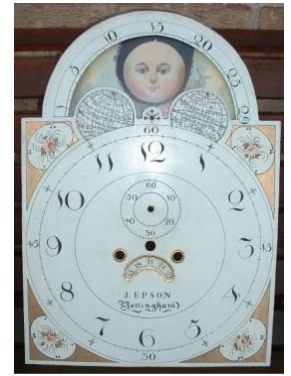


A Guide to buying a Grandfather Clock



This is a simple guide to help you when buying your first, or subsequent Grandfather Clock. The term Grandfather Clock is what most people call them, but they are also known as Long-case clocks, and more commonly in the USA they are also called Tall-case Clocks. I didn't want to write a 100 page detailed guide that you would get fed up with after 10 pages, so I've tried to fit in the most knowledge in the shortest time for you. This guide will help you with the basic choices that you will face, type of wood, duration of the clock, dial styles, case styles etc etc, as well as giving you a setting up guide for the two most common Grandfather Clocks, and a simple faults and fixes section at the end in case you run into any difficulties when setting your first treasured clock up. It will also give you a few pointers as to what to watch out, the dreaded "marriage", and other little tips and tricks. Remember though that the guides and examples given in the subsequent chapters are a general guide and will apply to most clocks, however it must be appreciated that clocks are still made today in the "Georgian style" which of course are not Georgian in age, therefore it is a guide and not a guarantee.

Dating your clock – simplified

Dials – Painted Dials

Ok, let's start with the dial, or face as some people call it. Many people will choose their clock purely on the look of the dial, and it is often the easiest way to get a rough idea of the date of the clock. With most Antiques, any restoration is detrimental to its price, but that is not the case with Long-case clocks, a well restored dial will ADD value to your clock, and of course give it a much nicer appearance. There are lots of different aspects that dials can have, Square or Arch dials, Roman or Arabic Numerals, seconds dials, date dials / calendar apertures, revolving moon dials and even automata which include rocking ships and moving figures that rock in time with the ticking of the clock. As a rule Moon dials are more expensive than standard dials, and automata are more expensive than Moon dials, again this is a general rule, and remember that it will be your clock, so pick something that YOU personally like, not what you think you *should* like!!



Painted dials started to be produced in the 1770's, so you know that no painted dial clock is older than that. The painted dials are divided into three periods, period 1, 2 and 3. Period one Clocks are the oldest and date from around 1770 to 1800. The first painted dials were made to replicate their more expensive Brass counterparts, therefore the corners of period one dials are often simple gold / gilt scrollwork, used to look like brass spandrels. On arch dials the scrollwork was often carried on into the arch and surrounded either the maker's signature, or a small painted scene. The



quickest way to identify if it is a period one dial is usually to check on the minute markings. On a period one dial the minutes are written every 5 minutes around the dial, ie 5, 10, 15, 20 etc all the way to 60 at the top. Period one dials that do not have the gold scrollwork usually have simple floral patterns or fruit patterns to the corners, often housed in a gold border. Here are a couple of examples of Period 1 dials.

Period 1 dials also tend to have the “dotted” markings separating the hours and the minutes, also around the seconds dial which are marked in ten second intervals. Not all dials are signed, but dial signatures are also an easy way to find out the age of a clock by looking in the various reference books that are readily available to buy. Remember, usually dials with the minute markings 5, 10, 15, 20 etc date from 1770 – 1800.

Period 2 Dials date from around 1800 – 1825/30, they can be similar to Period one dials but changes were gradually introduced over this period. The use of gilded scrollwork started to die out, and in its place came geometric corners, and also the start of the full painted scenes into the corners and top arch. The arch dials started to have very elaborate paintings, some dials had paintings in the centre too, but the easiest change to look out for was the differing use of the minute numbering. Whilst some dial makers continued to use the period one 5, 10, 15 etc, in period 2 the minutes changed to be only seen at the 15, 30, 45, and 60 minutes. Between these numbers appeared small stars, snowflakes, or other small deities. In some instances the markings of the seconds dial also changed to 15 second markings, 15, 30, 45 and 60.

Here are a couple of examples of Period 2 dials;



As you can see from these two dials, not all dials had Calendars. Sea shells were also a popular decoration for the corners in Period 2 dials, sometimes in the middle of a geometric pattern. Flowers and fruit were also used in this way. Remember, usually dials with the 15, 30, 45 and 60 minute markings are from 1800-1830.



