

# The Landmark Trust

## PETERS TOWER

### History Album



**Written and researched by Charlotte Haslam, 1984  
Re-presented June 2007**

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**BASIC DETAILS**

<b>Built:</b>	<b>1885, architect unknown</b>
<b>Acquired by Landmark:</b>	<b>1982</b>
<b>Architect for restoration:</b>	<b>John Vivian of Vivian &amp; Mathieson</b>
<b>Builders:</b>	<b>Willcocks &amp; Stephens</b>
<b>Clock:</b>	<b>Smith of Derby</b>
<b>Ironwork:</b>	<b>Erme Wood Forge</b>
<b>Work Completed:</b>	<b>1983</b>

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Peters Tower, photo, *Country Life*

## Summary

Peters Tower and the cottages around it were built in 1885 by William Peters in memory of his wife, Mary Jane. The Peters were a family of wealthy Liverpool merchants, who had made their money in the eighteenth century, trading with the American colonies (one branch of the family moved to Pennsylvania, where descendants still live). In the early 19th century, Ralph Peters III encouraged his three sons to take up careers not connected with trade, and in addition bought each of them a property in a different part of the country. William was the second son; he went into the army, where he served for a few years with the 7th Dragoons before his father settled on him the 400 acre estate of Harefield, in the parish of Lympstone. Harefield is a late Georgian house, rather plain (today, it is a preparatory school and the wider estate is managed by a family trust). William Peters seems to have had little difficulty in being accepted by the County establishment, taking on the traditional roles of JP and chairman of the local Conservatives. He died in 1896.

The following entry for Tuesday, 2 June, 1885 in *The Devon and Exeter Daily Gazette* sets the scene after his wife's death:

### *Lympstone Memorial Tower*

*'The Memorial Tower and Cottages at Lympstone, erected by Mr W.H. Peters, of Harefield, in memory of his widely-revered wife, are rapidly approaching completion, and the work in its entirety will form a most fitting tribute of esteem and regard for the deceased lady, whose loss is much felt by all classes of society, especially by the poorer inhabitants of the parish. The memorial is erected on a piece of ground that was for a long number of years occupied by the New Inn, in the lower part of the town, and adjacent to the Railway Station. The cottages are just in the very place where the families which they are intended to accommodate would wish them to be - by the edge of the river, where the fishermen mostly congregate. The memorial buildings comprise a substantial clock-tower, some 70 or 80 feet high, and a commodious block of twelve cottages, suitable for small families. From the former a magnificent view of the estuary of the Exe can be obtained. The memorial cottages are arranged as a series of twelve convenient buildings, and will be let at a mere nominal rent, so that they will be a great boon to the class which they are intended to benefit. The whole work is now well forward, and will be inaugurated at no very distant date. The tower is a landmark for many miles around, and the structure is an object of prominence and much interest. The entire work has been under the superintendence of Mr Sivell, builder, of Lympstone, and reflects credit on him.'*

No mention is made of an architect, but it is possible that there was none, the builder drawing up the design himself, perhaps after studying the Campanile in St. Mark's Square in Venice, or obtaining it from a pattern book. The tower was also intended to serve as a refuge for fishermen caught out in bad weather and unable to return to their homes in other villages along the estuary. A fireplace provided on the first floor allowed them to keep warm. The clock is a typical Victorian gesture to encourage good timekeeping, though for many years, until mechanical failure solved the problem, the striking of the clock at night was a source of complaint from many of its nearest neighbours.

By 1980 however, the tower had long been a much-loved part of the scene and there was general concern at its increasing dereliction, and the damage being done to it by vandals. An initial application to turn the tower into holiday accommodation by the Harefield Trust, who owned it, was rejected on grounds of fire safety. So in 1982, the Harefield Trustees transferred it to the Landmark Trust who had greater experience in such matters.

### **Restoration and Conversion**

The structural restoration of Peters Tower was mainly straightforward; a greater challenge was how to fit the amount of accommodation needed into the very small space available. It helped that all interior carpentry had anyway to be renewed, since the floors were rotten and the stairs collapsing. An extra floor was also inserted where the old clock mechanism had been. The principles of yacht design informed the arrangement of furniture and fittings. The architect, John Vivian, spent some time at Mashford's boatyard in Plymouth, and in a chandlery, before making his own plans for an interior that resembles that of a yacht, from galley kitchen to bunk beds. Teak (whose use in those days was less frowned upon) was used throughout, all corners are rounded off and light fittings and knobs are made of brass. The lanterns in the living room and the bathroom are copies of those on HMS Warrior, a 19th century ironclad battleship, then under restoration in Hartlepool with help from Landmark's founder, the late Sir John Smith, and the Manifold Trust. (Today, HMS Warrior can be visited in Portsmouth Docks).

Extra fire precautions were inevitably required. The County Fire Prevention Authority agreed that fixed fire escapes would not be practical, and that installing smoke detectors and using special 1-hour fire resistant timber for floors and doors would be precaution enough. To save as much space as possible the new staircase was to be a spiral and eventually a firm was found that made a good Victorian replica in cast aluminium - another yacht building material.

The external brickwork was in poor condition with parts of the parapet, having to be rebuilt completely. In the most visible places old bricks were re-used, obtained by unblocking windows on the north and south elevations. The whole of the exterior was cleaned using bristle and soft wire brushes before repointing.

As for the roof, although the rafters were mostly sound, the boarding and the wall plates were rotten. These were replaced and the original slates relaid. The leadwork was also renewed, as were the gable louvres and the access door. The finishing touches to the restoration were of course the repair of the clock and the weather vane. Very little of the latter survived in good condition - most of the scroll work and two of the letters had to be renewed - but what remained was cleaned and repaired. The forge that did the work, Erme Wood Forge, Ivybridge, also made the new fanlight above the front door (itself the old one repaired). The original hand-wound mechanical clock had unfortunately deteriorated beyond the point where it would be possible to get it going again without almost complete rebuilding. The actual clock faces, and the bell, were perfectly all right however; after minor repairs by Smith of Derby they are now fulfilling their proper function but with a new electric motor, complete with restart unit, striking mechanism and - since anticipatory protests were immediately voiced by nearby residents - night-time silencing.

