in the key in which they are played! Ordinarily the largest bell of the carillon is connected to "C," no matter what its note. The National Carillon at Valley Forge, one half the bells of which are by Paccard, is another example of a carillon in "C."

Jackson's carillon was designed as a homogeneous unit. Unlike other carillons in this country to date, it is not just a series of more or less successfully tuned bells, adequate in strength in the bass but possessing little tone in the treble. The Paccard carillon achieves tonal balance throughout its compass. The higher bells are just as strong, tonally, as those hundreds of times their weight, and are as capable of playing their part in the production of musical sound as are the lower ones. The higher tones of a piano or an organ are of a volume equal to the lower; if a carillon is an instrument in its own right, then it must behave as such.

Jackson's is the first carillon in the New World whose bells are entirely by Paccard, although bells from this foundry have been used to complete several important instruments in the United States.

The bells are housed in the carillon tower of the First Presbyterian Church, the belfry of which may be termed a "split belfry." The five Bourdons are hung in the lower section of the belfry. Above these is installed the "clavier cabin" which houses the carillon keyboard. Above this cabin hang the remaining forty-two bells. The reason the belfry is split is twofold: (a) big bells sounding out above the player would hinder his hearing the others; (b) if the basses hung above the cabin, the upper bells would be so far removed from the performer that the finest touch would be impossible. With the divided belfry the bellmaster is among his bells, equally distant from all of them, thus having equal control over bass and treble alike.

The bells are played by striking the keys of the clavier with the elongated fist, and by pushing pedals down with the feet. There are two rows of keys. The lower are the "white keys," or diatonics, twenty-nine in number; the upper are the "black keys," or chromatics, the sharps and flats, eighteen in num-



*Clavier -- or Keyboard*

ber. Near the floor are eighteen pedals. These are connected to the first eighteen keys above, governing the lower register of the carillon. There are two reasons for the pedals—it would be impossible for the bellmaster to play the bass bells when his hands are occupied in the medium and upper registers above, and the clappers of the basses are so heavy that he would have difficulty in playing them by hand.

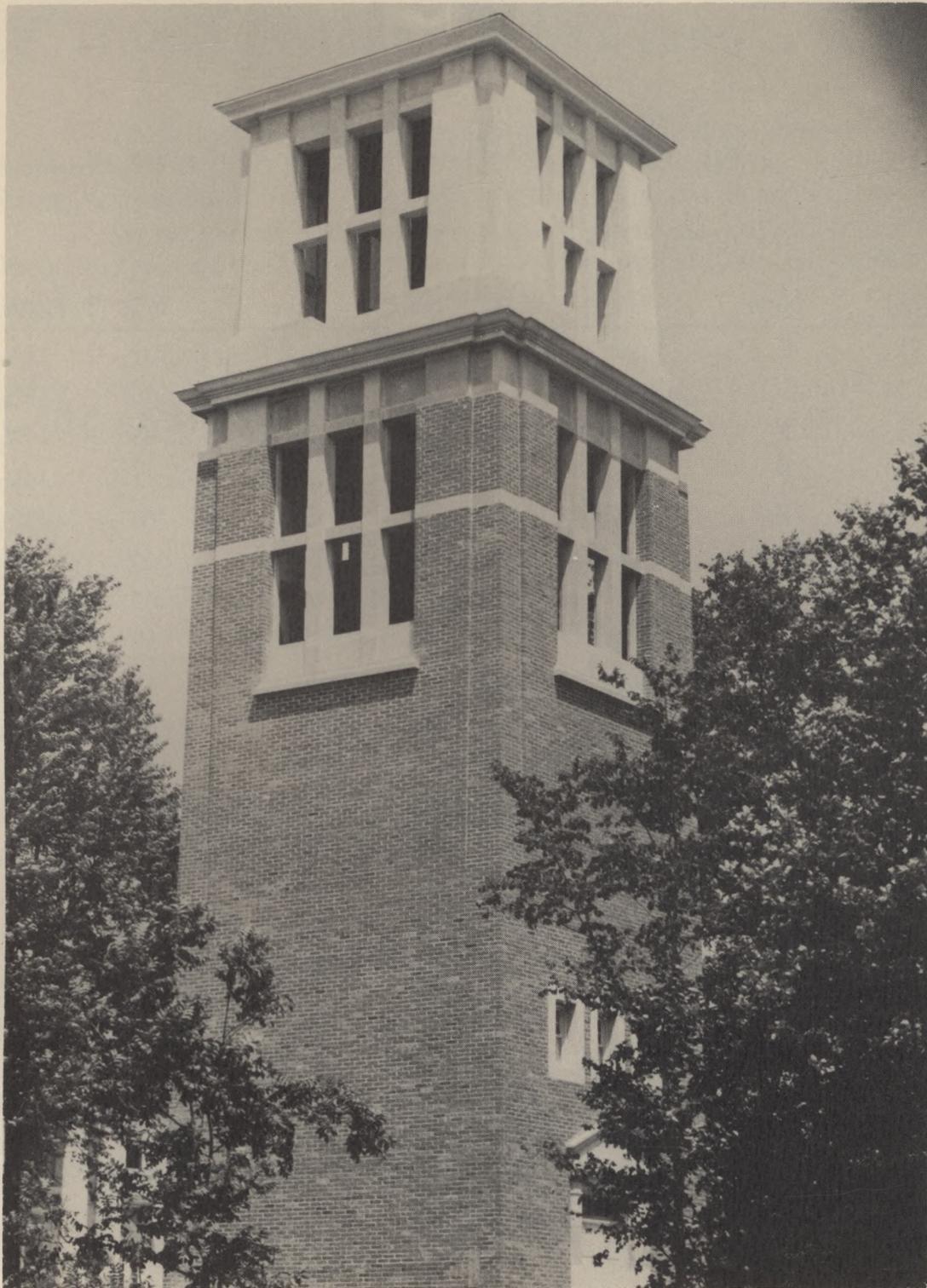
The clavier is made of hard wood and steel. The end pieces are of oak, finished in the natural color. The remainder is of maple. The keys are finished with a coat of light varnish. The pedals are finished somewhat darker. The other wood is finished a dark brown-mahogany. The key rack is of stainless steel as are also all the connecting rods from pedals to keys, and the adjustable connectors above the keys. Invisible, yet very important, are the pins upon which the pedals are mounted. These are also of stainless steel.

