



BELLS AND BELFRIES.

BY THE REV. H. R. HAWEIS, M.A.



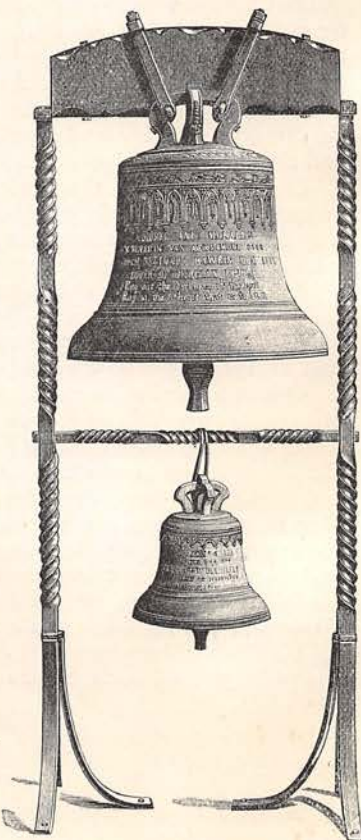
IN my study hangs, beneath a Belgian canopy of the sixteenth century supported by twisted columns profusely carved in the taste of that period, my Belgian bell. Full and shapely, and glowing with silver sheen it weighs six-hundredweight, and yields multitudinous tones, recalling at times, when touched tenderly, the whisper of the trees in the night-wind, or when struck loudly the melodious thunder of the ocean. In that bell indeed seem to sleep all wails of pain and all shouts of joy. A vast cauldron of potential sound

and each sound a fitting voice for some soul-secret else inexpressible, is that bell. I cannot speak or move but what it will answer me, while so sensitive and complex is its nervous system that not a vibration in the room escapes it. I have but to attend, and any noises, like the shutting of a door, the clapping of hands, a sneeze, a laugh, the inflexions of the voice, the tread of the foot, all are analyzed in the hollow vibrations of the bell, and each is found to be composed of infinite varieties and combination-hums, tones and over-tones. If I strike a chord on the piano or take my violin, the mysterious bell-life wakes up with spontaneous clamour, and re-echoes exultingly the clear notes in metallic timbre. A very microcosm of sound is this bell,

“Full of the ringing voices,
Full of the tidal pulses,
Songs of the golden sea.”

And then people wonder what there is to be said about bells! When they have quoted Schiller and recited Edgar Allan Poe and made a few indispensable allusions to funeral and marriage bells, they seem glad to have done with this unexhausted world of bell sound, bell fabric, bell history and bell association. But in reality the civilized life of the world, past and present, has been chronicled by, and may be still summed up by the Paean of the bells, or the throbbing of the bells, or the sobbing of the bells, or the rolling, or the tolling of the bells! bells! bells! or the moaning and the groaning of the bells!

We need not vex ourselves as to whether the bells of Exodus xxviii. 33—35, worn by the High Priest were bells at all; nor need we bother Sir H. Layard



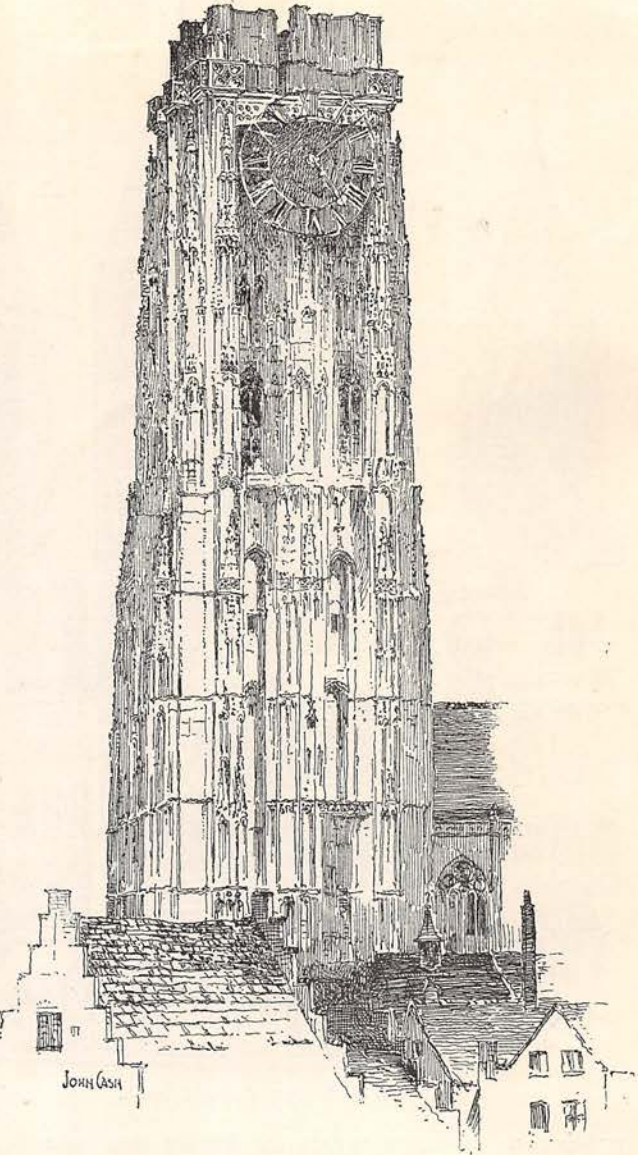
BELGIAN BELLS. CAST BY SEVERIN VAN AERSCHODT.

