J.J. Roberts, Master Engraver, engravés a small gun part with a hand push graver tool while holding it in an engraver’s vise. The vise can be rotated in any direction as well as tilted, for greater control, for engraving tiny scroll designs and script lettering.
The art of engraving has captured people's interest for centuries. The intricate designs created on metal, wood, glass, and stone not only served to personalize items of value but were also the first means of recording history. Noteworthy events, family names, animals, and landscapes were typical subjects of the early works. Mastering the traditional hand held tools that incised the engravings required both patience and passion on the part of the engraver; time has not changed that practice because contemporary artists focus on their intricate work in the same way as their predecessors. Fortunately, the classic art form is still being practiced today and has even received a boost from modern technology.

Most engraving is accomplished on a metal surface when the artist holds a small hand cutting tool known as a graver. The tool resembles a steel rod with one end sharpened and the other end finished with a round wooden knob that is held in the hand. The artist pushes the graver into the surface of the metal with varying levels of pressure, depending on the width or shape of the lines he wishes to incise. The shape of the graver and the angle that it is held by the artisan determines the furrow (groove) shape. The engraver pushes the tool with his hand or may use a small hammer (known as chasing); light tapping against the chisel drives it forward into the metal. The resulting cut is shiny, crisp, and durable; centuries old engravings maintain their sharpness and character. While the basic steps are easily described, in practice it takes years to master hand engraving techniques.
Traditional hand engraving is different and more difficult than similar decorative techniques. Machines generally cannot cut as deeply and intricately as skilled engravers. Stamping and etching, often confused with engraving, also do not match the clarity produced by the hand engraver. And while lasers and dies make precise cuts into metal surfaces, the results do not have the look, feel, and character of fine craftsmanship.

The traditional process has remained in place for hundreds of years and will likely continue to be practiced by those who want to maintain the integrity of time-honored ways. Recent developments in modern technology, however, offer engravers alternatives, particularly with air-driven gravers. A small rapidly moving piston inside the graver eliminates the artisan's need to use a hammer. The new tool is similar in size and shape to the older style manual models, thereby allowing for the same "feel" that artists expect. The result is a time savings since the incising can be accomplished more efficiently. A second advancement provides alternatives to the designing aspects of an artist's work.

Computer software technology allows artists to explore an almost limitless variety of designs, thereby speeding up the drawing process that precedes the actual engraving. Computers are not replacing the artist's creativity but rather assisting in the development of it. The use of modern technology has been adopted by some contemporary artists but avoided by others who want to maintain the time-honored hand drawing practices and styles passed down from European artists.

J.J. Roberts, a well-known gun engraver and instructor from Manassas, Virginia, has been actively involved in the art form since the early 1970s and has witnessed the influence of technology on his work. Initially, he rejected the modern air-driven tools. "I wanted to maintain the traditional way of engraving. It was actually my wife who started me thinking about using the modern tools. Now I tell my students that I teach the 'Old School' way but also use the Lindsay engraving tool." The Lindsay tools are power impact air engravers used by many contemporary engravers, but there are various air and power-driven tools available.

Although modern technology may assist artists in the processes of engraving and artwork, Mr. Roberts stresses that understanding the basic techniques of drawing remains a key to successful engraving. "Sometimes there is a perception that you just use a computer to quickly design a scene. I believe you have to know the basics of drawing to be successful. Knowing the basic shapes and how to draw is still really important."

Drawing skills are required for the artistic phase of engraving while craftsmanship refers to the actual engraving process—the technical skills. To be an engraving artist, one has to possess the appropriate technical skills but more importantly a passion to create original designs, particularly if satisfying customers' requests.

Artists sometimes develop their own style or adopt traditional ones. Mr. Roberts notes, "I can do almost any style of engraving: American, German scrolls, natural scenes, animals, and others. It just depends on what the customer requests. The most original scene that I engraved on a gun was a Civil War battle."

A great source of information is the Firearm Engravers Guild of America that was formed in 1981 to promote firearm engraving as an art form, exchange ideas, and assist in improving individual skills. Prior to the guild, information was not easily shared. According to Mr. Roberts, "When I started, there weren't too many sources of information. There was only one good book; the internet wasn't around, and some of the written material was about jewelry engraving. The guild provides a convenient way to share information and knowledge."

The important book referenced by Mr. Roberts was The Art of Engraving: A Book of Instructions by James Meek. Written in 1973, the book provided a comprehensive summary of engraving techniques for gunsmiths, blade-smiths, and metalsmiths. "If Meek's book hadn't been written, we wouldn't have had the engravers guild, forums, and related events. He is the one who really promoted engraving in this country and kept the art form going," stated Mr. Roberts.

Engraving has enjoyed a renaissance in recent decades and promises to flourish in the future. With so many mass-produced items of similar styles on the market, engraving is a way to transform the ordinary into the unique. Expressing personality and character are timeless traits that have mirrored engraving over the centuries and will continue to provide artists with creative opportunities.

J.J. Roberts can be reached by email at jjrengraver@aol.com. He uses the Lindsay system power tools as well as the traditional non-power hand gravers. The Lindsay graver is an impact air graver and made in Kearney, Nebraska.