ART OF A LONGTHORNE
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We travel to Northampton to meet with Jim and Elaine Stewart, owners of the family business, Longthorne Gunmakers. A young innovative company making the most accurate shotgun barrels in the world.

In 2006, Jim and Elaine Stewart embarked upon a quest to manufacture the most accurate shotguns in the world. Following a career of producing shotgun components as sub-contractors in Australia, where the industry constantly squeezed manufacturers to deliver parts faster, and at a lower cost, Jim and Elaine made the bold decision to take control and set their own standards. The Stewarts would create their own shotguns and pursue a more fulfilling and challenging vocation to engineer a product that they could be proud of and gain a sense of personal achievement that had always been lacking in the sub-contracting business.

Drawing on their vast knowledge and expertise in metallurgy, designs and prototypes were developed in the barn at the back of the family home. Elaine explains, “As with many English engineering companies, we began life as a true cottage industry. We had all of this high-tech, expensive equipment crammed into a shed at the back of the house, which was not ideal as there was no escaping the momentous task we had taken on.” It was hard for the Stewarts to ‘switch off’, and Jim and Elaine would often be found working into the small hours and weekends at their Lancashire home as they researched, developed and tested their designs. In 2010, after four years of development, the first gun sporting the Longthorne name was born and presented to the shooting community at the Country Landowners Association Game Fair in Warwickshire, England. The Longthorne was extremely well received, and they were commissioned to produce a collection of guns for the Duchess of Rutland. The Stewarts had realised their ambition - the creation of a shotgun engineered their way.

TRADITION & INNOVATION

Embracing technological innovation, Jim and Elaine had created an English shotgun with a patented method to produce barrels that were lighter, stronger and more accurate than anything else on the market. Combining this high-tech approach with traditional craftsmanship, the gun was not only impressively well balanced and accurate, but it was also an appreciably beautiful gun to behold.

Building a gun in the traditional sense never occurred to Jim and Elaine, it was simply not a consideration. On reflection, this was rather brave given the penchant for tradition by England’s finest gunmakers and their clients. The Stewarts engineering background, and to a degree, their naivety - having not taken a traditional gunsmithing apprenticeship journey to become a gunmaker - had kept them free from the baggage and preconceptions of what goes into crafting a fine English shotgun. This freedom allowed them to approach gun making with a fresh pair of eyes, achieving manufacturing tolerances not seen before in shotgun production.

In an industry that has suffered from protectionism by out-workers and specialists not imparting their knowledge, gunmakers have been somewhat held to ransom, and as a result, English gun making has not evolved in a linear progressive manner as other manufacturing industries have. It is interesting to note that the majority of English gun manufacturing patents were granted at the turn of the 20th century and have been very thin on the ground during the last 108 years. Fair to say...
though that the finest traditional handmade guns are still English, due in part because innovation has been somewhat stifled by the organisation of the industry, and therefore keeping with tradition has been the default route for gunmakers, and partly because a fine English gun is a ‘trump card’ that has served many gunmakers well.

As the world becomes increasingly global and prestige on the shooting line is no longer defined by a geographical country of origin, the best days for the traditional English gunmaker appear to be behind us, and clients are looking further afield for bespoke guns. Until now, the most advanced and innovative guns have originated from continental Europe, from the gun making countries of Austria and Belgium, where gun making continues to evolve, but Longthorne is bucking this trend. They have brought innovation back to England and with it a resurgence and reinterpretation of the fine English shotgun. The ‘best’ gun has evolved.

Their approach of investing in new technology and marrying it to traditional English craftsmanship has been met with some resistance by the established English gunmakers, but it is Longthorne’s barrels, machined from a solid piece of steel, that has made the shooting community sit up and take notice. Unbeknown to the Stewarts at the time, Sir Joseph Whitworth, the English engineer known for his passion for precision, accuracy and machinery had experimented in the 19th century with patented barrels that were produced from a single block of steel. Perhaps great minds think alike, and both Jim Stewart and Sir Joseph Whitworth were able to identify that the accepted methods of barrel production are somewhat flawed from an engineering perspective.