## Peters Tower

Peters Tower and the cottages around it were built in 1885 by William Peters in memory of his wife, Mary Jane. The Peters were a family of wealthy Liverpool merchants, who had made their money in the eighteenth century, trading with the American colonies (one branch of the family moved to Pennsylvania, where descendants still live). In the early 19th century, Ralph Peters III encouraged his three sons to take up careers not connected with trade, and in addition bought each of them a property in a different part of the country. William was the second son; he went into the army, serving for a few years with the 7th Dragoons before his father settled on him the 400 acre estate of Harefield, in the parish of Lympstone. Harefield is a late Georgian house, rather plain (today, it is a preparatory school and the wider estate is managed by a family trust). William Peters seems to have had little difficulty in being accepted by the County establishment, taking on the traditional roles of JP and chairman of the local Conservatives. He died in 1896.

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### LYMPSTONE MEMORIAL TOWER.

The Memorial Tower and Cottages at Lympstone, erected by Mr. W. H. Peters, of Harefield, in memoriam of his late widely revered wife, are rapidly approaching completion, and the work in its entirety will form a most fitting tribute of esteem and regard for the deceased lady, whose loss is much felt by all classes of society, especially by the poorer inhabitants of the parish. The memorial is erected on a piece of ground that was for a long number of years occupied by the "New Inn" in the lower part of the town, and adjacent to the Railway Station. Besides the consideration of the demolishing of one of the oldest houses in the parish for the new erections, is the pleasing fact that the Cottages are just in the very place where the families which they are intended to accommodate would wish them to be, viz., by the edge of the river, where the fishermen mostly like to congregate, and where within a cable's length of their homes are moored their little fishing crafts—on which they like so much to gaze—while either at work or at leisure. The memorial buildings comprise a substantial clock-tower, some 70 or 80 feet high, and a commodious block of twelve cottages suitable for small families. The former commands a magnificent view of the Estuary of the Exe, and contains three or four floors of observatories, from which most delightful scenes may be obtained, and which may be fitted up for the luxurious ease of its worthy owner, or for the comfort and pleasure of his numerous friends and visitors. The memorial cottages are arranged as a series of twelve convenient buildings, and at a mere nominal rent will be a great boon to the class of people they are intended to benefit. The whole work is now well forward, and will be inaugurated at no very distant date. The pinnacle and vane of the Tower is a landmark for many miles round, as also is the structure an object of attractive prominence and much interest to visitors, as well as to travellers as they observe it in passing the Lympstone Station on the Exeter and Exmouth Railway. The entire work has been constructed under the superintendence of Mr. Bass Sivell, builder, of Lympstone, and reflects great credit on him for the way in which the work has been carried out.

Exmouth Journal 30 May 1885

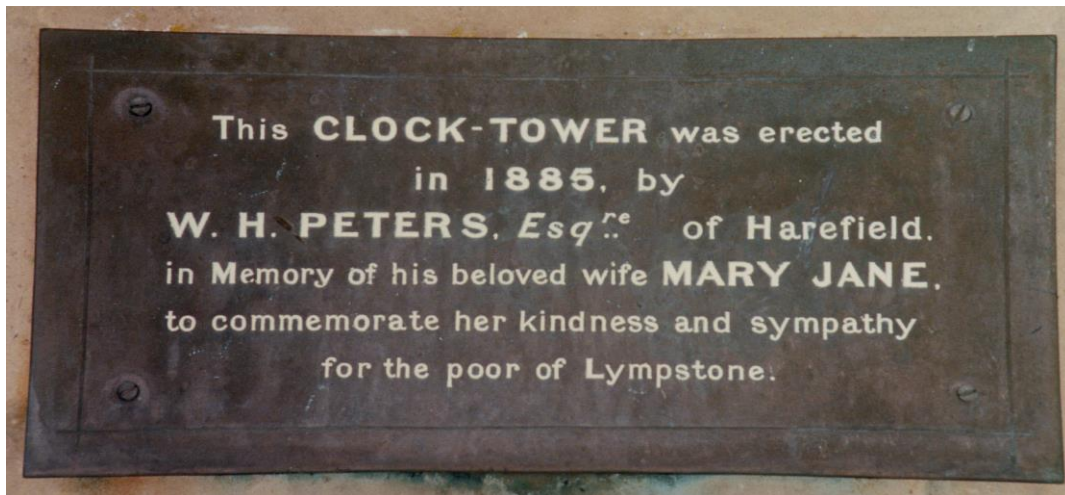
Flower Pots, Wasp Destroyer, Virgin Cork, &c., can be procured of GODFREY, Seedsman, Rolle Street.

LYMPSTONE.—In our account of the Memorial Tower, last week, it should have been stated that the entire work had been designed and constructed under the superintendence of Mr. Bass Sivell. That gentleman was not the builder, as was erroneously printed.

