THE RINGING WORLD

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STANDARDS.

Most of us, more or less unconsciously, cherish the idea that when peace returns we shall be able to pick up again the threads of our ringing life where we dropped them on that fateful Sunday when war was declared, but all of us know quite well, when we stop to think about it, that that can never be. There will be changes in every department of life, and changes all the more vital because their full effect will not at once be apparent. Owing to its nature, change ringing may be expected to escape these influences far more than most things, yet it will not be wholly immune. The ringers, who on the day of victory will hasten to get back to the belfries, may think they are the same men who rang before the imposition of the ban, but one and all will be altered, though in vastly different degree.

Those who were in the prime of their ringing career and whose enthusiasm has not waned nor their natural force been abated, will be the least affected. They will speedily be able to shake off the rustiness due to want of practice, and they will be able and will be eager to carry on again with peal ringing in the higher methods. But they will not be able to escape from the effects of the war on their fellows. The older men will not all have lost their enthusiasm, but four years or so of anxiety and strain will have told their tale. The brain will be less alert, the eye less keen, and the body less active. While those younger men who had not yet gained the skill which comes from experience will have to relearn much, and that will not be easy since so many of them will not realise the necessity of learning again.

Besides all this, there will be those whose enthusiasm has cooled, who have turned to new interests, and whose visits to the belfry will be few or not at all. Death will have taken its toll, and there will be a shortage of ringers due to the lack of recruits during these years of war.

It follows that the Exercise will not be able to maintain its old pre-war standards, and some of them must be lowered. Which shall it be? This is an important question, because on the way it is answered will depend the future of change ringing in many places.

Before the war the standard of method ringing was very high and had been greatly raised during the previous quarter of a century. The four Surprise methods were being regularly practised by the class of band who twenty-five years earlier would have been content with Stedman and Treble Bob. Most ringers will be reluctant to lower this standard, yet it is just what we feel sure they ought to make up their minds deliberately to

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do. We shall not be able to have everything again at once, therefore we should concentrate on the most essential. And the most essential is good striking.

It is essential for outside effect. On whether we please or annoy the outside public will largely depend whether we shall again be allowed the facilities for practice and peal ringing we used to enjoy.

It is essential to the ringers themselves. Many methods and a low standard of striking would be intolerable to a good ringer, and if the number of those who value striking less than they do method ringing were largely increased, it would mean a very great and very serious decline in the art, no matter what the peal records seem to show.

The man who begins by being a good striker can usually take method ringing in his stride. But the man who puts method ringing first and allows striking to take its chance, will never be a first class ringer, and not seldom is a nuisance to his fellows.

It would be no bad thing if when ringers returned to the belfries they found there written up in large letters, 'Good stoney is better than bad changes. Good Treble Bob is better than bad Cambridge. Striking is the one thing that matters.'

THE LATE ALBERT NASH.

HIS WORK FOR RINGING.

To the Editor.

Dear Sir,—The Barnsley District Society has lost another great tower of strength by the death of Mr. A. Nash, of Rotherham. He was one of the pioneers of the society, and had a lot to do with forming it. He was in fact the first secretary and treasurer for about three years. Later, he became president, and took a keen interest in the work until his death.

He had done much in his early days to exploit and encourage six-bell ringing in nearly all the minor methods, and later many of the Major Surprise methods. He was a first-class ringer and conductor on any number of bells, both in the tower and on the handbells, and was very keen on good striking. Considering how handicapped he was through his accident, it was marvellous how he could handle his bell and put it (usually the tenor) where it should be.

This is the fourth of the staunch supporters and pioneers of the society who have passed away within three years, viz.: Potter, Panther, Gill and Nash, and wherever the Barnsley District Society is concerned these names will always be remembered. Although they have left gaps in our ranks which will be hard to fill, it is to be hoped we can carry on with success the work they have begun and entrusted to us. It is a strange coincidence and worthy of note that the last peal rung by Panther was in memory of Potter, the last peal rung by Gill in memory of Panther, and the last peal rung by Nash in memory of Gill, but the Barnsley District ringers are not superstitious and they hope to kill the omen and ring a peal in memory of Mr. Nash on the handbells in the very near future.

DANIEL SMITH,
Hon. Secretary.

LEICESTER RINGER IN THE MIDDLE EAST.

Mr. Ernest Morris has just received an interesting letter from Sidney Harrison, of St. John-the-Divine, Leicester, who recently was drafted to the Middle East. At Durban, South Africa, where the voyage was broken for four days, he managed to get to St. Paul's and, finding a ringer, went up the belfry and pulled off the tenor (the bells being set up). Then between them they fell the bells, and he passed a pleasant half-hour playing hymn tunes and other pieces on the chiming apparatus.

His next ringing was at Khartoum, where for two months he took over the chiming at the Cathedral for Sunday evensong. The regular 'ringer' is a Sudanese, who simply thumps up and down the keys as fancy takes him, but Sidney Harrison soon gave a delightful variation with plain courses of Grandsire and Plain Bob with tunes as well, much to the enjoyment of an Irthlingborough ringer, who soon made himself known. There are eight bells at Khartoum Cathedral by Mears and Stainbank, with a tenor about 10 cwt.

The Army, however, has moved Mr. Harrison off again, and it is to be hoped he will find some bells to keep his hand in till he comes home again.

HANDBELL PEALS.

CRAYFORD, KENT.
THE KENT COUNTY ASSOCIATION.
On Sunday, August 9, 1942, in Two Hours and Twenty-Five Minutes,
AT 10, KING'S CLOSE,
A PEAL OF BOB MAJOR, 5056 CHANGES;
Tenor size 15.

MRS. E. A. BARNETT	1-2	EDWIN A. BARNETT	5-6
ERNEST C. S. TURNER... ...	3-4	EDWIN BARNETT	7-8

Composed by A. P. KNIGHTS. Conducted by E. C. S. TURNER.

CRAYFORD, KENT.
THE KENT COUNTY ASSOCIATION.
On Sunday, August 9, 1942, in Two Hours and Seventeen Minutes,
AT 10, KING'S CLOSE,
A PEAL OF LITTLE BOB MAJOR, 5040 CHANGES;
Tenor size 15.

ERNEST C. S. TURNER... ...	1-2	*GEORGE H. CROSS	5-6
EDWIN A. BARNETT	3-4	EDWIN BARNETT	7-8

Composed and Conducted by G. H. CROSS.

* First peal in the method. First handbell peal in the method by the association.

LONDON.
THE GLOUCESTER AND BRISTOL DIOCESAN ASSOCIATION.
On Wednesday, August 12, 1942, in Two Hours and Fifty-Two Minutes,
AT 24, ROLLSCOURT AVENUE, HERNE HILL,
A PEAL OF BOB ROYAL, 5040 CHANGES;
Tenor size 15 in C.

MONICA J. F. RICHARDSON...	1-2	REV. M. C. C. MELVILLE	5-6
WILLIAM L. B. LEESE ...	3-4	*DOROTHY T. RICHARDSON...	7-8
		†BRENDA M. RICHARDSON ...	9-10

Composed by E. M. ATKINS. Conducted by REV. M. C. C. MELVILLE

* First peal of Royal away from the tenors. † First peal on 10 bells.