about his Assyrian bells ; nor is it vital to our purpose to know whether Oriental bells were invented in India and imported into China or *vice versa*. It is enough to note that small bells preceded large ones, although large bells are generally held to have been used in India and China long before they reached Europe, but if, as Cardinal Manning has recently reminded us, the history of European civilization is the history of the Church, it is equally true that the history of the Church—I might almost add the State—is inseparably bound up with the history of bells.

Time would have been as dull in the old monasteries without bells, as it would be at Bruges, Mechlin or Louvain without the Carillons.

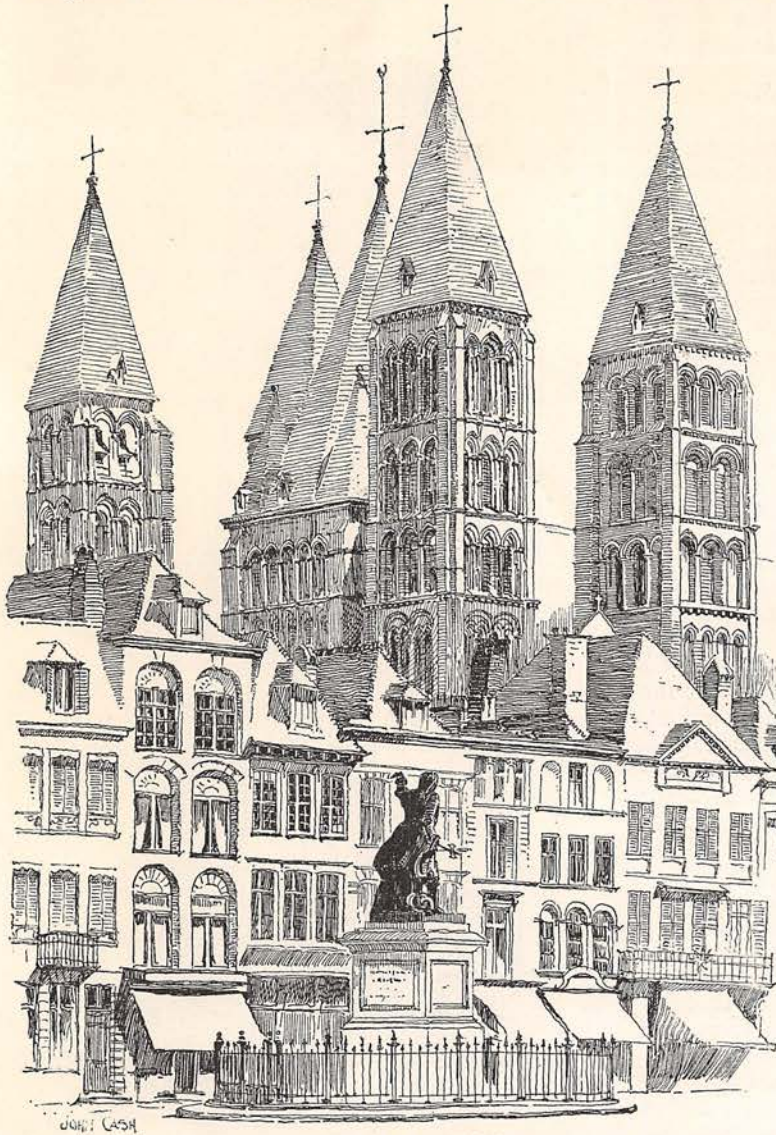
At the boom of the tower bell or *Signum*, in the early morn, the drowsy monk tumbled out of bed. The *Squilla* reminded him of breakfast, the *Campanella* recalled him from the cloisters. The Abbot's *Codon*, or hand-bell, must be instantly obeyed, whilst the large *Petasius* would be clanged if he failed to hear the *Codon*. The *Tiniolum* meant bed-time, the *Noctula* or *Dupla* called from sleep to prayer ; the *Corrigiuncula* or scourging bell, summoned the ascetic to his flagellatory devotions or his prescribed penance—the *Nola* or choir bell rang at the consecration of the elements—the *Sanctus* bell at the "Holy ! Holy !" I found a curious relic, a sanctus bell, still hanging on the old rood screen in Dr. Jessopp's church at Scarning, East Dereham, the other day ; it dates from before the Reformation but looks as new as though put up last year. Dr. Jessopp, asked me if I could account for this in a bell certainly more than 400 years old. The explanation occurred to me on examining the bell, which is not even worn by its clapper. "This bell," I said, "must have been put up new in Mary's reign during the Catholic reaction, then when the tide of Reformation returned again with Elizabeth the bell was of course disused along with all other distinctive parts of the Roman ritual, still the sanctus bell was left there and has been there ever since." Dr. Jessopp approved of the explanation.