Exmouth journal 6 June 1885



*are arranged as a series of twelve convenient buildings, and will be let at a mere nominal rent, so that they will be a great boon to the class which they are intended to benefit. The whole work is now well forward, and will be inaugurated at no very distant date. The tower is a landmark for many miles around, and the structure is an object of prominence and much interest. The entire work has been under the superintendence of Mr Sivell, builder, of Lympstone, and reflects credit on him.'*



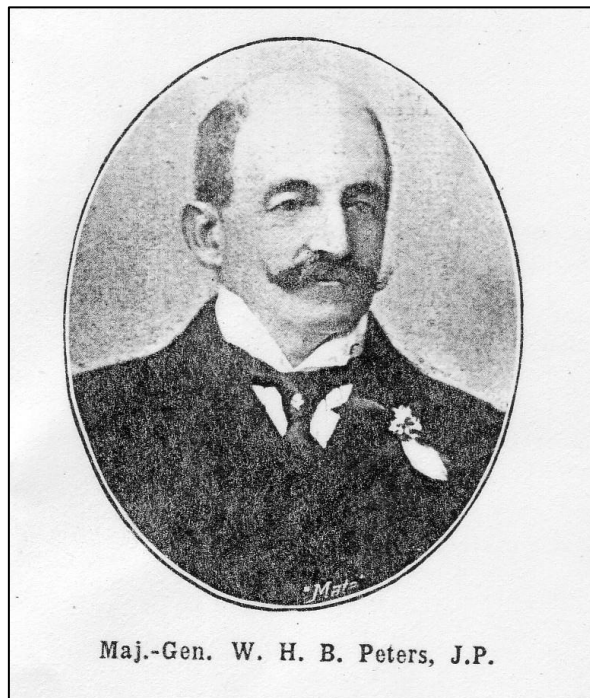
No mention is made of an architect, but it is possible that there was none, the builder drawing up the design himself after studying the Campanile beside St. Mark's Basilica in Venice and all its descendants, or obtaining it from a pattern book. The tower was also intended to serve as a refuge for fishermen caught out in bad weather and unable to return to their homes in other villages along the estuary. A fireplace was provided on the first floor to enable the refugees to keep warm. Not everyone was in favour of the tower. C.G. Harper in 'South Devon Coast' (1907) praised the appearance of Lympstone from the other side of the estuary: 'There it nestles; a little strand with little houses and a little church, set down in an opening between two little cliffs of red, red sandstone; but when you arrive there, Lympstone is modern, the church has been rebuilt, with the exception of the tower, and an ornate clock-tower, Jubilee or other, flaunts it insolently.' For many years too, until mechanical failure solved the problem, the striking of the clock at night was a source of complaint from many of its nearest neighbours.



**Lympstone, c. 1896. Note how much lower the shingle is than today. The thriving fishing industry is apparent in the rows of nets hung out to dry, and the village also benefited from rich oyster beds planted in the area.**

By 1980 however the tower had for a long time been accepted with affection as part of the landscape, and there was general concern at its increasing dereliction, and the damage being done to it by vandals. At about this time an application was made to convert the tower into holiday accommodation. The planning committee refused permission, though, on grounds of safety, there being no emergency exits from the upper floors in the plans that were put forward. The Trustees of the Harefield estate, who owned the tower, felt that a body with greater experience of such conversions should be approached, and in 1982 the tower was transferred to the Landmark Trust.

The Peters Family



**The builder of Peters Tower**

The Peters family of Lymptone tell a typical Victorian story, illustrating exactly the process by which such a thing as an 'upper middle class', accepted by the older landed gentry but with its origins in trade, came into existence; not just by the stereotype of acquiring land but more particularly by military and public service. William Peters, who built the clock-tower and cottages in memory of his first wife, Mary Jane, came from a family of wealthy Liverpool merchants. They had made money trading with the American colonies in the 18th century, and one branch of the family settled in Pennsylvania, where their descendants still live. Then in the early 19th century Ralph Peters III encouraged his three sons to take up careers not directly connected with trade, and in addition bought each of them a property in a different part of the country. William was the second son; he went into the army, where he served for a few years with the 7th Dragoons before his father settled on him the 400 acre estate of

Harefield, in the parish of Lymptone, shortly before his own death in 1838.

Harefield is a late Georgian house, rather plain, and described in 1907 by F.J. Snell in 'Devonshire: Historical, Descriptive, Biographical' as 'standing in its own extensive well-laid out grounds at a considerable elevation; extensive and magnificent views of the western side of the Exe estuary are commanded.' William Peters seems to have had little difficulty in being accepted by the County establishment, taking on the traditional roles of JP and chairman of the local Conservatives, and writing letters in support of the Church of England to 'The Rock.' He died in 1896.



**Harefield House 2004**

His son, William Brooke Peters, born in 1842 and educated at Harrow, established his family's position more securely, and in Snell's *Devonshire* his portrait comes in the section on County Gentry (though not yet qualifying for County Families). He entered a Hussar regiment in 1861, and rose to the rank of Major-General before retiring in 1887. He also

became a JP, served as President of the Constitutional Club in Exeter, and of the Horse-Show, and married the Hon. Roslinda Clifford-Butler, only daughter of 24th Baron Dunboyne. He died in 1913. His elder son, Harry, went to New College, Oxford, and was killed soon afterwards in the First World War. Arthur, the younger son, had a successful career in the navy, being awarded the DSO, and culminating with a knighthood and the position of Admiral.

With him, however, the story - and again it is a typical one of fading out after three generations - comes to an end. At the beginning of the Second World War he moved out of Harefield, first of all to a cottage in the park, later to Sidmouth. Harefield briefly became a country club and then, in about 1950, a prep. school, which it still is. Admiral Sir Arthur died in 1979, leaving an only daughter who died without children a year or two later. The Harefield estate, some time previously made over to a family Trust, is now in the care of some cousins living in South Devon.

## Clocks and Clock Towers

Today it has become usual to tell the time by looking at your own watch, so that the public clock, although still useful in railway stations, is not the essential part of life that it formerly was when watches were luxury objects, for the prosperous and retirement presents only. It was because of this need, as well as for prestige, that at some time between the mid-17th century, a time of great advances in clock-making, and the end of the Edwardian period, the great majority of towns and many villages acquired their own clock. The higher up the clock face itself was, the more accessible it became to a wider area, and by chiming the hour the information was carried further still. So the earliest public clocks are mainly in church towers, a few surviving from the Middle Ages and rather more from the 16th and 17th centuries.