Period 3 dials date from around 1830 – 1880 and beyond that date too in some instances. Period 3 dials are the most elaborate dials, with detailed paintings to the corners, often representing the four seasons of the year, or the four continents. The quality tends to drop off in Period 3 dials, but they are loud and “happy” looking dials with plenty of bright vibrant colours and interesting scenes in the arch. The minute markings have now been dropped totally in most cases, with no numbers at all, only the small ring with the minute divisions. The seconds and date dials tend to be back as Period one, 10, 20, 30 etc for seconds dials, and the Arabic Number one becomes “wavy” unlike the stark “1” on the earlier dials.

Here are a few examples of Period 3 dials;



Moon Dials

There are two main types of Moon Dial clocks, the square dial which is also called an “axe” moon, and the



arched dial. Moon dials come from all three periods but the date can be worked out the same using the minute numbering and corner decorations. The important thing to check is that the moon dial is actually working, ie revolving around as the clock works. If the moon is not working it can be a costly repair to get it back in working order. Also check that the moon dial isn't damaged, ask to see a picture of

both sides of the moon dial, there is usually a seascape on one side, and a landscape on the other, along with two Moon faces. Moon dials can also



have all the usual features, seconds dial, date dials, and below the moon there are two semi circles hemispheres. These can be detailed maps of the world, or simple paintings as the examples here show, again it all comes down to personal preference as to which one you like the best. Beware of some dials that have simulated Moon dials, this is just a standard dial that has a moon dial painted in the arch to appear like a moon dial. Of course it looks the same but the moon doesn't revolve, it is just a simulation.



Automata Dials

Automata dials are quite sought after and rarer than the usual dials, these are the dials that have moving parts, rocking ships etc, that rock to and fro as the clock ticks. Obviously if you are buying one of these you need to double check that the rocking figure, ship actually works. There are lots of types of Automata other than the standard rocking ships and figures, there are tennis players that knock the ball to each other, Adam



and Eve passing each other an apple, golfers making a putt, and even things like flying birds sweeping over chickens etc. Be prepared to pay more for this type of clock.



Brass Dials

Brass Dials tend to come from earlier clocks, pre 1770, and then re-appeared in the very late Victorian and



Edwardian clocks. They also come in various shapes and forms, square and arch dials, round dials which are usually silvered in appearance. The arch and square dials can also be flat, this is just a sheet of metal with engraving, the engraving is then filled with wax and the dial surface is silvered. The first dials had only one hand “single hand clocks”, with no minute hand, and these can date back to the late 1600’s, are always square

dials and usually not very large, measuring 10 or 11 inches in width across the dial plate. Brass dials can have all the usual features,

moon dials, seconds, date, strike /silent feature in the top arch which enables the chimes to be turned off at



night. If you buy a strike / silent clock, check that this feature actually works, it is surprising how many of these do not work. Once again, restoration of these done properly will ADD value to the clock so don't be worried if it has been restored. Brass dials



were re-introduced in the late Victorian / Edwardian era of around 1900, these are very elaborate dials, usually with bold Arabic numerals, raised fretwork to the centres, and with musical movements sometimes.



The cases of these clocks too are what some people would deem “over the top” and are usually instantly recognisable. Musical clocks are also recognisable by the dials, almost all have three winding holes (see photo left), musical clocks are expensive, and VERY expensive to repair so make sure everything works as it should if you decide to buy one.

Case and Hood Styles

There are various types of clocks and cases, many are regional and even clocks of similar styles can look very different. For example, Yorkshire clocks are generally wider than their counterparts, and Lincolnshire clocks are generally quite petite in proportions. None are particularly better than the others, it all comes down to personal taste and styles, some prefer an elaborate case with lots of inlay and a fancy hood, others will prefer a flat top country clock, nice and plain and very unassuming. Here are a few hood styles and their names;



The three hoods above are all types of Swan Neck Pediment hoods, the one on the left is fairly plain but with Corinthian columns with Brass capitals, the central hood has a very elaborate painted front, it also has a caddy top (the square that sits above the ends of the horns), with Reeded pillars, and the hood on the right has a raised central pediment and elaborately turned pillars.