Unlike other carillon keyboards, finished entirely in a neutral color, Jackson's is striking by the contrast of light wood against dark, and the radiance of stainless steel.

The keyboard was designed and made by the consultant, in Princeton.

When a key or pedal is depressed, the vertical wire pulls a bell-crank in the belfry, which, in turn, pulls a horizontal wire connected to the clapper of the bell. Immediately after a bell is struck, the clapper returns to its initial position, ready for another stroke when required. While the clappers of the bass bells are heavy enough to return by gravity, the clappers of the medium and upper bells must be aided in their return by small springs behind the clappers. The balance of touch from keys to clapper throughout the carillon, it may be imagined, is extremely important.

To hear Jackson's carillon is one thing; to see it in its belfry is quite another. The truest appreciation of the instrument is only possible if one knows how this mighty musical giant, the grand piano of the skies, is played. It is hoped that when possible the belfry may be visited. For in the presence of the great bourdons, the powerful medium bells, and the small but lusty trebles, the intelligently inquisitive cannot help but feel that here is an instrument of truly uncommon musical value.



THE CARILLON TOWER

*A sixty-two and one half foot spire will be added.*

# *The Tones and Weights of the Jackson Bells...*

No.	Note	Wgt.	Diam.	No.	Note	Wgt.	Diam.
1	C	5,060	61	26	D#	121	15 <sup>3</sup> / <sub>4</sub>
2	D	3,742	54 <sup>1</sup> / <sub>2</sub>	27	E	100	15 <sup>1</sup> / <sub>4</sub>
3	E	2,644	48 <sup>1</sup> / <sub>2</sub>	28	F	88	14 <sup>3</sup> / <sub>4</sub>
4	F	2,120	45 <sup>3</sup> / <sub>4</sub>	29	F#	75	14 <sup>1</sup> / <sub>2</sub>
5	F#	1,827	43 <sup>3</sup> / <sub>4</sub>	30	G	68	13 <sup>3</sup> / <sub>4</sub>
6	G	1,550	41	31	G#	65	13 <sup>1</sup> / <sub>4</sub>
7	G#	1,325	38 <sup>3</sup> / <sub>4</sub>	32	A	62	12 <sup>3</sup> / <sub>4</sub>
8	A	1,110	37	33	A#	59	12 <sup>1</sup> / <sub>4</sub>
9	A#	925	34 <sup>1</sup> / <sub>2</sub>	34	B	57	11 <sup>3</sup> / <sub>4</sub>
10	B	775	32 <sup>1</sup> / <sub>4</sub>	35	C	55	11 <sup>1</sup> / <sub>4</sub>
11	C	661	30 <sup>3</sup> / <sub>4</sub>	36	C#	51	11
12	C#	550	29 <sup>1</sup> / <sub>4</sub>	37	D	47	10 <sup>3</sup> / <sub>4</sub>
13	D	490	28	38	D#	44	10 <sup>1</sup> / <sub>2</sub>
14	D#	400	26 <sup>1</sup> / <sub>4</sub>	39	E	42	10 <sup>1</sup> / <sub>4</sub>
15	E	354	24 <sup>3</sup> / <sub>4</sub>	40	F	40	9 <sup>3</sup> / <sub>4</sub>
16	F	288	24	41	F#	38	9 <sup>1</sup> / <sub>2</sub>
17	F#	243	23 <sup>1</sup> / <sub>2</sub>	42	G	36	9 <sup>1</sup> / <sub>4</sub>
18	G	216	21 <sup>1</sup> / <sub>2</sub>	43	G#	33	9
19	G#	205	20 <sup>3</sup> / <sub>4</sub>	44	A	31	8 <sup>3</sup> / <sub>4</sub>
20	A	192	20 <sup>1</sup> / <sub>2</sub>	45	A#	29	8 <sup>1</sup> / <sub>2</sub>
21	A#	181	19 <sup>1</sup> / <sub>4</sub>	46	B	27	8 <sup>1</sup> / <sub>4</sub>
22	B	176	18 <sup>3</sup> / <sub>4</sub>	47	C	25	8 <sup>1</sup> / <sub>4</sub>
23	C	166	18				
24	C#	155	17				
25	D	139	16 <sup>1</sup> / <sub>4</sub>				