Other prominent buildings were Market Halls, Town Halls, and Guild Halls; clocks were constructed on many of these in the 17th and 18th centuries, and as the Industrial Revolution and the development of public transport made people more conscious of time and punctuality in the late 18th and early 19th centuries, few municipal buildings were erected without one. When there were two or more clocks in the same town and, as in Oswestry in the early 19th century, each obstinately told a different time, some confusion could be caused.

Time keeping was particularly important in towns that made their living from the sea, where the time of high and low tides regulated the business of the day. Small ports could usually rely on the church clock, but if as a town grew the harbour came to be some distance from the centre, it often had a clock of its own, either on the tallest of the harbour buildings (the Royal Liver Building on the Pierhead at Liverpool being the ultimate example) or in a separate clock-tower.

Dover, for example, had a clock tower, as did Middlesbrough, an important 19th-century port, where the tower is thought to be by Philip Webb. Although they did of course exist before, - the most famous being the great stone tower of the Palace of Westminster built in 1365 and containing Great Tom - the clock tower as a building type is particularly associated with the 19th century, the most elaborate examples dating from its second half. Towers of any sort were popular in the Victorian period, but clock-towers especially seem to have had a strong appeal to the Victorian character, demanding as they did a mixture of confidence - they would be seen by everyone for a great distance and though seldom of architectural merit generally carried a good deal of ornament; practicality - they must work well and be of use to the community; and sentiment - the pretext for a clock-tower was very often to commemorate a particular person, a local benefactor perhaps, or an event, such as a Jubilee of Queen Victoria.

Part of the impetus for the building of clock-towers must have come from the new Westminster tower, Big Ben, completed in 1858. The architectural influences however were a mixture of the Italian Renaissance and Baroque - the campanile and the cupola - and the Flamboyant Gothic of the Low Countries' town halls, and their great central towers. Gothic was thought to allow for greater height, and freedom of design, as well as a more fanciful silhouette, but the Renaissance and Baroque could be just as successful in achieving impressive effects since although the main shaft had to be relatively plain, it could be extended indefinitely and then given an elaborate topknot. A tall pointed roof was common to both Gothic and Italianate.

The idea of the clock-tower as part of a building appealed strongly to the Corporations of northern industrial cities, whose own town halls, frequently near copies of those in Flanders, were going up in great numbers from the 1850s on.

Their towers, sometimes placed centrally, sometimes at an angle of the building, were often of ludicrous height and ornamentation, but became an indispensable symbol of civic pride. The builders of the smaller, but often equally absurd, freestanding towers which are to be found both on the coast and inland throughout the country, must have been inspired by a similar desire to provide a sea front or market place with a distinguishing 'feature.' The result, along with the later War Memorial, is one of the most familiar, if idiosyncratic, ingredients in the crowded picture of British urban architecture.



From C.F.C. Beeson, (1971) *English Church Clocks 1280-1850*

## Chapter One

### THE EARLY HISTORY OF THE MECHANICAL CLOCK

**C**LOCKWORK before the clock. Before it was perfected so as to become a time-measuring machine clockwork had a long evolutionary history of geared devices. These were made by the Greeks from the time of Archimedes and by the Muslim astronomers up to the early Middle Ages, and took the form of anaphoric clocks, models of the Ptolemaic universe, animated astrolabes and other planetary calculating instruments. As long as two thousand years ago there was made in Greece a complicated machine composed of metal gears, pinions, eccentrics, worms and a series of divided circles marked out in degrees and the signs of the Zodiac. This is The Antikytheria machine found in a sunken treasure ship in 1901, the earliest conception of an astronomical model of the universe. [Price, 1955, 1959]