These four hoods are all Break-arch Pediment hoods even though they look different. You can see the differing styles of these hoods, from the “plainest” type (see picture below), to the very



elaborate fretwork panels on the second from the left. The addition of finials can also make the clocks look completely different, and remember that these can easily be bought separately and added onto your clock at a later date, either just one in the centre, or with a full set of three finials.





The hood on the left is from a beautiful Sheraton inlaid Long-case clock and is a Pagoda top hood. These are traditionally from either London or the Hull area but there are always exceptions to this rule. The hood on the top right is a very simple Flat top hood, often called “country” or “cottage” clocks because of their plain appearance and low standing heights.

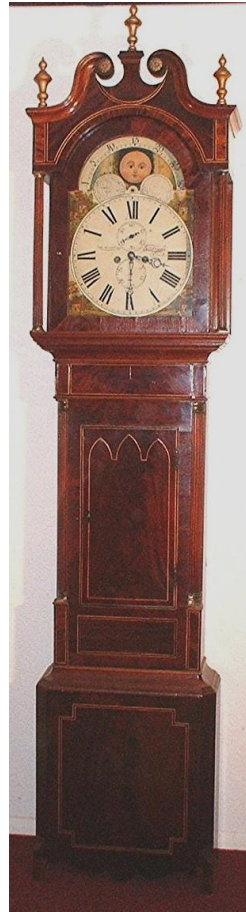


The hood to the lower right is called an Architectural pediment, again these can vary in size and angle but are always straight lines. This hood appears to have the central finial missing, as discussed earlier it is very easy to replace this with a modern Ball and Spire, or Ball and Eagle finial. Antique finials can often be found for sale on Ebay etc.



Here are some of the hoods above with their respective cases, you can see how the differing styles make the cases look completely different.





Different Woods

Long-case clocks are made from lots and lots of different woods, some have many different woods within the same case! Because of the staining and varnishing processes it is difficult to be precise when describing the various woods but the following is a rough guide to colours and styles.

Oak – Oak cases are often plain, simple country clocks are often made in Oak. Oak can vary in Colour from the “yellow” looking golden oak, to the very dark oak which can be almost black in appearance. Very old Oak or “period” oak has a type of “flecking” running through it which is not apparent in later Oak.

Elm – Elm is not extensively used in clocks but many do exist. It is similar in appearance to Oak but will often have a large knot on the sides or in the door, which Oak tends not to have. Generally a medium brown colour and again used on country style clocks.

Mahogany – Mahogany is a red coloured timber, used on top quality clocks as well as general quality clocks. The best Mahogany is known as “Cuban” or “Havana” mahogany and is a rich deep red, almost heading towards a purple hue, this was expensive to buy and carries a premium when clocks are made of this. When clocks are veneered they are often veneered in flam mahogany. As its name implies, the veneers have the appearance of a flame running through them, very striking and very distinctive.

Walnut – Walnut is also a good quality wood which tends to be more expensive than other woods in clocks. If a clock is described as Walnut, it is often made of Oak or pine, and then veneered with Walnut veneers which are small sheets and book-matched to give a beautiful appearance. Burr or curl walnut has the best figuring and can be many shades within itself, usually a lovely golden colour in overall appearance.

Red Walnut – Red Walnut looks almost the same as good quality Mahogany and can be extremely difficult to tell the difference, even to some experienced antique dealers. Mahogany tends not to have knots so this is the easiest way to tell, but not all Red Walnut has knots.

Pine – Pine is a pale timber of generally poor quality, ranging from a whitish appearance to a soft golden colour. Long-case clocks made in pine are often referred to as “Kitchen” clocks, and are possibly the cheapest Long-case clocks to buy. Pine can be full of knots, or without any at all, and again it comes down to personal preference if you are considering buying a pine clock.

Marquetry clocks – Marquetry clocks are very extravagant and usually very expensive. Marquetry is inlay and usually in floral design but can also be in the form of animals, birds, swags etc, with the individual pieces made in exotic woods and then hand inlaid into the background veneer which is usually Walnut or Mahogany. Marquetry is usually in two styles, Dutch which tends to be quite crude, and English which is extremely fine and the highest quality.

Rosewood – Long-case clocks are not usually made completely in Rosewood, but it is often used as decoration to edge panels etc. It is a dark brown colour, with almost black, thin straight lines running through it.