BOURNEMOUTH, HAMPSHIRE.
THE SALISBURY DIOCESAN GUILD.
On Thursday, August 13, 1942, in Two Hours and Thirty-Five Minutes,
AT ST. PETER'S HALL,
A PEAL OF GRANDSIRE TRIPLES, 5040 CHANGES;
PARKER'S TWELVE-PART. Tenor size 15 in C.

MRS. F. JOHN MARSHALLSAY	1-2	ARTHUR V. DAVIS	5-6
*WILLIAM G. YOUNG	3-4	FRANCIS S. WILSON	7-8

Conducted by ARTHUR V. DAVIS.

* First peal 'in hand.' Arranged especially for Lance-Corpl. W. G. Young, of St. James', Poole, Band.

GUILDFORD, SURREY.
THE GUILDFORD DIOCESAN GUILD.
On Saturday, August 15, 1942, in Two Hours and Thirty Minutes,
AT THE ROYAL GRAMMAR SCHOOL,
A PEAL OF STEDMAN TRIPLES, 5040 CHANGES;
PITSTOW'S VARIATION OF THURSTANS'.

CHARLES HAZLEDEN	1-2	*ALBERT DISERENS	5-6
ALFRED H. PULLING	3-4	†THOMAS N. LANAGHAN ...	7-8

Conducted by A. H. PULLING.

Umpire—E. J. Munday. Witness—Mrs. Pulling.

* First peal of Stedman in hand. † First peal of Stedman.

READING.
THE OXFORD DIOCESAN GUILD.
On Sunday, August 16, 1942, in Two Hours and Fifteen Minutes,
AT 18, MANCHESTER ROAD,
A PEAL OF GRANDSIRE TRIPLES, 5040 CHANGES;
PARKER'S TWELVE-PART (7th observation). Tenor size 15 in C.

*WILLIAM L. B. LEESE ...	1-2	ALBERT DISERENS	5-6
JOHN E. SPICE	3-4	ARTHUR WIGGINS...	7-8

Conducted by ALBERT DISERENS.

Witness—Thomas N. Lanaghan.

* First peal of Grandsire Triples.

THE NORWICH SCHOLARS.

MORE NEWSPAPER REPORTS.

Mr. Charles E. Borrett has sent us some more cuttings from 18th century Norwich newspapers which throw a good deal of contemporary light on the famous company of Norwich Scholars. The first four relate to early peals of Double Norwich Court Bob Major, the history of which was for long very dubious.

FROM 'THE NORWICH MERCURY.'

St. Michael's Coslany. Monday March 9th 1741 was rung by the Norwich Society 5040 changes of Court Bob all eight which was never done before, and was performed in 3 hours 13 minutes.

Saturday November 1st 1746 was rung at St. Michael's of Coslany by Edward Crane and seven Norwich Youths 5040 of that most curious Peal call'd Court Bob or all Eight in, in 3 hours and 17 minutes, without a bell out of course, being the second time that ever it was rung in this Kingdom.

On Tuesday March 26th 1754 was rung at St. Michael's Coslany by Eight Youths, a compleat 5040 of Court Bob, in 3 hours and 20 minutes. This is the first time of its being performed by Youths only.

On Monday January 5th 1756 was rung at St. Michael's Coslany 5040 Court Bobs Eight in; it was compleatly rung in 3 hours and 8 minutes without a bell out of course by us whose names are undermentioned. John Chamberlain rang the Treble and called the Bobs, Jeffrey Brady 2, John Dixon 3, Francis Lyth 4, John Keepus 5, John Vines 6, John Read 7, George Battley Tenor.

January 6th, 1775. St. Peter's ringers return thanks to those Gentlemen and Ladies who favoured them with Christmas donations, which liberal encouragement they shall endeavour to express a grateful sense of by continuing to ring such concerto's weekly (Composed by Signor Melchoir and others) as have hitherto given universal satisfaction.

October 26th, 1776. We hear that St. Peter's bells will be rung three evenings in every week the ensuing season by the old steeple band, who will entertain the Town with several complete circumsono's, particularly the much admired Oxford Campanatum and the last new peal of Norwich harmonies as composed by Messrs. Dye, Lindsey, Vines, etc., etc.

Sheffield, Yorkshire. May 4th 1809 was rung at St. Peter's Church a fine peal of Oxford Treble Bob Royal composed of 5400 harmonious changes which was nobly brought round in 3 hours 59 minutes on the grand new peal of ten bells cast by Messrs. Thomas Mears and Sons, Bellfounders, Whitechapel, London, in the deep key of C, weight of tenor 41 cwt. and 5 lbs. net bell. This society also rung on the same bells in the summer 1807 at various times 11177 changes in the intricate methods of Bob Royal, Stedmans Principle and Oxford Bob Royal to represent 11177 free holders who polled that year for Lord Milton at York.

July 23rd, 1814. We have it seems been accused of blundering in our paragraph last week concerning St. Peter's Bells. We should hardly have thought it necessary at this time of day to refer our readers to their musical dictionary to discover that pitch and temperament were two things. A confusion has hence arisen (not in our minds) and we are to say that the bells were tuned in the Key of C according to the temperament of E flat. Now we hope we may be better understood. This enables us to add that the bell was broken by the wear of a bolt, which occasioning the clapper to catch upon the frame, the bell thus fell with its whole weight upon the clapper in its rotation and burst its side.

DEATH OF A BEACONSFIELD RINGER.

The death occurred on Monday, August 3rd, of Mr. J. Blackmore, a member of the Beaconsfield band, at the age of 76.

His peals were not numerous, but at one time he was a regular service ringer, and in his earlier years did much to train a change-ringing band at Chalfont St. Peter.

He was a keen horticulturist, being a member of the Beaconsfield Horticultural Association, and had been for several years one of its judges at the annual show.

The funeral took place at Penn Parish Church on Thursday, August 6th, and was attended by a large number of friends, including some of the Beaconsfield and Penn ringers, and Mr. A. D. Barker, treasurer of the Oxford Diocesan Guild, of which Mr. Blackmore was a member.

DEATH OF MR. W. H. POYSER.

OLD DERBY RINGER.

We regret to annocnuce the death of Mr. William H. Poyser, who passed away in his sleep on Saturday, August 8th, in his 76th year. He had been a regular ringer at St. Peter's, Derby, since 1910, and before that at St. Werburgh's. He joined the Midland Counties Association in 1885, and rang 52 peals for it, as well as a number for the East Derbyshire Association. He was of a kindly and unassuming disposition and always ready to assist beginners. He was a safe ringer in most of the standard methods, a good striker, and a regular service ringer. The funeral was at Nottingham Road Cemetery on Wednesday, August 12th.

GRANDSIRE TRIPLES.

THE NEED AND USE OF SINGLES.

The total number of rows on any number of bells, however they are produced, divide into two groups; half of them are even and half of them are odd.

In Grandsire Doubles all the rows produced by the plain course and by any combination of plain and bobbed leads are even. It is therefore necessary to have at least two singles to produce the full extent. The same thing happens in Grandsire Caters.

