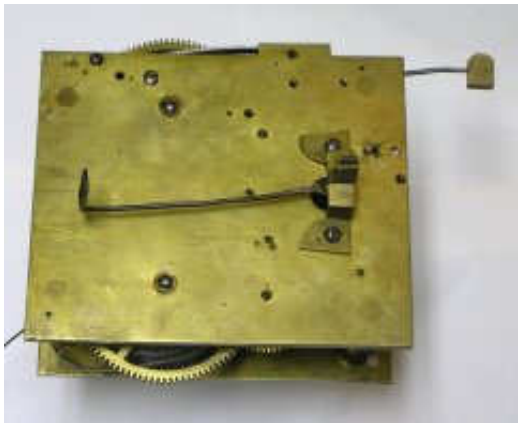
English Grandfather Clock

The 18th and 19th Centuries were the best of times for the English clock industry. A few clocks were made in other parts of the British Isles. A few early American clocks were produced by immigrant clockmakers, resembling clocks from the countries where these clockmakers came from, and some American clocks look just like their English cousins. This English clock was made around 1750. It is unusually well made and heavy for a clock from that era. Two features that make this clock very rare are the Graham escapement and the long second hand in the centre (which is missing). Most English grandfather clocks have recoil escapements and the small second hand under the number 12. Many clocks from that era have problems with their designs, evident by the extensive repair work and modifications you can see on this clock. While the clockmaker made the Graham escapement correctly, he did have problems with the geometry of the rack and snail design in the strike mechanism. Thou shalt not covet thy neighbour's clock, but I have become weak . . .



Dating your British grandfather clock. . .

. . . or, should I say, "How to determine the age of your British grandfather clock." Between about 1780 and 1870, floor clocks from England, Scotland, and Wales were made with painted dials, which were probably much less costly to make than the earlier dials with polished brass and filigree artwork. The following information was once on a webpage offering a clock for sale. Once the clock had been sold, the webpage was removed from the internet, but not before I had saved the information. Since it would be useful to clock collectors, I present this information here verbatim:

"It's quite easy to date a painted dial longcase clock. Follow the simple instructions below and you'll soon get the hang of it. They fall into three distinct types, commonly known as period one (1770-1800), two (1800-1825) and three (1825-1860).

PERIOD ONE:
Period one dials date from about 1770 to about 1800 and look more or less like this:

The hour numerals are in Roman lettering (FROM I to XII) and the minute numerals are in arabic (5 to 60) numbered every five minutes (often called five minute numbering).

PERIOD TWO:
Period two dials change in three distinct ways. Whereas period one corner decoration tends to be simple gold scrollwork OR little flowers, fruit or the occasional bird, period two dials tend to have either geometric shapes, or shells, or abstract patterns - usually with a little more colour than period one. This dial is typical of about 1800:

Period two dials start to lose the five minute numbering and this is replaced with fifteen minute numbering (15,30,45,60) possibly in slightly smaller size, around the hour numbers. The Hour numerals are often in arabic rather than roman style.

Period two tends to cover the period 1800 to 1825-30

PERIOD THREE:

Period three dials are from 1830 onwards until the demise of longcase clockmaking about 1850-70.

The minute numbering has disappeared completely and the hour numerals are back as Roman numerals, (I, II, III, IIII, V, VI, etc..) The corner decoration tends to be full colour scenes, often of country scenes, sometimes of the four seasons, countries (England, Scotland, Ireland, Wales) or the four continents. Sometimes there are specific corner or arch paintings to do with trade or commerce or perhaps with a religious or masonic theme."

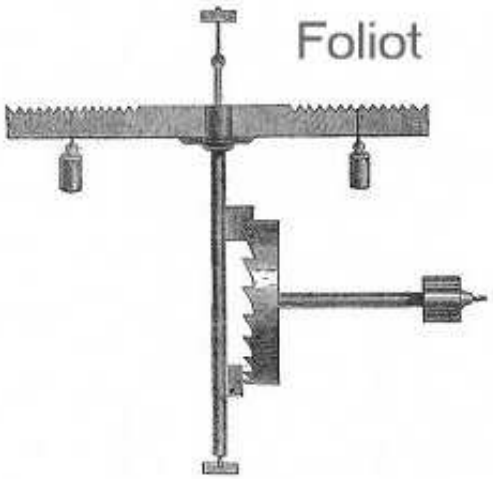
Most of the mechanisms from this period look like these:



Here is an alarm mechanism on another English grandfather clock of the same vintage, ca. 1790. The basic design of this alarm goes back by maybe a thousand years!

Here you can see the alarm hammer with the bell removed, and this is where the enormous

Here you can see the alarm hammer with the bell removed, and this is where the enormous significance of the alarm mechanism for the evolution of timekeeping becomes clear: if you add another hammer on the other side, you have a foliot, (developed around 1285).



If you place a wheel or a disk on the hammers, you have a balance wheel, (developed by Peter Henlein in 1510), so you can see how the alarm mechanism formed the basis of the clock escapement to be used for timekeeping in the Thirteenth Century and beyond. The crown wheel was used in clocks and watches in England until about 1840, even though the anchor escapement for the pendulum clock had already been introduced around 1657. The recoil action of the two escapements is similar, if you consider the crown wheel as a three-dimensional escape wheel and the anchor escapement as having a two-dimensional escape wheel.

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