Well we have given up announcing the miracle of transubstantiation or putting to flight storms and demons or managing exorcism by bell, book, and candle, but bells as sweet as the Angelus still ring over our English fields and woodlands on Sunday. The passing-bell in a country churchyard is full of pathos and memory, breaking



THE BELFRY, MECHLIN CATHEDRAL.

the stillness and arresting for a moment the busy haymakers as they pause to listen, and remember some old comrade who will no more be seen in their ranks. The solemn bell at our midnight services, now so customary on the last evening in each year throughout the land, is also charged with hallowed thoughts, indeed I know few



TOURNAI CATHEDRAL.

things more thrilling than that watch-night bell, which seems as the crowd kneels within to beat away on its waves of sound the hopes and fears and tumultuous passions of the dead year; when its echoes have ceased those kneeling crowds feel that one more chapter in the book of life has been written, that ringing voice has sealed the troubled Past and heralded in with its iron, inexorable, though trembling lips the unknown Future.

But many of the altogether secular uses of bells which I have been at pains to point out in my article on bells in the *Encyclopædia Britannica* are equally suggestive in their way—some, like the dustman's bell, have vanished within our own time; others like the town-crier's bell ("Oh, yes! Oh, yes!—Oyez! Oyez! hear ye—") are banished to the

provinces. In some towns the muffin man seems extinct, but the tricycle bell is a new invention, the omnibus bell is recent, and time would fail me to tell of the railway bells, the dock bells, the half-hour bells at sea, the sheep bell, and the stage bell. House bells worked with wires are scarcely one hundred years old, but ropes are now almost superseded and the old bell-pulls, still found in country houses, have yielded to spring handles, which are in their turn disappearing in favour of electric button bells; indeed it is plain that the whole of our secular life is somehow set to bells, even as the religious life of our ancestors was. What with the dinner-bell, the yard-bell, school, factory, and jail-bells, small cupola spring-bell, safety electric-bells, not to forget baby's coral and bells, bell-rattles, last reminiscence of the extinct fool's cap and bells, and fool's wand with its crown of jingling baubles, we seem never to

hear the last of bells. Indeed the most impressive uses, the most seductive qualities, the most musical aspects of bells remain to be still noticed. Bells are the land-marks of history as well as the daily ministers to our religious and secular life.

The bell's tongue is impartial and passionless as fate. It tolls for the king's death, "*Le roi est mort!*" it rings in his successor, "*Vive le roi!*" The cynical bells rang out as Henry VIII. led wife after wife to the altar, the loyal bells rang for the birth of Charles I., and the disloyal ones tolled again for his execution. The bells of Chester rang a peal for Trafalgar, alternated with a deep toll for the death of Nelson, and some of us can remember the tolling of St. Paul's bell as the Iron Duke's funeral passed up Ludgate Hill.

The long green bell which announced to the Pisans that the wretched Ugolino, starved to death in the bottom dungeon, had at length ceased to breathe, still hangs in the famous leaning-tower of Pisa. At the ringing of the Sicilian Vespers in the Easter of 1282, eight thousand French were massacred in cold blood by John of Procida. The midnight bells of Paris gave the sign for the massacre of St. Bartholomew's Day, 24th August, 1471, when one hundred thousand persons are said to have perished.

The bells which rang in the return of Charles II. rang a few years later for the coronation of his brother, and a few years after that for the removal of a rotten dynasty and for the entrance of its victorious rival in the person of the Prince of Orange. The curfew bell, which reminds us of William the Conqueror's primitive legislation, still survives in the low fen districts about Ely and the Cambridge flats, and is even now most useful to the traveller as he trudges through the marshy mists, which, while obscuring the lights of the distant city, act as favourable conductors, according to Professor Tyndall, to the sound of bells.

The great towers of Christendom have all their eloquent bell tongues, and as we pass in imagination from one to the other we not only catch the mingled refrains of life and death as it floats upwards from the fleeting generations of men, but we may literally from those lofty summits contemplate all the kingdoms of this world and the glory of them.