Grandsire Triples is different. There the rows are alternately of opposite nature and, in the plain course, and in any combination of plain and bobbed leads, all the handstroke rows are odd and all the backstroke rows are even. There is no one row that cannot be produced by bobs only.

It is obvious then that the use of singles in Grandsire Triples must be different from what it is in Grandsire Doubles and Grandsire Caters, and the first question is: Why are they necessary at all? In Doubles and in Caters we must have them because without them we could not produce any one of the odd rows. It is not so in Triples, and for the purpose of composing peals we do not need to change the nature of the rows. That is why in Doubles and in Caters (just as in Bob Major or Double Norwich) a definite single is always used; but in Grandsire Triples two kinds of singles have been employed, one of which turns the nature of the rows and the other does not.

The use of singles in Grandsire Triples is not (as it is in most methods) to enable us to produce the odd rows, which otherwise would have been unattainable, but to supply an indispensable link in the chain which binds the rows and the leads into one complete round block.

In the early months of this year we gave an explanation of the nature and use of Q Sets in the composition of Bob Major. The reader should study those articles, because the principle of Q Sets are the same in all methods, and they are the expression of what is probably the most important law in the science of composition. They are best studied in Bob Major because there they appear in their simplest and most easily understandable form. In Grandsire Triples they seem to be more complex, but essentially they are not different. The distinction arises from the fact that in Bob Major only three bells are affected by any one bob, but in Grandsire Triples five bells are affected.

In Bob Major we saw that in any in-course extent the bobs must be in sets of three. If one in any set is made all three must be made. If one is omitted all three must be omitted.

In Grandsire Triples in a complete peal the bobs must be in sets of five, and if one of the five is made, all the five must be made. If one of the five is omitted, all the five must be omitted. The five bobs are the set produced by calling the same bell Before until the round block is completed. Here is a Q Set with the third called Before, and with rounds as one of the members.

1532746
1735624
1637452
1436275
1234567

These five bobs form a Q Set, and the members of any Q Set are related to each other as these five are.

We ought to say that in Thompson's and Davies' writings, as printed in Snowdon's ' Grandsire ' and elsewhere, Q Sets are given in a different form. There what is called a Q Set is, not the five backstroke rows produced by five bobs, but the backstroke rows of the treble's lead previous to the bobs being made. It was natural for Thompson to use the plan he did, it fitted into the argument he was using, but it rather complicates matters, especially when we are dealing with Q Sets in other methods than Grandsire Triples.

When we are composing a peal of Grandsire Triples, the material we have to use consists of the 5,040 possible rows, but the method decides the first stages of arrangement and our material really consists of either 72 P Blocks, or 120 B Blocks. We can please ourselves which we use, but we must start with a definite decision on the matter, and if we choose P Blocks, we shall have to use in-course singles, while if we choose B Blocks, we shall have to use ' ordinary ' Grandsire singles.

But you may say: Why not arrange some of the 5,040 rows in P Blocks and the rest in B Blocks, and then join up the lot into one block by means of bobs and singles? Why not? Simply because it cannot be done. If we arrange some of the 5,040 rows into any particular group of P Blocks, then those which are left over cannot be arranged into a number of B Blocks.

Even if they could they would be useless for our purpose. We can only join P Blocks together, or to other blocks, by means of bobs, and in the B Blocks every bob is already made. And we can only join B Blocks together or to other blocks by means of omitting bobs, and in the P Blocks every bob is already omitted.

A P Block, we may remind the reader, is a natural course consisting of five plain leads without any bobs. A B Block is a bobbed course consisting of three leads without any plain leads.

Having selected either the 72 P Blocks or the 120 B Blocks as the basis of our peal, our task is to join them all into one round block.

We choose the P Blocks and start with the plain course. We make a bob in one of the five leads and complete the Q Set. The result is that we join four more P Blocks to our original one. We have now a round block consisting of five complete P Blocks. We make another bob and complete the Q Set, and again we add four P Blocks. Our round block now consists of nine complete P Blocks. So we go on bobbing Q Sets and each time adding four P Blocks. But when we get to the end we shall find that we are left with three P Blocks over, and no bobbing of a Q Set will add them to our round block.

So far what we have done is exactly similar to what we found happened when we tried to join the sixty in-course natural courses of Bob Major together by bobs; except that then we added courses two at a time and had one left over. This is where Grandsire Triples becomes more complicated than Bob Major.

In Bob Major when we have grouped our sixty natural courses into two round blocks, one consisting of fifty-nine courses and the other of one, we shall find that there are unbobbed Q Sets, two members of any one of them being in the large block, and the third member in the small block. If we bob one of these Q Sets what will happen is that the large block will fall into two separate pieces, and the small block will join up to one

(Continued on next page.)

GRANDSIRE TRIPLES.

(Continued from previous page.)

of the pieces. We are no nearer to getting all the sixty natural courses into one round block.

Something very similar happens in Grandsire Triples, but not quite. If in the large block there are three unbobbed members of a Q Set, and if two members are one in each of two of the remaining three P Blocks, we can bob the Q Set and the two P Blocks will join up with the large block. But we shall still have one P Block left over. We can, in fact, when we are building up our peal, add P Blocks, not only four at a time as we described above; but also, if we wish, two at a time.

What we cannot do, is to add an odd number. When we try to do that the result is the same as it was in the Bob Major—the large block falls to pieces.

An exactly similar thing happens if we start with B Blocks, except that instead of joining the blocks together by bobs arranged in Q Sets, we join them together by omits arranged in Q Sets. In either case we are left with two round blocks and for the final stage we need the help of singles.

(To be continued.)

SPLICED SURPRISE MAJOR.

To the Editor.

Dear Sir,—I have held the opinion for some time that a peal of Spliced London, Bristol, Cambridge and Superlative with full courses of each method is not obtainable with tenors together throughout, but I felt sure that one could be worked out if the tenors were parted for a part of the peal and, although I felt very interested in the matter, I have not been able to find time for the last few years to go thoroughly into the question.

I sincerely congratulate Mr. Parker on his success in producing such a composition, and feel sure it is the best which can be obtained.

A. J. PITMAN.

BOB MAJOR ON HANDBELLS.

To the Editor.

Dear Sir,—The article on handbell ringing by the Rev. M. C. C. Melville, in your issue of December 26th last, I found of interest owing to the fact that the system of composition he therein advocates happens to be very similar to the one contained in the peal composition we rang here. Here it is:—

BOB MAJOR.

5,120.

23456	W.	5ths.	4ths.	M.	H.
36425		S	—		—
43625					—
62435	—				—
46235					—
24635					—
63245	—				—
26345					—
32645					—
64325	—				—
42365		—	—	—	—
34265					—
23465					—

Three times repeated. Single at H in 23rd and 47th course.

As may be seen, the effect of this arrangement is that the pairs 1-2, 5-6 and 7-8 repeat in the second half of the peal the work each has already done in the first half, while the work of 3-4 in the second half is reversed to that done in the first half.

