



ABOUT  
**MICHELLE ROWLEY**

Michelle is a sewing teacher, writer and maker based in the Peak District. Follow her latest dressmaking accomplishments on Instagram [stitchywhitney](#)

*The Royal*  
**WEAVE**

*Michelle Rowley travels to Sudbury, Suffolk, to explore the home of Gainsborough Weaving, an institution in British textiles for over 100 years*

**S**udbury in Suffolk has been the centre of weaving in the UK since the arrival of the Huguenot weavers in the 19th Century. Gainsborough Weaving, based in Sudbury, has been producing some of the world's finest furnishing fabric since 1903. A specialist in historical reproductions of interior fabrics, the company has woven fabrics for the productions of *Downton Abbey* and *Pride and Prejudice* amidst an impressive portfolio of high-profile clients such as the British Royal Family and Bentley Motors. Michelle Rowley explores the company's fascinating history, complex weaving processes and incredible archive of over 7,000 sumptuous fabrics.



“We can weave whatever we like – so long as it’s beautiful,” says Neil Thomas, Managing Director of Gainsborough Weaving. He’s not wrong. Gainsborough’s long history of weaving has produced some of the finest damasks, silks, brocades and brocatelle in the world. Gainsborough is a proud holder of a Royal Warrant to her Majesty the Queen, and has undertaken a number of special projects for the British Royal Family, in addition to many Royal Family members overseas. The company provided fabric for three of the state coaches at the wedding of HRH Prince Charles to Lady Diana Spencer in 1981. The team went on to provide fabric for many more carriages over the years, including for the weddings of both Prince William and Prince Harry.

Gainsborough’s fabrics have adorned the walls of museums, the RMS Titanic, Middle Eastern palaces and luxury hotels. If you have ever visited a National Trust, English Heritage or Historic Royal Palaces property, chances are you have walked past one of its fabrics.

Founded in 1903 by Reginal Warner, the company added an English interpretation to the designs he brought over from European mills. Gainsborough quickly gained a reputation for specialising in historical reproductions and to this day creates fabric using design and weave effects

dating back to the 15th Century. Generations of weavers and designers have woven an expansive range of fabric designs from every decade of the 20th century. Their legacy is a stunning woven record of history.

Today a team of 20 continues to create a wide array of fabric for far-ranging clientele across the world, using a combination of old and new design and weaving technology. With its own Design Team, dye house and mill all operating from the same site, every team member understands the work of their colleagues to ensure continuity and perfection in production.

#### CONSULTING ON CLOTH

Every order starts with a consultation to establish the client’s needs. From a satin to restore a court mantua for the Royal School of Needlework, an attractive fabric to improve sound quality for a museum to a logo woven backdrop for *Antiques Roadshow*, Gainsborough can weave it. “Every job is like a little puzzle,” says Neil, for whom meeting with clients to find a solution to their needs is the best part of the job. “It’s satisfying when someone asks if we can produce a fabric we made 30 years ago and our answer is invariably yes,” he explains.

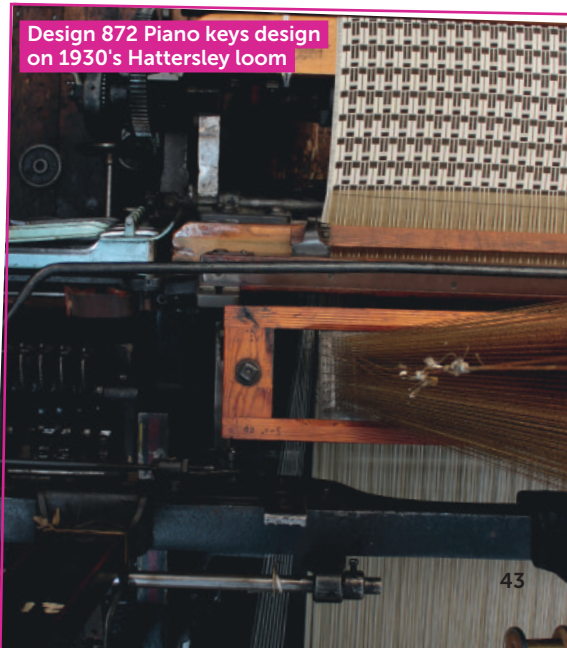
There’s most likely to be a fabric meeting the client’s needs in Gainsborough’s staggering archive of over 7,000 samples of fabrics the company has woven. However, should the client require a bespoke fabric, their needs can be met by the Design Team and its computer-aided design system.