From the top of St. Paul's the boom of great Tom rolls over the crowded city on either side of the glimmering river, away to the distant undulations of the Hampstead Hills. From the summit of the Capitol at Rome may still be seen fragments of the Rome of the Republic and the Cæsars. Beyond the purple Campagna loom the Sabine and the Latium Hills, and taking a nearer survey the eye follows the Tiber until the ear is arrested by the distant bell in St. Peter's clock tower, answered by the brazen tongue of the Capitol. Eternal *Aves* for ever wafted from the sepulchres of the Cæsars to the mausoleum of the Popes!

But nowhere in the world will you find the history, the music, the poetry of bells so concentrated and so irresistibly attractive as in Belgium. Even the casual tourist is fascinated as he crosses the great square at Mechlin by the tuneful floods of ærial sound which float at intervals from the superb tower of St. Rhombaud, whilst all through the night it never occurs to him to quarrel with the bell-broken silence which seems almost more silent but less lonely as the sweet melodies mingle with his dreams, so

"The night shall be filled with music;
And the cares that infest the day
Shall fold their tents like the Arabs,
And as silently steal away."

Belgium is indeed the classic land of bells, and it is a picturesque fact that most of the great Belgian towers (except Bruges, which lies in a hollow), Antwerp, Louvain, Malines, Ghent, and St. Gudules at Brussels, are within sight of each other. From the summit of Notre Dame, at Antwerp, which has two carillons, one in each tower, numbering over three-score bells, one hundred and twenty six steeples can be counted in clear weather, far and near. All those towers have bells, and most of them carillons, that is, suites of bells from several tons weight to a few pounds, tuned in semi-tones, and played both by the clock-barrel and from a key-board. Antwerp has most bells, but a good many are out of tune. Mechlin has the best bells and the best in tune, and Bruges boasts of the heaviest metal. The belfry at Tournay, which groups itself imposingly with the unique five towers of the cathedral, has some good bells. The Ghent carillon has been ruined by the substitution of an iron belfry in place of the grand

old beams and rafters, which in the others act as admirable sound-boards. Since this ill-advised reconstruction the Ghent bells sound poor and tinkly.

In the Louvain tower there still hangs a bell pierced by a cannon fired by Philip of Spain, and this accidental war-mark seems to strike the historic key-note of the

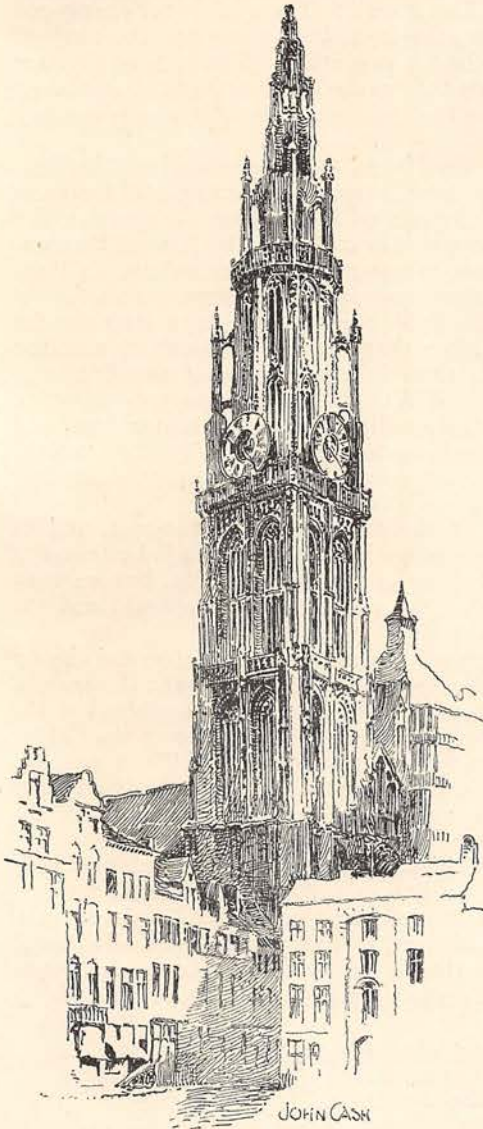
Belgian bells, and reveals the secret of their importance and their romantic interest. They are in fact intimately associated with war and with civic life as well as with popular religion. In the prolonged struggle of the Low Countries with Spain the bells, which sent their voices far out over the grassy flats and long, regular roads, thronged with transports and armed men, assumed an importance and a power unknown elsewhere. The bells warned the city of the enemies' approach and signalled to the watchmen to close the gates, and to the captain in command to marshal the troops in the market-place, or to concentrate on this or that rampart or square or breach. These brazen alarms were thus frequently the saviours and protectors of the people. In the sixteenth century the Belgian citizens began to multiply the bells, to increase their weight; they loved them for their associations, they treasured them for their uses. He who held the bells practically held the city. The conqueror knew this; it was his habitual aim to capture the belfry, and either melt down the bells for cannon or use them as signals against the town. Under these circumstances it is truly surprising that such towers as St. Rhombaud and Antwerp should have survived, but many belfries and some bells still bear the old scars, and it is here that we have the unlooked-for point of contact between Belgian bells and the art of music.