Our handbell practice has been suspended since last October. There are only three of us in the band, and the other two, who both were in the last big war, are doing military duties at nights and at other odd times.

New Zealand is now very busy preparing for a visit from the Japs, and I can assure you that she has from the word 'go' done her utmost to provide both men and money for the Old Country and its allies.

JAMES S. WILDE.

9, Balmoral St. Opoho,
Dunedin, New Zealand.

[Mr. Wilde's peal was rung for the first time forty-eight years ago last April 15th, at Tunstead, in Norfolk.—Ed., 'The Ringing World.']

BELFRY GOSSIP.

Mr. Ernest Morris' articles on Chimes and Chime Tunes will be resumed next week.

Mr. K. Ketteringham, of St. Wilfred's, Alford, Lincolnshire, who is serving in the Forces in a remote part of the British Isles, would like to form a handbell band among his companions, and wonders if anyone would like to give them six or eight bells in any condition. 'Our life,' he says, 'at this, one of the outposts of our island home, is inclined to become rather monotonous at times, and indulging in the art of change ringing would greatly assist in overcoming one of the soldiers' worst enemies—that of boredom.'

Air-raid warden (ringer) would like to get in touch with brother ringer, also an air-raid warden, with the view of spending a week's holiday in the Eastern Counties, preferably Norwich.

At Leigh, near Gloucester, jackdaws have taken advantage of the ban to build their nest in the third bell, which was left up.

Mr. Edwin Shepherd, of St. Sidwell's, Exeter, wishes to thank all who have sent him good wishes on the occasion of his 80th birthday.

On August 17th, 1812, a peal of Oxford Treble Bob Royal, 5,000 changes, was rung on the old ten bells at St. Michael's, Coventry.

On August 18th, 1858, Thomas Thurstans, so well known as a composer of Stedman Triples, died at Birmingham in pathetic circumstances. 'He was taken ill in the street,' wrote John Day, 'and died in the general hospital. No one knew who he was; no one enquired about him. So it came to pass that the parish authorities buried him—no friend or relative being near.'

Eight Keighley men rang 5,376 changes of Cambridge Surprise Major on August 18th, 1811. The composition was by Joseph Tebbs, of Leeds, but undoubtedly was false.

The first peal of Hereward Bob Major was rung at Reddish on August 20th, 1914, and on the same date in 1927 the first peal of Pershore Bob Major was rung at Pershore.

'On Saturday, August 22nd, 1752, was rung at St. Michael's Coslany a complete 5,040 of Mr. Holt's Tripples in three hours without changes alike or a bell out of course, it being the first time ever performed by eight men only. So intricate, it was thought no man could ring a bell and call the bobs. It has been rung in London and at Stonham with prompts. But was rung by these men without a prompt.'

THE COLLEGE YOUTHS.

There was little formal business to be transacted at the meeting of the Ancient Society of College Youths on August 15th. One new member, Mr. Cecil R. Longhurst, of West Grinstead, was elected, and appropriate references were made to the death of Mr. William G. Crickmer, of Earl Soham, who joined the society as far back as 1889.

A letter was read from Mr. George Thompson, of Tunbridge Wells, who has been a member from 1894, and another from Mr. Albert Walker, who reported that he was getting on very well after his operation.

In addition to the Master, hon. secretary and treasurer, the following members were present: Messrs. E. H. Lewis, C. W. Roberts, J. H. Shepherd, E. A. Young, W. T. Elson, F. C. Newman, C. Pothecary, C. C. Mayne, J. A. Trollope, H. G. Miles, R. F. Deal and E. Barnett, Trooper E. Rapley, R.A.C. (who rejoined his regiment and was on embarkation leave), Lance-Corpl. Len Fox and the Rev. M. C. Melville. The visitors were Mrs. E. Barnett and Mrs. E. A. Barnett.

PROPAGANDA.

To the Editor.

Dear Sir,—Referring to Mr. G. W. Fogden's letter on propaganda, I can fully endorse what he writes, as I was one of the regular visitors at that time. There were only three or four middle-aged ladies who indicated they were willing to learn, and only the stout lady persevered alas! without much advancement. One young boy had the makings of a ringer but. owing to the ban, apparently he has been lost for the usual reason: interest has been stopped just when it needed to be most stimulated.

Since I have been out of hospital I am pleased to say at Bromley we have been meeting regularly every Monday at St. Luke's, Bromley Common.

As you are aware, the old Bromley Church and bells are destroyed, and we of the old church have been very happy to co-operate with the St. Luke's band.

Unfortunately, with the darker evenings we shall soon have to cease dumb practice on the tower bells, but I am hoping to get a few enthusiasts together to learn handbells.

F. E. PITMAN.

40, Tweedy Road,
Bromley, Kent.

THE ART OF BELLFOUNDING.

ITS HISTORY AND PRINCIPLES.

BY ALBERT A. HUGHES.

A paper read before the Newcomen Society for the Study of the History of Engineering and Technology, at Prince Henry's Room, Fleet Street, on December 18th, 1929.

The ancient art of bellfounding has an interesting history, and can be traced in this country to the Saxon Period. By this I mean 'cast' bells. Small sheet metal bells—handbells—were in use much earlier. There were large bells at the Monastery at Whitby in the 7th century. There are records, too, mentioning directions for the uses of bells at York and Canterbury in the 8th century. In the latter part of the 10th century, seven bells were presented to Crowland Abbey. None of these very early bells exist, and I do not think there are any records relating to their founding.

This paper is, however, to deal with the technical side, and I will not therefore go further into the historical side of the bells themselves. This has been fully dealt with by Mr. H. B. Walters in his book, 'The Church Bells of England,' published by Henry Frowde in 1913.

I believe the first instructions recorded in this country on bellfounding are to be found in a treatise by Walter of Odyington, a monk in the time of Henry III. (early 13th century), and I will refer to this later.

Previous to the 13th century, bellfounding was carried on practically exclusively by the monks, who devoted themselves to the arts and crafts of the Church before the days of professional craftsmen. The earliest records of bellfounders hardly go back beyond the 13th century.

The famous bellfounder's window in York Minster, given by Richard Tunnoc, bellfounder, who died in 1330, shows roughly the processes of moulding and casting.

Fundamentally, the actual processes of moulding and casting have altered only slightly during the last six or seven centuries, and I propose to take the modern method first. The first step in the founding of a bell is to design the shape, and the making of this design is perhaps the most important part of the whole work, for the satisfactory quality of tone depends upon correct shape and correct proportions of thickness at various points. The quality of metal, whilst of importance, is secondary to design.

A bell contains a number of tones apart from the note by which it is recognised. These tones are called harmonics and, in designing the bell, the shape and proportions must be such that these harmonic tones are all in perfect harmony with the fundamental note, otherwise, however good the metal, the general tone would be unsatisfactory. There is evidence that the theory was partly understood by a few early English founders, and it was certainly understood by some 16th and 17th century Flemish founders, notably the Hemonys and Van den Gheyns. This knowledge apparently was lost, and was not revived until comparatively recently. Evidence of lack of knowledge of the full theory of bell-designing is found in so many of the peals of bells cast in this country from the 16th to the 19th century, for, whilst the fundamental notes may be fairly correct one with another, the harmonic tones will be found to vary to a considerable extent.