Ebony – Ebony too is used as decoration and it is the easiest to describe, black and with no visible grain. It is a very hard wood and difficult to work with, so it is used sparingly.

Cherry Wood - Cherry is similar to Mahogany but mainly with a lighter more “pinkish” hue. It is used mainly in American Tall-case clocks.

Satinwood – Satinwood is an exotic wood that is quite rare to find on an entire clock, but it is often used as decoration for small panels and inlay. Satinwood has a “quilted” appearance and ranges from a yellow colour to almost orange in appearance.

There are many other woods that are used in Long-case clocks but the ones listed above are the most common. When people ask me for advice on buying a clock the best advice I can give them is to decide on the type of clock they like, take their time to look at lots of different examples, and ultimately to buy one that they personally like. Clocks are a wonderful addition to any home, and the soft ticking in the background becomes part of the home, you only notice it when it stops! They are a good way to save too, for the most part antique clocks are very easy to sell if you needed to release some capital, and historically they have been quite a good investment too. I hope this guide will help you on the way to deciding which clock you are going to make part of your home, the following are setting up guides for a 30 hour and an 8 day Long-case clock, with some simple faults and fixes at the end. Please check out my website for any further details, I’ll be happy to offer any advice when I can.



Durations of clock (how long they run for, between winds)

With Antique Long-case / Grandfather clocks there are two general sorts of clocks in terms of duration, the 8 day clock and the 30 hour clock. The 8 day clock is the most common, with a separate train (set of gears or cogs) for the time, and another side for the strike or chime. 8 day clocks have two winding holes in the dial and will run approximately for 8 days between winding up. The term 8 day is generic though and you will find that taller clocks may run for 8 or even 9 days, and shorter cottage clocks may only run for 6-7 days. The reason for this is that weights (of which there are two in an 8 day clock) drop down in the case as the

clock runs, and when they hit the floor the clock will stop which of course will be quicker in a shorter clock. 30 hour clocks don't have any holes in the dial, and they only have one weight and a small counterweight or "doughnut" (lead ring). Inside they have either a rope or chain, and it is wound not by a key like the 8 day clocks, but by pulling on the chain / rope to raise the weight back up to the top. Again, 30 hour is generic and shorter clocks may only run for 22-24 hours, they are also called "everyday" clocks because they have to be wound up once a day! 8 day clocks are usually more expensive than 30 hour clocks.

There are also other duration clocks but these carry high premiums and are quite rare. There are Long-case clocks that will run for a month, and some will even run for a year but these are very rare indeed. If you see a dial with only one hole in the dial it will probably also be an 8 day clock, but without the chimes. They often have an alarm, but if you do see one, make sure that you ask exactly what it is!

Acceptable Repairs!

As you can imagine, clocks that are a couple of hundred years old invariably will have had repairs done over the years. With most antiques, repairs detract from the value, but this is not always the case with Grandfather / Long-case clocks. Of course, the following list is subject to each persons opinions, but I feel that the following repairs are acceptable, and I'll explain why where necessary.

1. Restored Dial. A restored dial is one of the few cases in Antiques that can actually ADD value to the clock. As long as the restoration is done to a high standard and carried out exactly as it was originally, it is not detrimental at all to the value.
2. Movement repairs. As with most mechanical items, things do wear, and of course a non-working clock is not going to be worth one that is in a good state of repair, watch out for nasty big blobs of solder everywhere though, again it comes down to the quality of the repair.
3. Replaced plinth or Feet. In the old days, many of these clocks were stood on old stone floors which were subsequently swilled down with water and washed, and hence over time the feet / plinths rotted. Therefore I feel that a replaced plinth or Feet, as long as they are correct and have been done in keeping with the clock, is acceptable.
4. Replaced seat-board. The seat-board, (where the movement sits) is under stress from the weights hanging from it, and of course it can twist and warp, or even start to crack. Therefore it must be replaced as if it broke the whole movement would move and could cause serious damage.
5. Backboard repair. Unfortunate as it may be, many of these old backboards did manage to get woodworm, along with rotting off at the base along with the feet/plinth. It is not uncommon to find that the lower portion of the backboard has been replaced, and I feel that this too is acceptable.
6. Replacement glass in the hood door. Many people do like to see the old wavy glass still in the hoods, (I do too) but this glass is flawed and very easy to crack. No-one wants to see a clock dial behind a piece of cracked glass, therefore replacing the glass is of course acceptable.
7. Re-polished, sometimes! – Some of the old varnishes do and can perish over time, especially in damp conditions. When this happens the finish of the clock can be very detrimental, and it is acceptable in that case for the clock to be re-finished. This doesn't apply where clear polyurethane varnish has been thickly brush painted on, I am referring to a proper traditional re-polish or re-wax, carried out to a good standard. A badly re-polished case is definitely not acceptable!
8. Small Veneer repairs. Veneer can become brittle and it is very easy to catch a corner of veneer when dusting the clock. It is acceptable for a clock to have some minor veneer repairs.