The wars of the Low Countries occurred chiefly in the sixteenth and seventeenth and eighteenth centuries, that is to say, they were contemporary with the rise of the great singing schools in Italy. The Cremona violins and the development of the musical art in Germany. The multiplication of bells suggested naturally that they should be tuned in the newly-discovered octave, the perfect cadence of which the rising art was just then so proud.

The strong and varied emotions which the bells excited in the breasts of the citizens soon converted the bells into playthings in time of peace, and thus the clang which had up to that time been merely a war signal or a call to prayer, got naturally turned into music.

We thus arrive at the three leading characteristics, or *sine qua non*, of the Belgian carillons, namely that each bell shall be a note, secondly that it shall therefore have its fundamental and leading harmonics, third, fifth and octave in tune together, thirdly that the bells shall be numerous enough to accomplish something worthy of the name of music instead of the ding dong of our City belfries or the wearisome and purgatorial sequences of your famous peal of eight or twelve bells which is usually the beginning and the end of the English founders, and the English ringers' ambition.

I do not wish to be hard on English bell ringing. It is a healthy and ingenious



THE BELFRY, NOTRE DAME, ANTWERP.

exercise, and distance certainly lends enchantment to the sound. Its popularity seems reviving, and even ladies, who now shoot and play cricket and the violin are, I am told, taking to bell ringing, but *music* it is *not*, nor does your true bell-ringer care twopence for the sound or the tune; all he thinks of is whether the bell swings easily and whether he can dodge it, snap it, triple bob major it and so on in time.

About 1657 the ingenious Fabian Steadman invented the present purgatorial system of change ringing *ad infinitum*. The affair is simple; it requires a little arithmetic and a strong arm—no fine musical ear and certainly no love of music. Take three bells and begin 1 2 3, 1 3 2, 2 1 3, 2 3 1, 3 1 2, 3 2 1. This is much simpler than writing a tune and you can go on for ever. The full changes on twenty-four bells would occupy, so the mathematicians assure me, at the rate of two strokes a second, 171,000 billions of years.

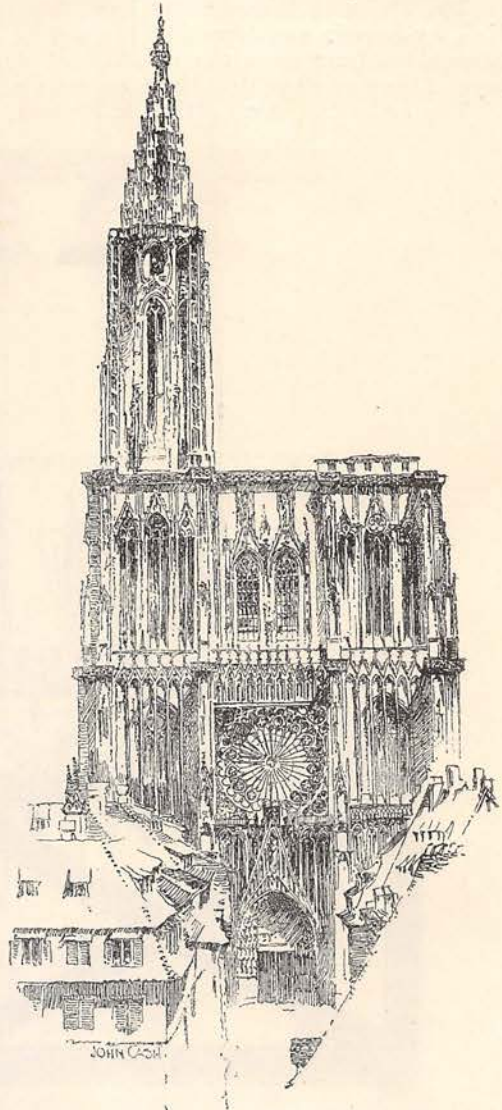
That would be Steadman's heaven. But the bell-ringer's Paradise is the musician's Inferno. I may here add that the deterioration of English bells is also largely due to bell ringing. The best form of bell not being the easiest to ring.

I have no doubt that the best English bells were inspired by the Belgian bell founders in the sixteenth and seventeenth centuries. This statement always makes our English bell founders angry, but one has only to set down a few dates side by side and the thing is next to proved.