Having designed the shape, the next step is to make the 'crook' or 'strickle' with which the moulds are made. If in wood, it is made in two parts—one for the inner and one for the outer shape of the bell, but if made in iron it is in one piece. The moulding materials are bricks and loam, and the ordinary process of 'loam moulding' is followed. Two moulds are required, the 'core' for the inner shape of the bell and the 'cope' for the outer shape. The cope is made by lining an iron case, made approximately to the shape of the bell, with loam. This loam, similar to the yellow London clay, is mixed with horse hair and manure, the hair to bind, and the manure to aid ventilation. The prepared loam is laid on by hand, in the case, and trammelled round by means of the strickle which turns between centres. The loam is laid on in several operations and thoroughly dried after each, in order to reduce the shrinkage to the lowest possible point. The 'core' is a hollow cone, constructed of bricks laid up with loam and set to the approximate shape with the aid of the strickle. The loam is applied over the whole surface and trammelled up with the strickle. This also is carried out in several operations. The final dressing of the top of the core is of stronger loam, or, in the case of large bells, soft brick, to withstand the wash of the metal during the casting.

In making commercial castings, such as cylinders, etc., the moulds do not go through so many processes, and it is customary to add a percentage of thickness to allow for machining, but in the case of bells there is no machining in the accepted sense of the word, and the founder designs his bell to produce the note required. It is for this reason that such particular care is taken with the moulding, as the limits for correction by the tuning machine are very small.

The majority of church bells bear inscriptions and ornamentation. These are effected by making impressions in the cope with metal stamps whilst the final coat of loam is still plastic.

Both moulds are finally given a dressing of plumbago and polished, in order to produce a clean, smooth surface on the casting, also to prevent the metal from burning into the mould, and to allow of easy 'stripping,' after casting. When both moulds are completed, the cope is fitted down over the core, leaving the space between the two, corresponding to the shape of the bell. The correct degree in this closing is determined by a guide step formed in both moulds by the strickle, and when these steps register correctly all round, the correct space between the two moulds is obtained.

In the crown of the cope are two holes, called the runner and the riser, the former through which the metal is poured, and the latter through which the metal rises when the mould is full. The head of the mould is now fitted with an iron box, in which two large basins are formed with mild sand, to contain the pouring metal, and the rising metal when the mould is filled. The large amount of metal on the head is necessary in order to feed the crown of the bell during the cooling, and thus to obtain a sound casting. When the bell has sufficiently cooled, the cope is lifted off, revealing the bell with the core inside. The core is then dug out, and the whole surface of the bell is cleaned by means of wire brushes or sand-blast.

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THE ART OF BELLFOUNDING.

(Continued from previous page.)

Bell-metal is an alloy of copper and tin, and for church bells the mixture is about 76 per cent. copper and 23 per cent. tin. Many experiments have been made, but this copper and tin alloy has been proved to be the best for producing a clear pure tone.

The note of a bell depends upon its diameter at the mouth and its thickness at the soundbow—the part of the rim on which the clapper strikes. The bells of the same size, but of different thickness, would therefore have different notes, the thinner of the two being the lower in pitch. In making a 'peal' or 'ring,' they must therefore all be of different sizes, and the diameters for, say, a peal of eight in the diatonic scale, are calculated from the following proportions: Taking the largest as 1, the diameter of the next, or seventh, would be eight-ninths of the tenor, and for the whole ring of eight the figures would be:—

$$1 \quad \frac{8\ 4\ 3\ 2\ 3\ 8\ 1}{9\ 5\ 4\ 3\ 5\ 15\ 2}$$

and each bell would, of course, be cast on the same scale of thickness. From this it will be seen that the smallest bell, i.e., the octave to the largest, called the tenor, would be one-half the diameter of the tenor and, as weights vary as the cubes of the diameters, its weight would be one-eighth. In the case of bells to be hung for change ringing, the weights obtained in a peal cast exactly to the above natural scale, would not be satisfactory, as the smaller ones would be overpowered by the larger ones. It is therefore necessary to depart by calculation from the natural scale, and gradually to increase the weights from, generally speaking, the 6th—the largest but two. This naturally necessitates making them larger, and in order to retain the desired note the thickness must be proportionately increased. The result is that the treble, or smallest of the peal of eight, would be about 30 per cent. of the weight of the tenor, instead of 12½ per cent. (one-eighth).

In casting a single bell, a good founder can generally produce the bell straight from the mould perfectly correct in tone, but in the case of a 'peal' or 'ring,' a certain amount of tuning is necessary to get them all correctly in tune with each other. For this purpose they are placed on a vertical lathe, and metal is pared from the inside. This is a delicate operation, as the various harmonic tones have also to be kept in line as well as the fundamental note.

In modern tuning, the note and harmonic tones are recorded by means of special tuning forks, registering the rate of vibrations per second for each note. The required note for each bell is then calculated from the table mentioned previously, but in the inverse ratio, viz.:—

$$1 \quad \frac{9\ 5\ 4\ 3\ 5\ 15\ 2}{8\ 4\ 3\ 2\ 3\ 8\ 1}$$

Each bell is treated on the lathe until its note responds exactly to the desired forks, and a ring of bells so tuned can be guaranteed to be absolutely perfect in tune.

We will now return to early founding. As already mentioned, the actual process of moulding has altered very little through the centuries. The old system has frequently been described in the various works on church bells, and particularly by Mr. Walters in the book already mentioned; also by the late Canon Raven in 'The Bells of England.' This method of moulding was used from the earliest recorded times up to about 45 to 50 years ago. It is also described and illustrated in the French 'Encyclopédie Méthodique' of 1784, and is still used largely on the Continent.

It is in the designing and tuning that the great advance has been made. The first tuning machines constructed were laid down at the Gloucester Foundry, owned by the renowned Rudhall family, and at the Whitechapel Foundry, about 190 years ago. From descriptions handed down, these machines were worked by a horse, or donkey, and it was the machine which revolved—not the bell. Later, steam power was used. With these early machines, it was only possible to tune a bell in one zone, i.e., the sound-bow, and the harmonic tones were therefore neglected.

Previous to these first machines, tuning was effected by hand chipping metal from the sound bow inside the bell. Sometimes a bell would be sharpened by chipping metal from the extreme edge, the reduced diameter and retention of the original sound-bow thickness resulting in lesser amplitude, and therefore quicker vibration, giving the higher note.

Reverting to Walter of Odyington's instructions, the MS. in which they are included is in the library of Corpus Christi College, Cambridge. The translation, copied from Mr. Walter's book, is as follows:—

> 'For making bells, the whole difficulty consists in estimating the wax models from which they are formed, and first, in knowing that the thicker a bell is, the higher its note, and the reverse.
>
> 'Starting with any given amount of wax for the model of the first bell, you divide it into eight parts, and the addition of one-eighth part (s.c. nine-eighths of the size of the first) will give you the amount required for the second bell. If you start from the heavier bells, the principal is similar. But take care lest the inner mould (or core) of clay, to which the wax is to be applied, is changed in any different proportion; and also that none of the allotted wax gets into the vents. Further, a fifth or sixth-part of the metal should be tin purified from lead, the rest copper similarly cleansed, with a view to greater sonorousness. If any defects should be apparent, they can be set right with a file or whetstone.'