The main repairs to be careful of are replaced doors (hood, trunk, or both) and entire bases replaced, unless these repairs have been carried out expertly they will seriously detract from the value of your clock.

What to look out for – the danger signs!

When you are buying your Long-case clock there are as many bad examples out there as there are good ones, and spotting them can be difficult for an amateur. Here is a list of things for you to check;

1. Check that the dial fits properly in the hood, if there are gaps around it then it obviously wasn't made to fit in there originally.
2. Equally, check that the hood fits the case properly, sometimes unscrupulous dealers will mix and match cases!!
3. Check that there are no extra holes anywhere on the movement, if it used to be on a different dial the chances are that new holes will have had to be drilled to take the new dial. This means the old holes will still be there, empty, and sure sign that it is a marriage. Remember though that even if it is a marriage, and you really like it, there's nothing wrong with buying it!
4. Check that the winding squares on the dial fit EXACTLY in the middle of the holes, sometimes dials and movements are married together without any extra holes as they are *nearly* perfect, but you will still be able to tell it's a marriage if the winding squares don't line up in the middle of the dial holes.
5. Check that the seat-board (this is the piece of wood that the movement sits on), sits directly onto the sides of the case. If there is packing underneath then it is a sign that the movement has had to be lifted up to fit the dial, this never happened on an original clock. The exception to this rule however is that the original seat-board may have had to be renewed because the old one had warped or cracked, so this must be taken into account.
6. Ask the seller if the clock chimes the correct amount of times for each hour, and that the clock chimes on the hour, not at 5 minutes to the hour or 6 minutes past! Repairs to the chiming train can be expensive, and there are plenty of clocks that work correctly!!
7. Ask if the clock keeps good time, you may think this is obvious but it's surprising how many people will merely say that the clock runs, without telling you that it loses an hour a day, or even worse! Many of the problems can be corrected, but at a price, and so this should be reflected in the asking price, if not, stay away!
8. Don't be talked into something that you *quite* like, clock salesmen are no different to any other salesmen, only buy what you **really** like.

Setting up a 30 hour clock

1. Place the clock into situation and make sure that the case is level and absolutely solid with no movement, this is very, very important. If there is a large skirting board you may need to screw a piece of similar size wood across the back of the case to allow the case to stand level without leaning back.
2. Place the dial & movement onto the clock. Carefully place the hood on and make sure the dial is positioned centrally with the hood door. If it is, remove the hood.
3. On the back of the movement you will see a long strip of metal with a loop at the end, this is called the Crutch. You must slide the pendulum inside the case door and up through the loop. Above the loop is an extruding metal piece with a slot cut into it. Slide the thin strip of metal that is at the top of the pendulum (called the feather) into the groove and gently lower it so that the tip of the pendulum falls into place. The pendulum should now hang without touching the back of the case, if it doesn't, lean the clock forward by wedging behind the backboard.

4. Take hold of the pulley on the chain and turn it upside down with the chain running around the pulley. The hook should now be at the bottom for you to hang the weight on. Carefully let the weight move round until the chain is not twisted.
5. Now simply rock the pendulum. You should now hear a steady, and even, tick, tock, tick, tock. The ticking must be even, not tick, tock.....tick, tock.....etc. If this is the case, you need to bend the wire hanging from the back of the movement (that the pendulum loop is attached to). Very carefully bend it to the left. You bend it by resting one finger against the middle of the wire, and gently press the bottom loop in the opposite direction, thereby bending it in the middle, not at the top. If the ticking is now worse, you must bend it the other way, if it is a little better, then bend it the same way until the ticking is even. To set the time, simply move the minute hand, letting the clock chime through the hours, until you reach the right time.
6. If the clock is losing time, at the bottom of the pendulum is a nut which is moved up to make the clock run faster (ie if it running slow and losing time), or down to make the clock run slower. Please remember that when antique clocks are moved, they do take time to settle down, adjusting may take quite a while until you get it spot on.
7. Put the hood on and enjoy your clock!

