

By: Hitesh Verma
Sr. Gemmologist, IDI

Holding Equipment

The importance of the devices used to secure work while engraving or to say it another way, even a properly sharpened graver in experienced hands will be difficult to use if the workpiece is sliding across the bench. Knowing this it is not surprising to find that several tools have been developed to hold onto the work for cutting.

The simplest and cheapest tool is a pitch stick, This is nothing more than a convenient length of wood that has a layer of pitch smeared on one end. The work is set into the softened pitch and pressed down to insure a grip, then the pitch is allowed to cool and solidify. The stick is held against the bench pin as the graver is moved against it. When cutting is complete the pitch is warmed slightly and the piece is removed. Alternate adhesive media include flake shellac and hot glue.

Figure below shows a top-of-the-line holding device, a weighty steel ball called an engravers block. This steel sphere is divided at its equator and mounted on a greased bearing to allow it to rotate easily. The top element is fitted with a vise that has many holes to receive holding pins. One side of the holding plate swivels, so by placing pins strategically and turning the plate as needed it is possible to hold almost any shape in the block. Tiny pieces can be secured with pitch onto a strip of wood that is then clamped into the device.



Engraver's block with universal adjustments.

The gravers block is set into a felt or leather ring that

allows it to be tilted at any angle. In conjunction with its free rotation, this makes the tool extremely responsive to even subtle movements as work is being moved under the cutting action of a graver. The gravers block is also a useful tool for chasing, stone setting and other "two-handed" tasks.

Working with the Graver Elaborate designs or lengthy panels of text will almost certainly be given over to professional engravers, but it is useful to be able to cut a monogram or decorative line at the bench. In addition, goldsmiths who have confidence in their engraving skills will find themselves reaching for a graver to assist in clean up, to sharpen a detail, and to cut seats for stones. It is worth noting that every culture that has worked precious metals has invented a graver or similar cutting tool.

Imagine learning to play a sport or to dance only by reading about it and you will have a sense of the importance of practice when it comes to learning how to engrave. The following passage attempts to describe the cutting process, but no amount of reading or observation can take the place of sitting down with the tools to practice. Regular work with gravers, however, will teach factors such as angle, force and roll if you keep at it. It is better to practice for 15 minutes every day than to labor for a couple hours once a month.

The proper stroke will involve a delicate ballet between tool and object as each is moved into the other. Dozens of muscles in the hands are constantly receiving information and reacting to it in the form of