The 9/8ths proportion which he gives refers, of course, to the interval of a whole note, and it is strange that he takes no account of the difference between a whole tone and a semi-tone. His method is, however, so obviously empirical that it is impossible to imagine any musical result from such working. As Dr. Raven states in his book, 'one cannot wonder at the necessity for whetstones and chisels; and the free use of these instruments may help to account for the almost total disappearance of bells of the Saxon and Norman period.' The few remaining examples of 13th century bells are extremely discordant in sound.

One point of view might, however, be taken, viz., that where a number of these early bells existed in one tower it is probable that they were not used 'in peal' as at present, but that each bell had its own particular use, such as Matins, Vespers, Curfew, etc.

An interesting point in Walter of Odyington's instruc-

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THE ART OF BELLFOUNDING.

(Continued from previous page.)

tion is the reference to wax models, inferring that the *cire perdue* process was employed. There is, however, no record that this process was used in England, and one can only assume that his reference to wax came probably from his association with the Continent, where the process was used.

It has been stated that a few of the early English founders had some knowledge of the theory of correct design. The examples are mostly found in the Eastern Counties, and one can only assume that they may have gained a certain amount of knowledge by contact with Flemish founders, or by having paid visits to the Continent. One of the most renowned bells in East Anglia is the tenor at Lavenham, Suffolk, cast by Miles Graye, of Colchester, in 1625, and weighing about 24 cwt. This bell is almost perfectly correct in its tones. The curious thing, however, is that as good a founder as Miles Graye was, his bells are not consistent in quality, and one can therefore only assume that his knowledge was limited. My own opinion is that these early founders, like their successors, believed that all bells, irrespective of size or scale of thickness, could be designed on exactly the same lines. It is, of course, now known that this is not the case.

It is remarkable that in my own foundry no records exist in writing showing how the former founders arrived at their shape. This also applied to the Gloucester Foundry already mentioned, and the Hertford Foundry owned by John Bryant. Both these foundries were acquired by Whitechapel about 1825, and the only records which existed were the actual strickle boards. The only founder I know who left a record was William Dobson, of Downham, Norfolk, whose foundry eventually was merged into that of Whitechapel. He left a chart somewhat on the lines of the one shown in the French Encyclopedia, and the chart shows that his idea also was that every design was made on similar lines.

With all these early founders' products, it is noticeable that one or two bells are better than the others, and I think there is no doubt that they worked largely by rule-of-thumb methods.

I well remember as a small boy at home, looking at the old wooden strickle boards in the presence of the foreman moulder, and his remarking to me that those boards were the secret of the fame of Whitechapel bells. The foundry was at that time using metal strickles, which had been designed from the old wooden boards, then out of use, but evidently retained as original patterns.

We have now criticised the work and methods of the bygone founders, but it should not be inferred that all the old rings of bells in the country should be recast. There are still many old rings throughout the country which, despite technical faults, are regarded favourably, and the general effect in ringing is pleasing. It is also possible to retune many old peals, getting their fundamental notes correct, and their harmonic tones as nearly in line as possible, with satisfactory results. Unfortunately many good old peals have been recast for the sake of theoretical accuracy, whereas they should have been preserved as ranking amongst the best specimens of the bellfounders' art of the period.

UMPIRES FOR HANDBELL PEALS.

THEY ARE UNNECESSARY.

To the Editor.

Dear Sir,—You ask if it is necessary to insist on umpires for handbell peals for the sake of the few people who ring false peals. I say it is not, and if we did have such a rule it would do more harm than good.

In the first place, how many ringers are really capable of seeing whether a peal is properly rung throughout? Very few, I think. It would be no good insisting that there should be umpires unless we insisted that they should be competent umpires, and who is going to do that? If people are capable of faking a peal they are capable of having a faked umpire. Even now half the umpires that are put in peal records are only fakes. Some friends of Mr. Jones meet at his house and start for a peal. Somewhere in another room Mrs. Jones is doing her household work. She can hear the ringing if she takes the trouble to listen, so she goes down in the report as the umpire, or, if the band is a bit fastidious, as the 'witness.' It doesn't do any harm, for people are not really deceived, but it is all a farce.

That sort of thing doesn't happen nowadays so much as it used to do, but it does happen, and it would be quite common if the rule were insisted on. The truth is that most bands could not get the services of a competent umpire for love or money, and they would be almost compelled to have sham umpires or drop peal attempts.

Even when they could get a real ringer to come and sit in the room while they are ringing, and even if they supplied him with the course-ends and the calling, the chances are that he would not know whether any particular change came up. All he would know would be that the ringing went on for so long without any serious trips, and that it seemed all right. And that is all that an ordinary ringer knows about a tower-bell peal he listens to outside or even that he takes part in himself.

If a handbell ringer changed his hands and put them right again after a lead or two, or a course or two, the average umpire would probably know nothing about it. Everything came out all right in the end, and so the peal must have been rung true.

There was an instance which affords a good illustration. Years ago the Cumberlands rang the first peal of Stedman Triples in hand. They had a first-class band and rang in the presence of many ringers well known at the time, including several College Youths. Afterwards William Cooler asserted that John Cox had shifted his pair for nearly a course and put them right just before the course-end. The point is that not one of the other witnesses could say what had happened, and to this day no one knows whether the College Youths or the Cumberlands have the honour of ringing the first peal of Stedman Triples on handbells. Both societies, I believe, still claim it.

I do not say that there are not many ringers who could, if they wished, properly umpire a peal, but they are not usually available.

In ordinary circumstances there are no more reasons why umpires should be insisted on for handbell peals than for tower-bell peals. Or, if you like to put it so, there is just as much necessity for umpires in tower-bell peals as there is in handbell peals. In either case the best safeguard is the honesty of the conductor and the band. And in both cases, if the truth is told, there are some men whose standards are not so high as they might be and as others' are.

HANDBELL RINGER.

THE FIRST PEAL OF LONDON.

Dear Sir,—I read with much interest your leading article of last week.

I am in full favour of the rule which the A.S.C.Y. have, that all handbell peals must have an umpire, but there is still another point to watch. When the first peal of London was rung on handbells, although there were two umpires, the truth was questioned by a certain London society. But when the fourth peal of London was to be attempted, the society were asked to send any two members they liked to umpire the peal, which was rung at Finsbury Pavement House, City, on July 20th, 1904, conducted by William Pye. The umpires were J. W. Golding and H. R. Pasmore, of the A.S.C.Y., also A. W. Brighton and A. T. King, of the Middlesex County Association.

E. W. PYE.

9, Park Villas,
Chadwell Heath.

SHIRLEY LADY RINGER MARRIED.

The marriage took place at Shirley Church, near Birmingham, on August 8th, between Miss Kathleen Morris, only daughter of Mr. and Mrs. Arthur Morris, of Shirley, and Lance-Corpl. J. Watts, R.A.C., of Bournville.