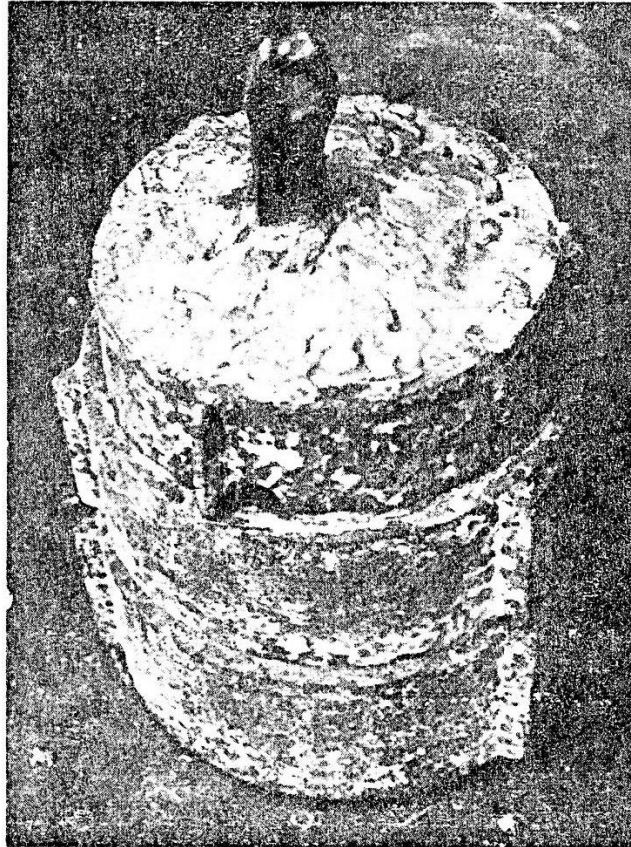


FIG. 1

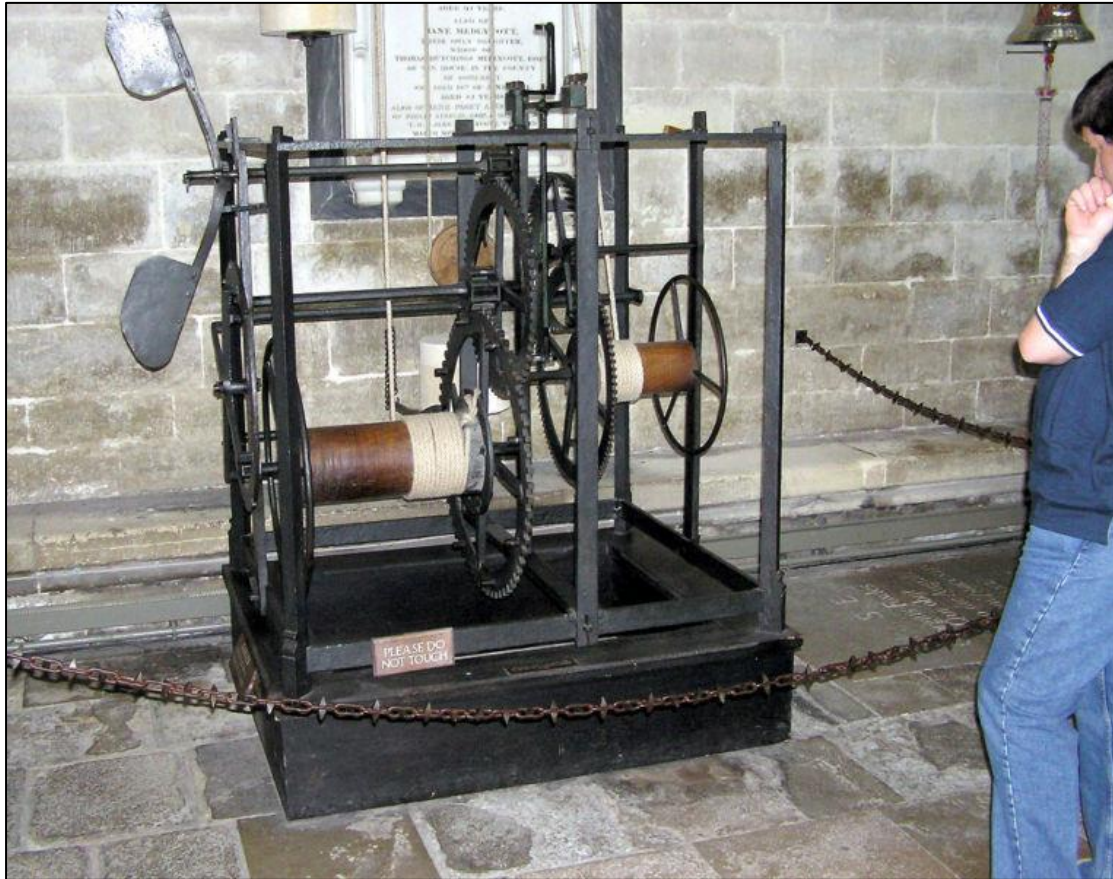
THE WEIGHT was the essential motive power for turret clocks for nearly seven hundred years until electricity began to replace it. Weights were cast in lead or iron or hewn in stone. In this one, made in 1673 for the church of Whaddon, Buckinghamshire, the lead was hammered into interlocking iron bands.

Clockwork existed. What was needed in order to regulate it automatically, so that it worked at uniform speed and measured the passing of time, was an escapement and a constant motive power. The latter, a weight drive, had already been used for other purposes. The elements of an escapement may also have been so used but unrecognised as such. Some mediaeval scholar-craftsman may have made an oscillating device "taking it, in all probability, from the weights at the end of the arms of those screw-presses so characteristic of Hellenistic and European technology. Then he applied it, in alternating opposition, to a wheel driven by the fall of a weight and found that it worked" [Needham, 1960]. Generally it is believed to have been first applied to a true mechanical clock sometime between 1277 and 1300. The argument for the first date is based on two documents, (a) a commentary by Robert the Englishman written in 1271 on the *Tractatus de Sphera Mundi* of Johannes de Sacrobosco, and (b) the *Libros del Saber de Astronomia* compiled in 1276/7 under the direction of Alfonso X, The Wise, King of Castile.

Robert states that in 1271 clockmakers have not found a method by which a wheel will make one complete revolution for every one of the equinoctial circle, that is, the time from sunrise to sunset divided into 24 equal parts. If they could do so they would have a timepiece recording the hours worth more than an astrolabe or other astronomical instrument. Six years later the Arab and Jewish astronomers in Spain, who had collected everything previously known for the astronomical archives of Alfonso X, were likewise unaware of any mechanical escapement. At this date Hispano-Moorish culture was one of the chief sources of learning.

The choice of the second date, 1300, is influenced by various documents written between 1280 and 1300 all using the term *horologium*, which was at first supposed to mean a water-clock or clepsydra. This interpretation is still repeated in some recent horological literature, but if the series of English records for this 20-year period is reappraised it will be seen to be more than a chronological coincidence and to represent an increasing response to the appearance of a new kind of time-measurement, the mechanical clock. A similar series of records before 1280 could reasonably be accepted as referring to *clepsydrae*, but none has so far been traced.

It has long been supposed that the mechanical clock was born in Italy or Central Europe and that the knowledge gradually spread westwards. Yet the following cases show that England was from the outset not less informed than other countries, and the same cases might even be used to argue a claim for English priority in the making of the first mechanical clock. Moreover they show a strong probability that a clock escapement existed before 1283. Historians are now generally agreed that the verge and foliot escapement was invented in the second half of the 13th century and, as C. M. Cipolla points out, it was not entirely by chance that the mechanical clock and the cannon appeared at approximately the same time. Both were the product of a remarkable growth in the number and quality of metal workers.