Peter van den Gheyn, of Louvain, 1560, is contemporary with the Braziers and Brends of Norwich. Hemony, of Amsterdam (the most prolific of all the founders), 1658, with Myles Gray, 1625-59, of Colchester. Between 1679 and 1755 flourished Richard Chandler, of Buckingham, Ruddle of Gloucester (who cast the Fulham bells), and the same period is marked by P. van den Gheyn, by Dumery, de Haze, and Declerk, &c., in Belgium. Now at this day there is a P. van den Gheyn bell hanging in the tower of St. Peter's, Cambridge, and a Dutchman named Waghaven had a foundry as far west as Glamorganshire. I drew out this argument to demonstration in my lecture on bells, 1879, before the Royal Institution.

Now the true bell model comes no doubt from Belgium, where it has never been departed from. The bells of Severin van Aerschodt in the nineteenth century are as the bells of Hemony in the seventeenth century, but the English bells of the last century departed from the Belgian model—(to which, since my writings on Belgian bells, some of our founders have thought fit to return). The truth is, that instead of giving the bell its right proportional length, our English founders fell to shortening it. Why? Because the squat bell was easier to ring and pleased the ringers better than the longer bell. Of course the founder worked to please those whose condemnation meant his loss!

I am glad to notice a great revival of interest in bells since the appearance of *Music and Morals*, which contains two chapters on "Bells" and "Carillons." Deans and Chapters have applied to me about their bells from all parts of England. Many of them



THE BELFRY, STRASBURG CATHEDRAL.

have for the first time been moved to go up into their towers ; they have swept and repaired their belfries, retuning and, in some cases, recasting their bells, whilst a few efforts have even been made to introduce into England some Belgian bells and to attempt a little carillon music.

The Duke of Westminster has a fine carillon cast, at my suggestion, for Eaton Hall, by Severin van Aerschodt (unhappily since dead), but great pressure having been brought to bear upon the illustrious founder to supply the bells to time it proved beyond his powers to tune them accurately.

The suite cast for Cattistock Rectory, also under my direction, by Severin van

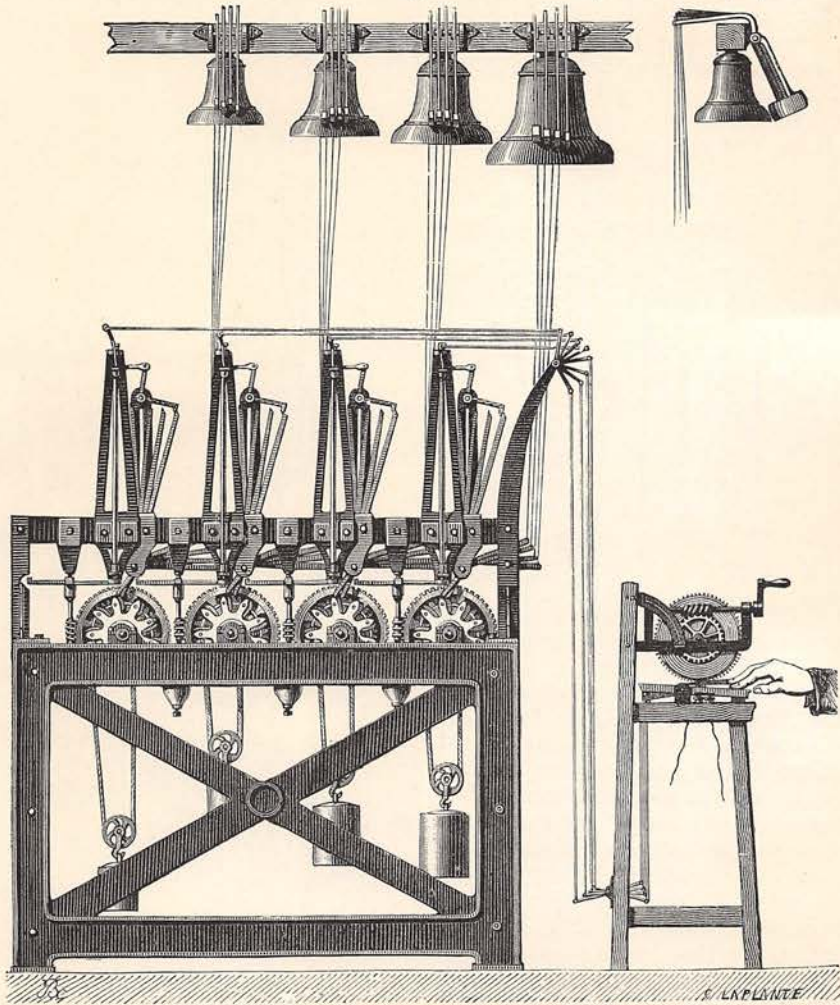


DIAGRAM SHOWING METHOD OF PLAYING A CARILLON.