Number, Note, Weight in pounds, and Diameter in inches of the Bells.

## *Listening to the Bells...*

The bells cannot be heard to advantage at a distance of less than two hundred yards from the tower. It is only at this distance, or more (depending on the surroundings), that all their beauty and blending can be appreciated.

Do not remain near the tower while the bells are played, but stroll about the grounds to find out for yourself those places where the carillon sounds its best.

## *The Inscriptions on the Bells...*

### FIRST BELL:

"This Memorial Carillon was erected by Members of The First Presbyterian Church and Citizens of Jackson and Madison County in Honor of Those who served their country in the Two World Conflicts, 1914-1918 and 1940-1945"

### SECOND BELL:

#### Bell of Honor

"In Loving Memory of Clarence E. Pigford, 1873-1945, who conceived and generously supported this Memorial Carillon"

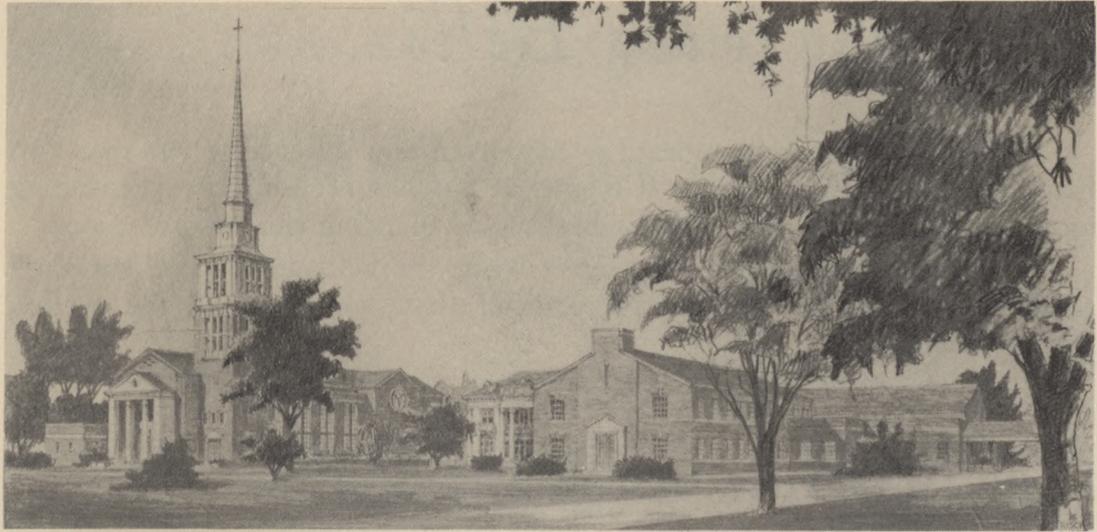
### THIRD BELL:

"In appreciation of the generous gifts from the residents of Jackson and Madison County."

### FOURTH BELL:

#### Lafayette Bell

"To Marie Jean Paul Roch Yves Gilbert Motier, Marquise de LaFayette, whose friendship for a young America lives forever in our hearts."



*The Architect Drawing of The Jackson Memorial Carillon and the proposed new home  
of the First Presbyterian Church*



*Ring, o bells!  
Never shall the land forget  
How flowed the lifeblood of her brave,  
Flowed, warm with hope and valor,  
Upon the soil they died to save.*

*Ring and swing,  
Bells of time! Bid the sad rejoice,  
Give to everyone a voice,  
Tell the world, as you ring,  
That God alone is Lord and King!*

*—Anonymous*



*Jackson's Bourdon, in the foundry at Annecy-le-Vieux, France*

*Price 50c*