As such Jim rejected traditional barrel making methods. Longthorne barrels begin life as a solid 27 kg / 59.5 lbs billet of high specification steel before being precisely machined into what can only be described as ‘mono-barrels’. The two perfectly parallel barrels maintain a connection and rib throughout the machining process of the steel billet and require no additional soldering or jointing. As such there are no weaknesses or inaccuracies caused by heat distortion introduced to the barrels by the soldering process. Compare this to the traditional barrel manufacturing process where seven separate components are typically combined to create a pair of barrels. The result of this patented barrel machining process is a pair of 12 gauge barrels that weigh 1.3 kg / 2.8 lbs with a barrel wall deviation of .001”. The light weight of the barrels allows more material to remain within the barrel...
walls to achieve ‘magnum steel proof’ up to extra-full choke - almost unheard of in conventional barrels and a way of future-proofing the barrels should a complete ban on lead shot occur in the gun’s lifetime. Longthorne also manufactures 28 gauge, 20 gauge and 16 gauge barrels with .410 gauge currently being developed.

FULLY BESPOKE

A Longthorne gun is a very personal and unique object. Despite being engineered to extremely high tolerances, the gun is 100 percent customisable. Made from start to finish under one roof in Northampton, England, this level of in-house control gives Longthorne the ability to tailor the gun to their clients’ exact requirements. The small, close-knit team at Longthorne work in such a way that the company can react and is fluid enough to accommodate all manner of client requests. As with all fine craftsmen and engineers, they are a very talented team of problem solvers working together with a common goal - to create the most accurate and refined shotgun possible. To achieve this goal, each component of the gun is created piece by piece by these craftsmen, nothing is brought into the factory apart from the raw, high-quality materials.

The process of commissioning a Longthorne usually begins with the creation of a specification sheet after a meeting with the client to flesh out the general requirements for the gun - details such as the gauge required, barrel length and the type of shooting the gun will be used for. Following this, the client is invited to choose their stock from the extensive selection of exhibition grade walnut blanks available in the ‘wood room’ at Longthorne, where all of the walnut has been personally selected by Jim and Elaine at source in Turkey. A traditional gun fit with Jim - a CPSA instructor - is undertaken shortly after selecting the walnut to allow for the commencement of the rough shaping of the stock while Chloe (Jim and Elaine’s daughter) will be working concurrently on the artwork and engraving inspired by images and references supplied by the client. Final fitting refinements take place once the stock has been married to the sidelock action, prior to oiling and finishing to bring out the extraordinary figure and colour of the walnut.

What is interesting about this process is that Longthorne makes no grand claims about the engraving of the side plates or the chequering on the forend (for example) being undertaken by hand or by a CNC machine. The Stewarts explain, “We use the process most appropriate to complete the product to the highest standard possible.”
There are elements of the shotgun that our craftsmen can complete with an inherent quality that no machine can match, such as shaping and finishing the stock, but we fully accept that a machined action will be more accurate and will perform better than a handmade action. The decision to be objective and not blindly follow tradition gives our clients the best performing shotgun we can produce, that is fully tailored and unique to them.”

THE FUTURE

It is interesting to see where Longthorne is reinvesting; where they see the future of modern shooting. Longthorne has recently begun sponsoring a number of competitive shooters and events, the majority of which are women and youth guns, while event sponsorship is targeted at clay shooting events, such as the CPSA World Championships. Jim and Elaine are passionate about encouraging young shooters and ladies to take up the sport, and by sponsoring this demographic, they hope it will inspire others to pick up a gun and enjoy shooting. Clay shooting events are accessible to everyone, and there are opportunities for the public to handle the guns at the competitions, unlike driven game shooting, which tends to be by invitation only. Potential clients are also familiar with clay shooting. Many non-shooters have seen the televised events at the Olympic Games, and when first introduced, one’s first shooting experience is often at a shooting ground targeting clays.

To bring more game and sporting shooters into the Longthorne family, the Stewarts are busy finalising their boxlock over-and-under and sidelock side-by-side shotguns. These high quality fixed specification guns will be available with several customisable options. Both guns are nearing the completion of their development cycles and will be available to purchase in the very near future.

Despite resistance from traditionalists to the Stewarts approach of embracing new production techniques and technologies to engineer fine English guns, Longthorne have found a formula - the marrying of tradition and innovation - that will serve them and their customers well. In an era when English gun makers are struggling to reinvent themselves, Longthorne’s passion and contemporary approach to gun making have already earned them a loyal client base and reputation for producing shotguns that can match any other in terms of quality and accuracy. From humble cottage industry origins, the Longthorne story continues to unfold.