Both the bride and her father are members of the St. Martin's Guild, Birmingham. Mr. Arthur Morris is the popular Ringing Master at Shirley Church, and his daughter has made good progress in Minor ringing on the six bells in the tower.

After the ceremony, a reception was held, to which the Shirley ringers and friends were invited, and the opportunity was taken to wish the bride and bridegroom every happiness and prosperity.

A WEEK-END AT LEICESTER.

SUCCESSFUL HANDBELL MEETING.

In spite of present difficulties, a successful week-end of handbell ringing commenced on Saturday, August 1st, at 'The Wayside,' Narborough Road South, Leicester, the home of Mr. and Mrs. Harold J. Poole.

On Friday evening all those taking part assembled at 'The Wayside,' and the peals were duly arranged. The self-styled amateurs and professionals mixed very well indeed, and the 'try-out' was quite successful.

The first attempt was made after breakfast, and was a peal of Bob Major for the youngsters. After about an hour's ringing, a well-seasoned member of the band, who certainly should have known better, decided that second's place should not be made over the treble, and unfortunately it was not a case of a 'Bob Made Yer' do it, and in consequence somebody didn't dodge in 3-4 or 5-6 or 7-8. Well, no decent method will stand that messing about, and therefore we stopped. This was one of the important peals of the week-end, and further attempts would have to be made until the job was done.

MR. HAROLD J. POOLE.

In the afternoon a start was made for Stedman Caters and, after good ringing, the conductor decided that he wanted the treble where it certainly was not, and at the subsequent inquest a verdict was returned that by culpable negligence the said treble should have made a bob which was not called. Here, again, Fabian never intended the method to be 'mucked about' in that way, and that's why we stopped.

In the evening the old maxim, 'Third time pays for all,' was right, because a good peal of Stedman Cinques was rung. If the two previous attempts are regarded as rehearsals, then this peal is rightly described as the 'Opening Chorus.'

On the Sunday morning a further attempt was made for the 'Youngsters' Bob Major,' and somewhere about half-way one of the professionals shifted one of his bells with one of the bells of one of the amateurs. Well, one couldn't expect the Amateur Association to stand for that, so again we stopped.

Another very special event was a handbell peal for the hostess. She had rung only one peal on handbells, and that was 22 years ago, when she rang the tenors to Grandsire Triples.

After tea, another Alf, who had bravely battled a thunderstorm on a cycle, joined the party, and a further attempt was made for Stedman Caters. Again, it was splendid ringing, and this time the turning course was negotiated without incident, but, alas! the conductor had not counted the bobs at five properly, and insisted on omitting one, in spite of strong representations to the contrary. Anyhow, as might be expected, the bell that should be in treble's place was not, and the one that was there shouldn't have been, so again we stopped. In accordance with the traditions of all good conductors, the blame was duly put on the unfortunate individual who showed the conductor the composition and told him that both halves were the same. Ah! the truth will out sometimes.

On Monday morning a further and successful attempt was made for the Bob Major. This just illustrates what practice will really do. Enid Richardson completed her first peal of Major, and the ringers duly extended their congratulations to her. This peal was also rung in celebration of Sergt. Pilot A. J. B. Wayman gaining his wings. Stedman Caters was arranged to be rung at the same time as this peal, but Old Joe the 'Rhythm King' failed to put in an appearance, and it was decided to start for Stedman Triples. This came to grief after about an hour, the band being told by the conductor that one really needed brains for such a peal to be successful.

In the afternoon a peal of Stedman Caters was given a good send-off by the siren sounding, and the 'All Clear' was heard above the roll of the 3rd course-end. Apart from some comments about the pace of the ringing, this peal was rung without incident.

(Continued in next column.)

THE YORKSHIRE ASSOCIATION.

JOINT MEETING AT RAWMARSH.

A joint meeting of the Southern District of the Yorkshire Association, the Sheffield and District Society, the Barnsley and District Society, and the Doncaster and District Society was held at Rawmarsh on Saturday, August 8th.

By kind permission of the Rector, Canon F. S. Scovell, the Church Room was available from 2 p.m. for handbells, etc.

Members were present from Sheffield Cathedral, St. Marie's, Rotherham, Felkirk, Eastwood, Handsworth, Eckington, and the local company. Welcome visitors were Sergt. Norman Chaddock, from Northampton, Pte. C. W. Woolley, from Bushey, and Pte. W. Kerr, from Finningley. An apology for absence was received from Mr. C. Haynes, Ranmoor, who was indisposed.

A short service in the church was conducted by Canon Scovell, assisted by the Rev. Stephen Barker, curate, and an excellent tea was provided in the Church Room, at which 35 sat down.

At the business meeting, the chair was taken by the Rector, supported by Vice-President Mr. George Lewis, acting district hon. secretary, Mr. S. F. Palmer, of the Yorkshire Association, Mr. D. Smith, hon. secretary of the Barnsley and District Society, Mr. G. G. Graham, hon. secretary of the Sheffield and District Society, the Rev. Stephen Barker, curate, and Mr. W. Roberts, churchwarden.

Mr. T. C. Ryder, speaking with emotion, paid a glowing tribute to the memory of the late Mr. Albert Nash, of Rotherham, whose sudden death, at the age of 56 years, came as a great shock a few days previously. Mr. Nash had worked his way up from youth to become manager of the coke ovens of the Wath Main Colliery Company. Although he suffered terrible injuries to his hands by an explosion in his early days, he had supreme control of his rope and handbells, and became master of the art. He rang upwards of 200 peals, many of which he conducted. As a conductor and sound ringer, he was held in the greatest respect by everyone with whom he came in contact. He was a staunch and loyal member of the Yorkshire Association and kindred societies for nearly 40 years, and his place will be very difficult to fill.

The place and date of the next meeting was deferred until next springtime, the arrangements being left in the hands of the hon. district secretary.

Mr. S. F. Palmer stated that a notice of motion had been passed at Selby whereby the financial year end in the future would be on December 31st instead of September 30th. The committee considered it would ensure a greater representation at the annual general meeting in the spring than in January as at present. The motion would come up for ratification at the next general meeting.

Votes of thanks were accorded to the Rector for his interesting address on 'The Silence of the Bells' at the service and for his presence at the tea and meeting, and also to Mrs. F. C. Wilson and the ladies for so kindly providing the tea.

Canon Scovell said he was pleased to find that the interest of the association was being maintained by the members, and gave them a hearty welcome to Rawmarsh. He assured them they could come again, and hoped the next time the bells would send forth their joyous sounds of victory.

The Rev. Stephen Barker and Mr. W. Roberts also expressed their appreciation of the good work done by the association and the members individually.

Mr. M. E. Wilson (Sheffield Cathedral) was elected a member of the district committee in place of Mr. A. Nash.

A collection in aid of the Bell Repair Fund amounted to £1 1s.

An adjournment was then made to the tower, when silent touches of Plain Bob, Treble Bob and Grandsire Triples were brought round to the enjoyment of everyone. It was a very successful meeting.

