

# SETT STICKS –FACT OR FICTION?

It is not uncommon to be told, and to read, that the ancient method of recording and preserving traditional tartan was by means of a pattern stick on which the exact number of threads for each colour were wound to record the pattern. At first this concept may seem as valid as many of the other traditions that surround tartan and Highland Dress but what is the truth behind the tradition?

The first record we have of these pattern sticks is by Martin Martin in the early 18<sup>th</sup> century<sup>1</sup>. Martin was a native of Skye and this, combined with the early date, has tended to lead later writers to the conclusion that if he reported the existence of sett sticks then it must be true. Martin may have been a Highlander and have reported accurately what he saw but that does not mean that he necessarily understood it. Based on Martin's assertion, the use of pattern sticks has been blindly repeated as fact in many subsequent works including Logan<sup>2</sup>, who referred to them by the Gaelic term *maide dealbh* (pro *mat-cha jal-uv*), and Dunbar<sup>3</sup> whom pointed out that very few of these sticks remain (c1955). By the time I started to investigate them in the mid-1970s none seem to have survived. This, together with my knowledge as a tartan weaver, caused me to reconsider whether they ever actually existed.

In considering whether pattern sticks did in fact ever exist one needs first to consider their supposed role and therefore the need for them. Martin et al state that *the exact number of threads of each colour was wound on sticks in the order of the colours so as to preserve a record* of each tartan. For those with no knowledge of weaving this might seem a logical way to preserve a design and the concept could have worked admirably for a simple tartan. However, as some of the more complex traditional designs were the full width of the loom this would have meant that some of the pattern sticks would have had to have been 26-28 inches wide. The practicalities of storing a range of pattern sticks in a small cottage where they could be accidentally damaged, eaten by moth larvae or spiders, or in some other way spoiled can easily be imagined. Notwithstanding the difficulties of storing them, we might reasonably expect at least one example to survive to support their use.

Apart from the difficulty of storing the sett sticks, and the fact that none survive, there are a number of other reasons that argue against their use and I can think of nothing to support their existence beyond Martin's assertion. So, if not a sett stick, what would a weaver need in order to reproduce a tartan? For most tartans a weaver simply needs access to a half repeat of the design. For example, in the MacGregor tartan, details of the sett are shown by line A in Fig 1 are what would be needed in order to weave the design. As there was no standard size to a particular pattern, a weaver needed to be numerate in order to fit the design to the width of the loom based on the density (quality) and width in conjunction with the desired number of repeats of the tartan.

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<sup>1</sup> MARTIN M. 1720 *Description of the Western Isles of Scotland*

<sup>2</sup> LOGAN J. 1831 *The Scottish Gael*. Smith, Eldar & Co., London

<sup>3</sup> DUNBAR J.T. 1962 *The History of Highland Dress*. Oliver & Boyd., Edinburgh

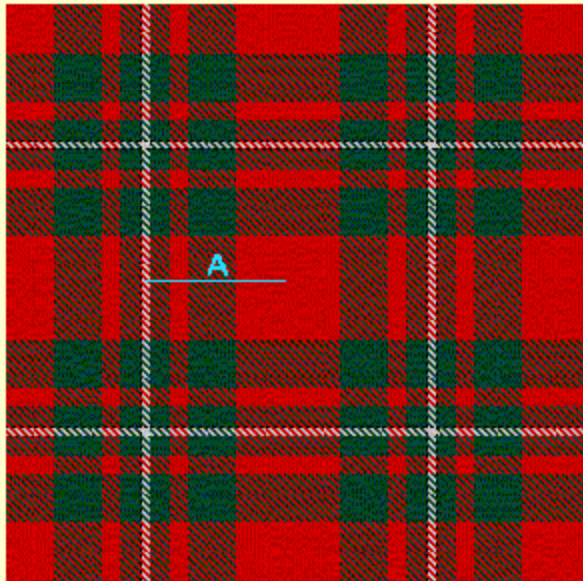



Fig 1. Portion of a pattern required to make the tartan.

In other words, to weave the MacGregor tartan one would simply need the following threadcount: W/2 K2 G8 R8 G16 R/20 that represents this section  of the tartan (called a half repeat) which, when repeated, makes the whole pattern in the warp or long-ways threads on the loom.

If a weaver has to be numerate to be able to weave then all that was needed in order to preserve a tartan was to write down the threadcount. However, if for some reason one wanted to keep an accurate record of a particular version, including the specific rather than generic colours, then it is simplicity itself to store away a small off-cut of a previous weaving. It is therefore clear that there is no benefit in using and keeping pattern sticks the question arises of why Martin said they did and what caused him to state that such sticks were used in order to preserve the individual tartan designs?

In fact, there are a couple of stages of the weaving process where the warp threads are arranged on sticks and pegs that Martin could easily have misinterpreted as the use of pattern sticks. Firstly, there is the winding of the warp. The warp for the desired length of the material is measured out on a series of pegs on a warping board. The width of the warp is compressed to a series of stripes wound around each peg and at one end of the length the threads are crossed around three narrowly spaced pegs to form a cross with half the number of threads running each side of the central peg. So it is possible that Martin mistook the warping process as the method of recording the pattern.

Secondly, there is the procedure where the warp, having been transferred to the warp beam i.e. the one at the back of the loom that acts as a yarn reservoir, is threaded through the heddles. Generally a new warp is simply tied onto the end of the previous one and then drawn through the eye of each heddle like a form of self threading. Where a loom is re-set for whatever reason then the heddles have to be threaded from scratch. With either practice the warp cross where the threads had run in alternate pairs either side of the central peg must be maintained in order for the threads to remain untangled. To achieve this, two sticks (known as lees sticks) are inserted between the cross to maintain the separation of the threads. These sticks are somewhat longer than the full width of the warp that appears to be wound around them. Having wound the warp on the warping frame some weavers store the warp on the lees sticks until it is needed. Some weavers also keep the lees sticks in the warp throughout the actual weaving process tying them to the back of the loom. It is easy to understand how either action could be misinterpreted as a record of the pattern being kept on a stick.

It is unlikely that we will ever know what the source of Martin's information was and so can only speculate. However, it is possible to do so in an informed way. The fact that no sett/pattern stick has ever been found but that full loom width off-cuts from the 18<sup>th</sup> century do must give rise to

serious doubts that such sticks ever existed. I have described various stages of the weaving process where the threads are arranged on sticks and believe that it is much more likely the Martin either saw, or heard about these, and misunderstood the process. Given the need for a weaver to be numerate I do not give any credence to the tradition of sett sticks and believe that Martin's misinterpretation of the use of the lees sticks offers the best explanation for the myth of pattern sticks to maintain a record of each tartan.

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