**Salisbury Cathedral, Wiltshire. The clock of 1386 after restoration in 1956, said to be the oldest clock in working condition.**

**A CLASSIFICATION OF TURRET CLOCKS  
IN ORIGINAL FORM**

WROUGHT IRON FRAMES			
1. DOOR FRAME Trains one above the other	2. FIELD GATE Trains end to end	a. Originally Foliot	b. Originally Anchor
3. PIVOTS IN SEPARATE VERTICAL BARS			
4. TRAINS END TO END		7. TRAINS SIDE BY SIDE	
5. External Count Wheel Hoop Wheel	6. Central Count Wheel No Hoop Wheel	8. Main Wheels Wrought Iron	11. Main Wheels Brass
a. Warning with peg on fly arbor	b. Three train movements (e.g. Wells)	c. Separately hinged horizontal Locking Piece in slot	Grouped by Finalis e.g. Knob ended Spiral or Hook Brass None
b. Separately hinged horizontal Locking Piece in slot	a. Separately hinged horizontal Locking Piece not projecting thro' slot	9. Peg and lever No Hoop Wheel	
c. Various other forms of locking Piece	10. Hoop Wheel	12. Peg and lever No Hoop Wheel	
14. PIVOTS IN FRAME POSTS or NOT IN VERTICAL BARS			
CAST IRON FRAMES			
15. FOUR POST	16. FLAT BED		

**TWO TRAIN MOVEMENTS**

WOOD FRAMES			
17. DOOR FRAME Trains one above the other			
18. Flail Locking		19. Kick Starting	
a. Foliot 'scape	b. Verge and Crownwheel 'scape	c. Anchor 'scape	Other types
20. FIELD GATE Trains end to end			
a. Foliot 'scape	b. Anchor 'scape		
21. PIVOTS IN SEPARATE VERTICAL BARS			
a. TRAINS END TO END	b. TRAINS SIDE BY SIDE		
22. PIVOTS IN OR ON POSTS			

Some Clock Towers



**Westminster Hall, built around 1365 showing Clock Tower. From a seventeenth-century etching by Hollar in the Grace Collection. (By courtesy of the Trustees of the British Museum.)**



**Redruth, Cornwall  
1828 & 1900**



**Downham Market, Norfolk  
1878**



**Epsom, Surrey. Built 1848.**



**Bradford 1869-73**



**Wakefield 1877-80**

Plans for 'Big Ben'**The Specification.**

CONDITIONS TO BE OBSERVED IN REGARD TO THE CONSTRUCTION  
OF THE CLOCK OF THE NEW PALACE OF WESTMINSTER.

*I. Relating to the Workmanlike Construction of the Clock.*

1. The clock-frame is to be of cast-iron, and of ample strength. Its parts are to be firmly bolted together. Where there are broad bearing surfaces, these surfaces are to be planed.

2. The wheels are to be of hard bell metal, with steel spindles working in bell-metal bearings, and proper holes for oiling the bearings. The teeth of the wheels are to be cut to form on the epicycloidal principle.

3. The wheels are to be so arranged that any one can be taken out without disturbing the others.

4. The pendulum pallets are to be jewelled.

*II. Relating to the accurate going of the Clock.*

5. The escapement is to be dead-beat, or something equally accurate, the recoil escapement being expressly excluded.

6. The pendulum is to be compensated.

7. The train of wheels is to have a remontoir action, so constructed as not to interfere with the dead-beat principle of the escapement.

8. The clock is to have a going fusee.

9. It will be considered an advantage if the external minute hand has a discernible motion at certain definite seconds of time.

10. A Spring apparatus is to be attached for accelerating the pendulum at pleasure during a few vibrations.

11. The striking machinery is to be so arranged that the first blow for each hour shall be accurate to a second of time.

*III. Relating to the possible Galvanic Connexion with Greenwich.*

12. The striking detent is to have such parts that, whenever need shall arise, one of the two following plans may be adopted, (as, after consultation with Mr. Wheatstone or other competent authorities, shall be judged best;) either that the warning movement may make contact, and the striking movement break contact, for a battery, or that the striking movement may produce a magneto-electric current.

13. Apparatus shall be provided which will enable the attendant to shift the connexion, by means of the clock action, successively to different wires of different hours, in case it should hereafter be thought desirable to convey the indications of the clock to several different places.

*IV. General Reference to the Astronomer Royal.*

14. The plans, before commencing the work, and the work when completed, are to be subjected to the approval of the Astronomer Royal.

