Last updated on August 25, 1996.
Copyright 1996-2013 by Michael P. Murray and Harry Gilmore
The following was written by Harry Gilmore who's E-mail address is harry@gilmore.dnet.co.uk and downloaded from the E-mailing list Clockers.
$=$ Harry Gilmore BA BAI =
= Harry Gilmore Clocks $=$ Belfast $=\mathrm{UK}=$
$=$ member $=\mathrm{BCWMG}=\mathrm{IPCRA}=\mathrm{AHS}=\mathrm{AWI}=$

Method for counting the wheels' teeth of a clock train.
Many people are reluctant to even begin counting a clock train as it can be such a tedious chore, so here is a method which I have found makes the task a lot faster, simpler and more accurate for me. It is also much quicker to use than to describe, so please bear with me.

You may well find it necessary, particularly for smaller clock wheels, to use some form of magnification, such as a loupe.

Firstly, mark the side of one tooth of the wheel (that you are wishing to count) with an indelible marker pen. Lay a piece of white paper on a not-too-hard surface such as vinyl or cork, and make a small penciled dot near the top left-hand corner of the paper. Then place the marked wheel tooth on to the dot, and pressing it sufficiently to make a reasonable impression on the paper, r-o-l-l the wheel across the paper until the marked tooth comes round again, and mark this indentation with another dot. You should now have an impression of every tooth on the wheel laid out across the page in a fairly straight line. Mark and count the first dot " 0 " (zero) and, carefully counting across to the right, mark impression "10" and impression "20".

You could now count the entire line of impressions directly by marking off 10s or 20s as you go, but using a paper strip as described below will be faster and more foolproof!

Take a strip of paper about 6" or 8" long, put a small mark near the left-hand end of its long top edge, line up this mark with the original dot " 0 " and as you lay its edge close under the line of wheel tooth impressions, put a corresponding mark on the strip opposite the "10" and "20" marks on your page.

Your paper strip is now marked off with a measurement (or interval) of 10 and then another $10(=20)$ teeth (or really "spaces"). Move the strip across until its zero is opposite the 20 -mark on the impression line (already marked). The 20-mark on the *strip* will then be opposite tooth "40" on the impression line. Mark this and number it "40". Now step along with the strip in 20s (or tens, if you prefer), marking and numbering the impression line each time, until you get near to the right-hand end of it. You can then count the remaining spaces up to your final indentation, writing
down the total score beside it.

You will realize that, because the perimeter of the wheel is a circle, the number of teeth is the same as the number of spaces between them.

You can continue by putting the impressions of other wheels from the same clock below on the same page (using a new strip for each), and if they are carefully labeled you will finish up with a permanent record of the clock which you may wish to store with your other notes.

Harry Gilmore
August 1996

## A service from, E-mail address: Mike@atmos-man.com Mike Murray Founder of Clocksmiths

A specialist in Atmos and 400-day clock repair.
Also, I overhaul most plug in electric clocks.
In continuous horological service since 04/01/1982.
Mike's Clock Clinic Membership: NAWCC
1600 Maryland Avenue
Myrtle Point, OR 97458-1508

Phone: 541-559-1090 or 877-286-6762

My main Web site is located at "http://www.atmosman.com/"
Main FTP site is located at:
"http://home.earthlink.net/~atmosman/earthftp.html"
Copyright 1996-2013 by Michael P. Murray and Harry Gilmore