Setting up an 8 day Grandfather clock

1. Place the clock into situation and make sure that the case is level and absolutely solid with no movement, this is very, very important. If there is a large skirting board you may need to screw a piece of similar size wood across the back of the case to allow the case to stand level without leaning back.
2. Place the dial & movement onto the clock. Carefully place the hood on and make sure the dial is positioned centrally with the hood door. If it is, remove the hood. Be very careful that the dial cannot fall forward through the glass as you remove the hood.
3. On the back of the movement you will see a long strip of metal with a loop at the end, this is called the pendulum crutch. You must slide the pendulum inside the case door and up through the loop. Above the loop is an extruding metal piece with a slot cut into it. Slide the thin strip of metal that is at the top of the pendulum (called the feather) into the groove and gently lower it so that the tip of the pendulum falls into place. The pendulum should now hang without touching the back of the case, if it doesn't, lean the clock forward by wedging behind the backboard.
4. Take hold of the pulleys on the gut lines and turn them upside down with the line running around the pulley. The hook should now be at the bottom for you to hang the weight on. Carefully let the weight move round until the gut line is not twisted. Repeat for both sides. Be very careful to check that the gut lines are still wrapped around the large spools, it is very common for them to slip forward and fall off the spools preventing the clock from functioning properly. If they have slipped off, carefully feed just enough gut line back up through the seat-board (what the clock movement is sitting on) to allow you to reposition the gut line back onto the spools.
5. Now simply rock the pendulum. You should now hear a steady, and even, tick, tock, tick, tock. The ticking must be even, not tick, tock.....tick, tock.....etc. If this is the case, you need to bend the crutch at the back of the movement (that the pendulum loop is attached to). Very carefully bend it to the left. You bend it by resting one finger against the middle of the wire, and gently press the bottom loop in the opposite direction, thereby bending it in the middle, not at the top. If the ticking is now worse, you must bend it the other way, if it is a little better, then bend it the same way until the ticking is even. To set the time, simply move the minute hand, letting the clock chime through the hours, until you reach the right time. NEVER move the hands backwards through the 12 o'clock position on the dial, this can cause serious damage, and always let the clock chime as you go through

each hour. Contrary to some other online setting up guides, you CANNOT just remove the right hand weight to stop the clock from chiming, this will definitely cause damage. If you wish the clock to stop chiming, simply bend the strike hammer away from the bell at the top, so even though the clock chiming is still functioning as normal, the hammer does not strike the bell and thus no sound will be heard

6. If the clock is losing time, at the bottom of the pendulum is a nut which is moved up to make the clock run faster (ie if it running slow and losing time), or down to make the clock run slower. Please remember that when antique clocks are moved, they do take time to settle down, adjusting may take quite a while until you get it spot on.
7. Finally, one final check to see that the clock is level, stable and solid, and that the gut lines are not twisted or have slipped off the spools..
8. Put the hood on and enjoy your clock!

Simple Faults and Fixes

1. Pendulum rubs on backboard -- Put another thin strip of wood behind the backboard to allow the clock to lean slightly further forward.
2. Clock does not tick evenly -- Follow the instructions on bending the crutch (number 5 on the 8 day clock setting up guide), to get the clock back "in beat".
3. Clock does not keep good time -- You can regulate the clock with the nut under the pendulum bob.
4. Clock does not chime -- Check that the weight line is not twisted or has slipped off the large spool on the left hand side, also check that the hammer can strike the bell and hasn't been bent away to create a silent chime.
5. Clock stops whenever the hands come together -- This is a very common fault and can be easily remedied by simply bending the minute hand slightly outwards so that it runs past the hour hand without snagging. Another fault is that the second hand catches the hands, again causing the clock to stop, this can be remedied by either pushing the second hand towards the dial, or again by slightly bending the hands away from the problem.

For further reference please visit my website at; <http://www.sjbean-dialrestoration.co.uk/>

or email me at; info@sjbean-dialrestoration.co.uk