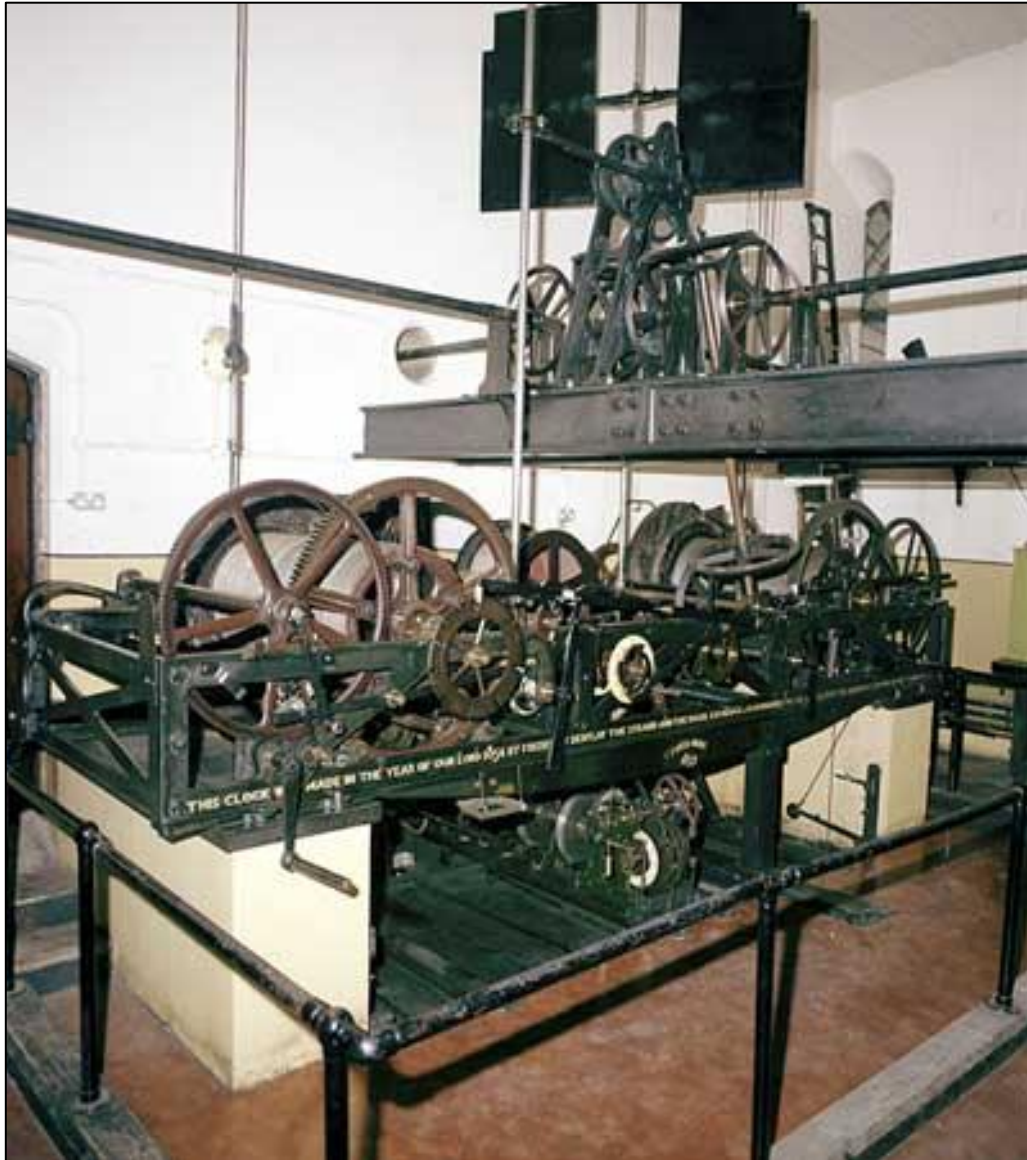
15. In regard to the Articles 5 to 11, the maker is recommended to study the construction of the Royal Exchange clock.

(signed) G. B. AIRY.

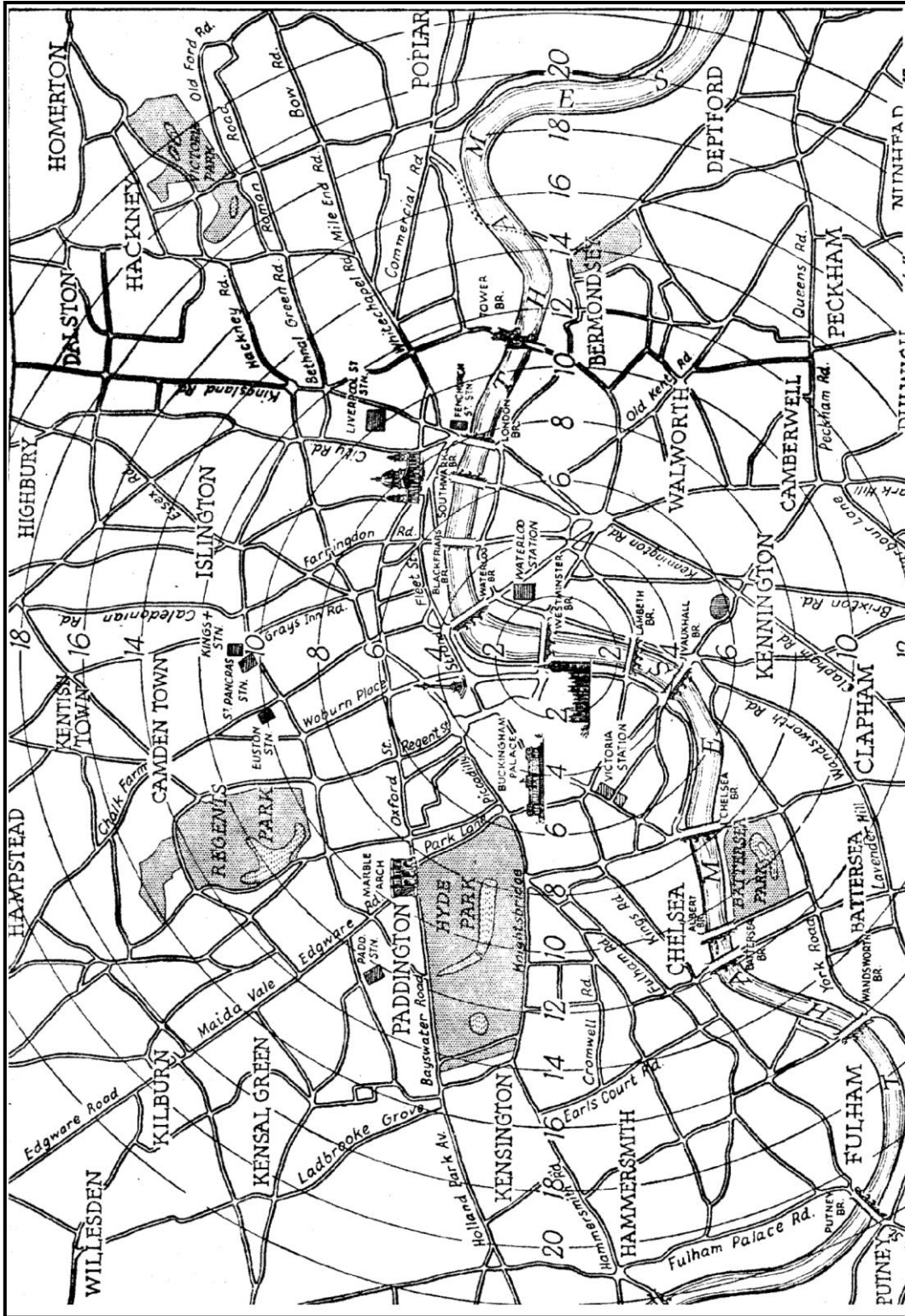
22 June 1846.