HALE, CHESHIRE.—On Saturday, August 8th, at 6, Stanway Drive, 1,392 Bob Major: David Vincent 1-2, Gordon G. Vincent 3-4, Allen F. Bailey (conductor) 5-6, Alan J. Brown 7-8.—On Sunday, courses of Grandsire Caters, Kent and Oxford Treble Bob Major were also rung, with Mrs. D. Vincent, John J. and Peter D. Vincent taking part.

A WEEK-END AT LEICESTER.

(Continued from previous column.)

In the evening a peal of Bob Major came to grief after about one hour's ringing. This time the conductor admitted very meekly, 'I've missed a bob.' Here was clearly an open confession by the conductor. Who now says a conductor will never admit being wrong? The second eleven were more successful with a peal of Stedman Caters, Alf really doing his stuff well.

Tuesday morning came with the reparture of Alf, and then a start for Bob Major as a grand finale. Bob Royal had been arranged, but for some reason yet unknown George Stedman—the son of Josiah—failed to come.

Details of the peals rung during the week-end were published last week.

H. J. P.

NOTICES.

THE CHARGE FOR NOTICES of Meetings inserted under this heading is at the rate of 4d. per line (average 8 words) per insertion, with the minimum charge of 2/-.

For Notices other than of Meetings 6d. per line (minimum 2/6).

NOTICES must be received NOT LATER THAN MONDAY.

'The Ringing World' can be sent direct by post from the Editorial Office for 4s. 3d. per quarter.

All communications should be sent to THE EDITORIAL OFFICE OF 'THE RINGING WORLD,' LOWER PYRFORD ROAD, WOKING, SURREY.

MIDDLESEX COUNTY ASSOCIATION AND LONDON DIOCESAN GUILD.—North and East District.—Meeting at St. Mary's, Finchley, on Saturday, August 22nd, at 3 p.m. Service at 4.30 p.m. Six-tower bells for silent ringing, also handbells. — T. J. Lock, 57, Holloways Lane, North Mimms, Hatfield, Herts.

MIDLAND COUNTIES ASSOCIATION.—Leicester District.—A meeting will be held at Kibworth on August 22nd. Ringing (8 bells, silent) at 3 p.m. Service at 4.40 p.m., followed by tea.—Herbert W. Perkins, Hon. Dis. Sec., 53, Landseer Road, Leicester.

SOCIETY OF ROYAL CUMBERLAND YOUTHS.—The annual general meeting will be held on Saturday, August 29th, at 3 p.m., in the Vestry Hall, St. Martin's-in-the-Fields, London. Handbells from 3 to 4 p.m. Business meeting at 4 and tea in the canteen at 1s. per head, 6 p.m. Tea can only be provided for those who notify me not later than August 24th. Please bring own sugar.—G. W. Steere, Hon. Sec., 46, Milton Avenue, Sutton, Surrey.

ESSEX ASSOCIATION.—South-Eastern District.—The next meeting will be at Springfield on Saturday, August 29th. Ringing on 'silent' bells and handbells from 3 p.m. Service at 4.30. Tea and business meeting after. All who require tea must notify me by Thursday, August 27th.—H. W. Shadrack, Hon. Dis. Sec., 48, Arbour Lane, Chelmsford.

ANCIENT SOCIETY OF COLLEGE YOUTHS.—The next meeting will be held on Saturday, August 29th, at the Bell Foundry, Whitechapel Road, E.1, at 3 p.m.—A. B. Peck, Hon. Sec., 1, Eversfield Road, Reigate.

WINCHESTER AND PORTSMOUTH DIOCESAN GUILD.—The annual general meeting will be held at Winchester on Saturday, August 29th. Executive Committee meeting 2.30. General meeting at 3.15, followed by tea; all at Dumper's Restaurant, High Street. Handbells available. Service in Cathedral at 5.15. All ringers and visitors welcomed. All those requiring tea must let me know by Wednesday, 26th.—F. W. Rogers, Hon. Gen. Sec., 35, Carisbrooke Road, Milton, Portsmouth.

WORCESTERSHIRE AND DISTRICTS ASSOCIATION. — Northern Branch. — Monthly meeting at Wollaston (D.V.), Saturday, August 29th, 3 p.m. Bells (6) available ('silent'). Tea 5.30 p.m. Handbells and social evening to follow.—Bernard C. Ashford, Sec., 9, Bowling Green Road, Stourbridge.

SALISBURY DIOCESAN GUILD. — Dorchester Branch.—A meeting will be held at Stratton on Saturday, August 29th. Handbells, etc., from 3 p.m. Service at 4.30. Tea and meeting to follow. Kindly notify early for tea. Suitable local train service. — C. H. Jennings, Hon. Sec., 59, Portland Road, Wyke Regis, Weymouth.

HERTFORD COUNTY ASSOCIATION.—Meeting at the Studios, Falconer Road, Bushey, Saturday, August 29th.—Handbells 3 p.m. Tea 5.30 p.m.—H. G. Cashmore, 24, Muriel Avenue, Watford.

LEEDS AND DISTRICT SOCIETY.—The next meeting will be held at Calverley on Saturday, August 29th. Handbells in the schools from 3 p.m. Business meeting at 4 30 p.m. A good attendance is requested.—H. Lofthouse, Hon. Sec., 8, Wortley Road, Leeds 12.

WORCESTERSHIRE AND DISTRICTS ASSOCIATION.—Western Branch.—The next meeting will be held at Claines on Saturday, September 5th. Tower bells available at 3 p.m. (silent ringing). Service in church at 4.15 p.m., followed by business meeting. Further ringing afterwards.—Ernest F. Cubberley, Branch Hon. Sec. and Treasurer, Park Cottages, Kempsey, near Worcester.

CHANGE OF ADDRESS.

CROSS. — The address of Instructor Lieut. R. G. Cross is now Sunwaves, 27, Neville Avenue, Hove, Sussex. Tel. Hove 4743.

FOR SALE.

SET OF TWELVE HANDBELLS in C. Size 15. Price £10.—Sandriggs, Aldershot, Hants.

ESSEX ASSOCIATION.

MEETING AT LAWFORD.

Eight towers—Great Bentley, Thorington, Mistley, Dedham, Ipswich, Rushmere, Sudbury and Halstead—were represented at the meeting of the North-Eastern Division of the Essex Association, held at Lawford on August 1st.

Handbells were made good use of from an early hour until 8 p.m. and many methods were rung from Minor to Royal. A choral service in the church at 4.15 was conducted by the Rector, the Rev. C. E. Fynes Clinton, who gave an interesting address. Miss Hilda Snowdon was at the organ.

Mr. Charles J. Sedgley presided over the business meeting at the Ogilvie Hall, and referred to the late Mr. J. S. Goldsmith and the great work he had done. A suggestion from the Suffolk Guild to hold a joint meeting at Stratford St. Mary on September 12th was agreed to.

St. Michael's, Coslany. On Monday November 19th 1792 was rung by a select company 1792 changes of that ingenious Peal call'd Norwich Court Bob, the masterly performance of which did great credit to the company and afforded much pleasure to those who understand and admire that art.

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