

## ***Hada and Nugui***

by

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Most *Nihontô* enthusiasts are aware of how important the *Hada* is to the Japanese sword. It is one of the major points of aesthetic appreciation and a key factor in determining the time, place and school of production. It is also the key to the technical quality of any sword.

It is the key not only because well forged, even *Hada* is obviously desirable and shows that the smith had a thorough knowledge and control over his skills, but also it affects the tempering process. What is not often mentioned is that poorly worked and forged steel will not produce or take a good *Hamon*. This extends to the color, brightness - the *Nie* and *Nioi* - and how they form within and around the *Hamon*, and even the shape of the *Hamon* itself. Whether the *Hada* is *Itame*, *Mokume*, *Masame* or some combination dictates what kind of *Hamon* both in shape and intrinsic characteristics can be successfully done. The various qualities found in the steel and imparted to it during the forging process are important in this, but the physical forging grain of the steel is at least as important.

As a *Togishi*, I could not presume to comment on the forging process in detail as it is another area of expertise entirely. But as a *Togishi*, I must be able to deal with the outcome of that forging technique: the *Jihada*.

Specifically the work on the *Hada* begins in the *Shitaji* stage and is carried on into the *Shiage*. The *Hato* and *Jito* stones are used in this case. The stones are of the same kind known as *Uchigomori* stones. The *Hato* is usually to deal with the *Ha* and the *Jito*, the harder of the two, is used to bring out the *Jihada*. It is used to make the *Hada* more prominent, or less so, in the case of loosely or coarsely forged *Hada*. By judicious use of the *Jito* we can to some extent give the forging a more even appearance. When well done by a *Togishi* with a true understanding of his work, the forging will have a more mellow, well balanced appearance. I hasten to add however, that no *Togishi* can change the basic appearance of the forging or make a poor quality blade better intrinsically. We can only work with the basic quality of the *Hada* to enhance its positive points in a pleasing way.

With the completion of the *Jito*, the *Shitaji* is also completed. We then move into the *Shiage* work which requires a totally different body position and frame of mind. I continue to work on the *Hada* in the *Tsuya* process, using stones I have chosen, split and ground by hand to about 1 millimeter thickness. These I glue with lacquer to paper made from the persimmon tree. There are two different kinds of stones used in the *Tsuya* process. One is the *Hazuya* stone used in the *Hato* and *Hadôri* process. The *Jizuya* is of a yellow brown cast and, as the name implies, is the stone used to deal with the *Jihada*. This stone helps capture the beauty of the steel by bringing up the highlights of the *Jinie*. This will give the steel the *Nettori* or moist, sticky appearance that is so prized in fine blades, and bring out the natural color of the steel. The degree to which all this can be achieved depends on the *Togishi's* skills and the actual amount of *Jinie* there is to begin with.

It's absolutely necessary to choose the proper stones for each sword. As stones are natural things there are infinite qualities to be found in a single type of stone. This is true of the steel and forging of each blade, and each *Togishi* has a different touch from any other. So we see that the choice of stone is quite dependent upon a number of complex variables. Being able to choose stones of the right sort is one of the important skills a really first class *Togishi* must master.

When the *Jizuya* process of the *Tsuya* is completed, it is time for the *Nugui*. The word simply means "to wipe" and does not really give one any idea of its great importance. It caps all the hard work leading up to giving full expression to the *Jihada*. The actual substance known as *Nugui* is made of flakes of highly decomposed steel that is a by-product of the swordsmiths' forging process. This is ground with mortar and pestle for several weeks. It is then mixed with *Chôjiyû* (clove oil) and worked into the *Jihada*. Though this finely ground and strained through Japanese paper, the polisher must be careful not to get *Nuguibiki* (*Nugui* scratches) on the *Hada*. This would be a disaster and require redoing much of the work already completed. To guard against this takes a very sure touch. In this process, as in the rest of the work as well, one must never hurry, must be deliberate, have courage and put absolutely everything else out of his mind. I have found if someone, no matter how great his skill, lets his mind dwell on one thing or another, his work will come to grief. This may sound easy, but it is the nature of a person to worry about daily things and it is no slight thing to block these things out.

In relationship to the previous work done in the *Shitaji* with the *Hato* and *Jito*, the *Nugui* process is physically less, but emotionally and aesthetically every bit as demanding. Should the *Hada* take on too dark or too light an appearance, there is no real way to balance it later. Either situation probably denotes some error in judgement when doing one of the previous steps mentioned. Of course the *Jihada* of any blade has its own qualities, and some are difficult in the extreme to work with and make them look attractive, but something can always be done to make the *Jihada* acceptable to some extent. A *Togishi* must, while working on a blade in the earlier steps, be able to anticipate such problems.

When deciding how dark or light to make the *Hada*, not only the natural highlights and color of the *Hada* must be taken into consideration but also the height and shape of the *Hamon* and the basic fineness and coarseness of the *Hada* forging as well. In the case of a high *Hamon* where there is more *Ha* than *Ji*, I may consider less darkness in the *Ji* desirable. In any case, the *Ji* will appear to be darker than it is due to the contrasting whiteness of the *Ha*. The *Togishi* must not allow the *Ha* to overpower the total affect of the polish. Conversely in the case of rather low lying *Hamon*, the *Togishi* may wish to give a very slightly darker cast to the *Hada*. This is especially true of blades with a rather *Shiraketa-hada*. This is *Hada* with a milky, cloudy color. These blades are always a problem, but still can be made quite attractive if the problem is anticipated early and steps taken to minimize it.

When the *Nugui* is complete it is time to move on to the burnishing of the *Shinogiji*, the *Hadôri*, and finally the placing of the *Yokote* and *Narume* which will complete the polish and is not in the scope of this article.

At this point I must minimize the ravages of time and get back to work on the blade that awaits my undivided attention.