Aerschodt, are in this respect much more satisfactory. The bells at Beeding were lying in Severin van Aerschodt's factory waiting to be tuned when poor Severin was actually on his deathbed, but they are fairly correct and in quality of course exquisite. Still the English public have not yet grasped the conception of a Belgian carillon, which is nothing short of a vast aerial instrument, not only capable of being ground by a clock-barrel to tunes in unison, but fitted with a keyboard at which may be seated a skilled musician with a pianoforte score of Handel, Bach, or even Mendelssohn before him. The carillonneur treats the pegs as keys, just as you treat organ and pianoforte keys ; instead of pipes or strings he operates on a suite of bells, ranging from several tons to a few pounds and forty or fifty semi-tones ; had we such a carillonneur and such a carillon, grand music might be

rolled over London and Salisbury Plain like the strains of melody and harmony which for an hour every Sunday and feast day are heard from Mechlin or Utrecht or Bruges towers when a skilful executant like Denyn is seated and makes melody and harmony for the town and country six miles round. Here in England at best, even when we have got a dozen or two of Belgian bells we grind or hammer out a tune in unison and call it a Belgian carillon. Belgian fiddlesticks! Indeed this thing will never be done until our organists take it up, the organists and none others should be the carillonneurs. Let them go to Belgium and learn how to play the carillon-clavecin, or keyboard, and then we shall have real carillon music, such as sets all time to music in the Netherlands, not till then.

The largest bell in the world is the big bell at Moscow, it weighs 193-8(?) tons. It is cracked and has been converted into a chapel. Some say it was never hung but cracked in the casting; others declare it was hung and fell down and cracked. I have in my hands good authority for both statements. Little bells as old as the sixth century are still preserved in Ireland and Scotland. The oldest are quadrangular and made of thin iron plates hammered and welded. Such is the four-sided bell of St. Gall, of the sixth century, still preserved at Gall in Switzerland. Such is St. Patrick's bell.¹

Queen Mary's silver handbell is much more recent and more shapely.

St. Patrick's little bell, richly jewelled and inscribed, 1091, is still preserved at Belfast. It is supposed to be much more ancient, and is said to be alluded to in the *Ulster Annals*, 552 A.D.

The *Carolus* at Antwerp is a favourite bell, having a fine rich tone. It is said to be worth £20,000 on account of the amount of silver and gold in it (neither metal is good for bell sound, tin or copper being the proper ingredients). The *Carolus* was given to Antwerp by Carl V. It is not often allowed to be rung now, but as I wanted to hear the sound some years ago I managed to get into the belfry. I then crept under the bell and swung myself upon its clapper till I sounded it; the experiment was perilous, deafening but satisfactory. It weighs seven and half tons. There are very few bells extant earlier than 1400 A.D., but the *Horrida* or *Tocsin* in Strasburg Cathedral dates from 1316.

Bells have been famous for their inscriptions. Here is an inscription on a famous bell at Ghent, which is also repeated in many other places—

“Mynem naem is Roelant;
Als ich clippe dan ist brandt
Als ich luyde dan is storm in Vlaenderland.”

At Strasburg the “Holy Ghost” bell dated 1375, 3 nonas Augusti, weighs about eight tons, and bears the beautiful inscription, “O Rex Gloriæ Christæ veni cum pace.” It is only rung when two fires are seen at the same time by the watchman on the tower. The gate bell in the Strasburg tower has been recast; it originally bore this celebrated inscription—

“Dieses Thor Glocke das erst mal schalt.
Als man 1618 sahl.
Dass Jahr regnet man.
Nach doctor Luther Jubal jahr.
Das Bös hinaus das Gut hinein.
Zu lauten soll ihr Arbeit seyn.”

Notre Dame at Paris has a good bell of 1680, weighing seventeen tons. Erfurt one of thirteen tons of finest bell metal.