C. de Carle, *British Time* .

The Mechanism (movement) of Big Ben







The time it takes for the sound of Big Ben to travel. The figures against each circle represent seconds; the time can only be approximate since the rate of travel depends upon temperature, wind etc. (Sound travels at the rate of 1,110 ft per second approx.)



**Peters Tower in 1982, as it was when Landmark acquired it.**

## Restoration and Conversion

The structural restoration of Peters Tower was mainly straightforward; much more of a challenge was how to fit the amount of accommodation needed into the very small space available. There was some advantage in the fact that all interior carpentry had anyway to be renewed, since the floors were rotten and the stairs collapsing. It was also possible to fit in an extra floor where the old clock mechanism had been. For the next stage, the arrangement of furniture and fittings, the idea occurred to look closely at the space saving methods of yacht design. The architect, John Vivian, spent some time at Mashford's boatyard in Plymouth, and in a Chandlery, before making his own plans.

It is not accidental therefore, that the interior of the tower resembles that of a yacht, from galley kitchen to bunk beds. Teak is used throughout, all corners are rounded off and light fittings and knobs are made of brass. Where water is likely to be splashed about, the teak is protected with yacht varnish. The lanterns in the living room and the bathroom are copies of those on HMS Warrior, a 19th-century ironclad battleship, then under restoration in Hartlepool, with help from Landmark's founder, the late Sir John Smith, and the Manifold Trust. Today, HMS Warrior can be visited in Portsmouth Docks.

Because of the building's height, the regulations demanded extra fire precautions; it had been the lack of these that caused the previous scheme's failure. The County Fire Prevention Authority agreed however that fixed fire escapes would not be practical, and that installing smoke detectors and using special 1-hour fire resistant timber for floors and doors would be precaution enough. To save as much space as possible the new staircase was to be a spiral. It took some time to find one of the right dimensions which also satisfied the safety regulations, but eventually a firm was found that made a good Victorian replica in cast

aluminium - another yacht building material - which answered all requirements.

The external brickwork of the tower was in poor condition. Parts of the parapet, out of one corner of which an elder bush was growing, had to be rebuilt completely; in several the places bricks had to be replaced. In the most visible places old bricks, obtained by unblocking windows on the north and south elevations were used. However, the white bricks of the quoins and parapet facing had worn worse than the red and also needed to be renewed. These had come originally from Newton Abbot, but they are no longer made there. Luckily a new source was discovered, in Totnes, and so replacement was possible. The whole of the exterior was cleaned using bristle and soft wire brushes before repointing.

Inspection of the roof structure showed that although the rafters were mostly sound, the boarding and the wall plates were rotten. These were replaced and the original slates relaid. The leadwork was also renewed, as were the gable louvres and the access door. The finishing touches to the restoration were of course the repair of the clock, and of the weather vane. Very little of the latter survived in good condition - most of the scroll work and two of the letters had to be renewed - but what there was has been cleaned and repaired. The forge that carried out the work, Erme Wood Forge, Ivybridge, also made the Warrior lanterns and the new fanlight above the front door (itself the old one repaired). The original hand-wound mechanical clock had unfortunately deteriorated beyond the point where it would be possible to get it going again without almost complete rebuilding. The actual clock faces, and the bell, were perfectly all right however; after minor repairs by Smith of Derby they are now fulfilling their proper function but with a new electric motor, complete with restart unit, striking mechanism and - since anticipatory protests were immediately voiced by nearby residents - night-time silencing.

## Refurbishment in 1999

Peters Tower's functional purpose, and its exposure to the elements led to a refurbishment to the building in 1999. We found that the main walls were allowing water in which could have caused serious damage. The building was therefore closed for almost a year whilst our direct labour team of Philip Ford, Ken Long and others worked in the cramped confines of both Lymstone and Peters Tower to make improvement to the external walls, and completely refit the interior of the Tower. We have changed very little from the original restoration but have improved the kitchen and bathroom appliances and upgraded the arrangement for fire safety. The hardwood fixtures and fittings have all been carefully removed and refixed. Mechanical air extraction has been added to the Tower (with controls hopefully to make it less noisy than it need be) to dispel condensation, and observant Landmarkers will spot the ventilation to the dry lining on the walls. The clock has also been upgraded, and some of the more noisy mechanisms removed or relocated.

Peters Tower therefore remains much as it ever was, now better able to withstand the elements for many more years in the future.



Restoration work in 1999



**PETER'S TOWER.**

## Tower work is nearly over

WORK to renovate one of East Devon's strangest buildings is nearing completion after a nine-month project.

Peter's Tower is Lympstone's best known landmark, on the beach alongside the village harbour. It was built in 1885 "for the poor of Lympstone" by the wealthy Peters family, who were merchants from Liverpool.

In 1979 the trustees of the Peters' estate offered the tower to the Landmark Trust charity which looks after historic buildings, and since then it has been rented out as holiday accommodation.

Since last summer, the tower has been clad in plastic and covered in scaffolding, but soon the building will be back in use complete with its characteristic chiming clock and, for the first time in many years, its giant weather vane will be in working order.

A team of craftsmen from the Landmark Trust have been giving the four-storey tower a complete overhaul to rid the building of dry and wet rot.

The tower has a spiral staircase leading from the ground floor bathroom through each of the small rooms into the first floor kitchen, second floor lounge and a third floor bedroom which has only enough room for one bunk bed.

A spokesman for the Landmark Trust said the first booking had been taken for April 12.

The tower can be rented by calling 01628 825925.

April 1999