#### DYEING AND WINDING

The Dye House plays a vital role

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in creating Gainsborough’s fabrics, renowned for their lustre and beautiful colours. Colour accuracy is imperative due to the need for the colour to remain consistent over great lengths. Dye house manager Geoff Turkentine carefully creates dye recipes for each order. Each recipe is carefully monitored and controlled in hank dye vats that allow adjustments to be made to get the colour just right. With every dyeing, a single skein will be removed and checked for colour accuracy before the batch is given the all-clear. It then takes a few days for the yarn to dry gently, using recycled heat from the dye vats.





Next, the hanks of yarn are taken to the weaving shed to be wound. Yarns that will be used for wefting – the crosswise threads on a loom that are passed over and under the warp threads – are wound onto cones and pirns. Yarns required for warping – the lengthwise threads on the fabric loom which act as the support network for the weft – will be wound onto bobbins.

#### WARPING

The wound bobbins are slotted onto rows of pegs on an upright frame called a creel. Each thread must then be kept separate by threading them, by hand, through a comb-like structure before being tied to a warping mill. As the warping mill revolves, it winds the threads around its circumference as many times as necessary to achieve the required length of cloth. The warper repeats the process across the warping mill until the required number of threads is achieved. As Gainsborough weaves very fine count cloth, the number of warping threads ranges from 6,000-14,400 on the Pressure Harness looms. Gainsborough's finest silk fabric, requiring 14,400 warp threads, can't be replicated on a modern loom. "On a good day we can weave eight metres," says Neil.



#### WEAVING

Gainsborough runs three types of looms: traditional dobby and jacquard looms and modern rapier looms. Whilst around 75% of the weaving today is done on the modern looms, the 100-year-old traditional looms are still required for certain fabrics that can't be woven to the same high standard on the modern looms. Whether old or new, the dressing process for a loom is the same: a knotting machine ties the new warp to the one in the loom, thread by thread to allow the new warp to be pulled through the harness, ready for weaving. With this method, which takes a whole day, the number of threads in the warp (known as the sett) does not change. "It would take several months to change the sett of the harness," reveals Neil.

On the shuttle and dobby looms, metal-tipped wooden shuttles have been loaded with the weft yarns wound onto pirns. The shuttles shoot side-to-side across the loom between the warp threads. A reed on the loom then pushes up each passing

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of the weft to form the cloth. It is not surprising when Neil says that “to learn all the looms proficiently is a four to five-year process.”

Gainsborough predominantly weaves damasks, in which different yarns are used for the warp and weft to create stunning designs. The warp threads form the background and the weft threads the design; when done in reverse, a brocatelle fabric is created. On the jacquard shuttle looms, the design is controlled by large packs of punch cards that either allow the warp threads to be lifted or stay down. Gainsborough runs 15 punch card looms that weave one metre an hour. If a new design is required, it takes 4-6 months to prepare a new set of cards, which must be cut and laced together before having wire inserted to hang them on the rack.

The colour, design and handle of the fabric designs all need to be tested with a sample before full production can take place. “Just one thread out of place throws the whole weave out,” Neil explains. Such a lengthy and painstaking production process, combined with the use of only high-quality natural fibres, results in fine fabrics that understandably come at a price; on average around £150 per metre. However, this can rise significantly for the top end fabrics. “People are appreciating artisanship and craft more than ever,” says Neil. We are very glad to hear it!



## FIND OUT MORE

If you'd like to see more of Gainsborough's production facilities and fabrics, visit [www.gainsborough.co.uk](http://www.gainsborough.co.uk) and head to its beautiful Instagram [gainsboroughweaving](#)