The bells of Hemony and the van den Gheyns, which abound in the Belgian towers are all of the finest quality. The Italian and French bells are as a rule poor. There are a few celebrated bells in England—Great Peter, York Minster, cast in 1845, ten tons, cost £2,000; Great Tom of Lincoln, five tons, and Big Ben, the pride of London, thirteen tons! Nothing more exasperating to a bell connoisseur than Big Ben has perhaps ever been hung or left unhung. Did I require any proof of my much-abused dictum *Music and Morals*, “the English are not a musical people,” I have only to point to Big Ben. Did I seek confirmation of my statement that the English know nothing about bells, Big Ben and his four discordant quarters, which are actually teaching

¹ *Vide* Catalogue Archæological Museum, Edinburgh, 1856.

generation after generation of London school-boys to whistle out of tune, Big Ben is again my justifier. To think that the Lords and Commons should have sat for thirty years under the hoarse, gong-like roar of that brazen fiend and listened to the quarters timing the dreary periods of Parliamentary oratory, without any sense of shame or annoyance, and still dare to call themselves the representatives of a musical people! The thing is absurd! But I feel nevertheless, in deference to public opinion (*sic*), that however I may dismiss the Westminster quarters and the new St. Paul's peal—with its big bell by Taylor of Loughborough, all of which are far superior to Big Ben—yet this article in the eyes of the majority of my readers would be most defective without some account of Big Ben. Well, there he hangs in the tall Westminster



THE BARNAN COULAWN, OR CAPPED BELL OF ST. CULAN, BROTHER OF CORMAC, KING OF CASHEL, WHO DIED A.D. 908; IT IS ENCLOSED IN A SHRINE OF THE TWELFTH CENTURY. (IN BRITISH MUSEUM.)

campanile, whose walls are of a uniform thickness of between five and six feet—what a noble and saintly carrillon they might enshrine, instead of this Dagon and his four discordant satellites. The great clock disks measure seventy feet in circumference, they are illumined by a blazing wall of light composed of perforated gas tubes, ranged in tiers and measuring 340 feet. The large clock hand swings round at a foot a minute. Telegraph wires from Greenwich regulate the time. I am glad to dwell on these imposing accessories, I must come at last to Big Ben. The original bell was cast by Warner of Clerkenwell, who is also the founder of the present four quarters. Warner's bell cracked as Mears's present bell has cracked. Cracked Ben bears the following inscription—"This bell, weighing thirteen tons, three quarters, fifteen pounds, was cast by George Mears, at White-chapel, for the clock of the Houses of Parliament, under the direction of Edmund Becket Denison, Q.C., in the twenty-first year of the reign of Queen Victoria and in the year of our Lord MDCCCLVIII." A hard Gothic pattern runs round the top; the only other decorations are the usual heraldic grating and the arms of England. The lettering is of the worst kind of narrow Gothic type, intended evidently to conceal all information from the reader. A couple of hundred years' of dust will make it quite illegible. I hope Big Ben will be hauled down long before that. Much is unhappily heard of Big Ben, but nothing much more need be said. He was cracked from his birth. He is a disgrace to the nation. But so ignorant and insensible are the Londoners to these little characteristics that few have ever discovered them, and so absolute is British apathy in all such matters that you could not get a single M.P. to rise in his place and ask for the removal of this hideous Westminster gong. How should it be otherwise when throughout the length and breadth of the land our countrymen, the M.P.'s. themselves, delight to go into dinner to the sound of gongs. And we are still told that "the English are a musical people!" They dine to the roar of one gong, and legislate to the roar of another.

Before bell music can ever be introduced into England two things have to take place. The people must be more generally musical and more particularly instructed in

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the true nature of bell music and bell tone. We must so improve in our musical organization that we shall be glad to *hear music constantly in the air*, we must so understand bells as to *know what to listen for and how to hear*. The same accuracy of tune which we require in the voice can no more be got from bells than you can get from the pianoforte the accuracy of tune expected from the violin. A few bells—church quarters for instance—may, and ought to be in fair tune, but a carillon of more than an octave and a half will never realize even the pianoforte standard. The difficulty of tuning bells *together* increases with the *number*; what must be aimed at is that each bell should represent an intelligible fundamental note floating upon an ocean of harmonics, the dense atmosphere of confused and mingled sound is like a mist, to transfer the idea from the acoustic to the visual plane. You see lights of all colours, surrounded with dim haloes—the mist marries and interweaves their radiations—but still the dim, vaporous globes of emerald, ruby, amethyst, and sapphire flame are sufficiently pronounced, and the charm of the situation is just this mystic and indistinct intermingling of their distinctive properties. It is so with carillon sound, the bell notes float upon a sound-ocean, the sounds intermingle and marry through the combination-hums of an infinite variety of radiating harmonics. Yet the fundamental notes of the scale retain their individuality. The audition of bell-sound is an education—as the eye has to be educated for colour, so the ear has to be educated for sound, and specially trained and accustomed to the peculiarities of bell-sound, musically employed in carillon playing. The Belgians have been trained for centuries in this. We have not even begun our training—we never shall begin till we have real carillons of fifty and sixty bells, and real carillonneurs to play them as lovingly and knowingly as our great cathedral organists play our great cathedral organs. The big towers are there—the bells can be got. When will the hour strike? When will the man appear? When shall we have a big London carillon and a great London carillonneur?

