

# Beyond The Edge

A Newsletter for Woodworkers from The Luthierie

Volume 1 No. 3

Fall, 1987

\$3.00

## HAMMERS, ANVILS, BLOCKS AND BLADES

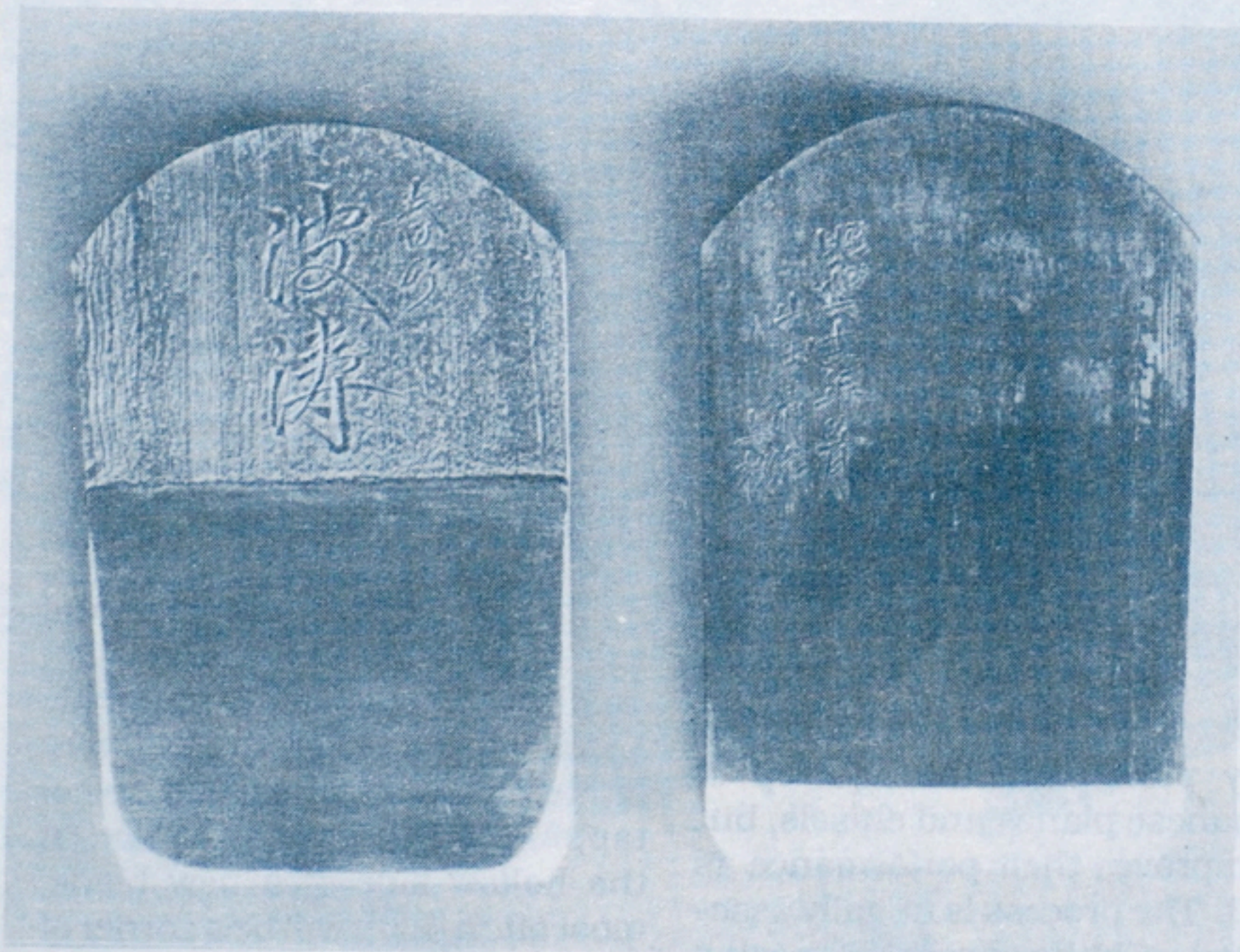
**Special Quality Plane irons and Sub-blades:** On his last trip to Japan, Robert visited many blade makers and distributors and selected the best plane blades among those he saw to import on a limited basis. The prices below include a sub-blade.

60mm:	Yamada Syuho	\$135.00
	Nakano Yunami	\$195.00
	Usui Tetsuhide	\$250.00
65mm	Nakano Yunami	\$210.00
70mm	Nakano Yugiri	\$225.00
	Nakano Nagamichi	\$225.00
	Yamada Hato	\$250.00
	Usui Juichi	\$185.00
	Usui Kenkon	\$230.00
	Usui Meiju	\$270.00

(See photos below and on page 2.)

**Anvil** - We had these made locally. They are designed for use in tapping out. Dimensions: 4" high x 3"x 3". \$15.00

**Uncut plane blocks** - We now have high quality Japanese white oak blocks for *Dai*. \$20.00



Yamada Hato blade, front and back side.

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And more...

**Hammers** - We can finally bring a **tapping out** hammer to you! (So many people have asked if we have these, we are glad we finally can say "yes"! We are pleased with this hammer, as you will be. \$16.00. We have carried a few brands of plane adjusting hammer over the years, but here is one we chose from many. It is 150 gr., the ideal weight for this purpose. \$16.00 The hammer we suggest for use with **chisels** is 450 grams. The price of this one is \$18.00.

*Beyond The Edge* is a quarterly publication of The Luthierie.

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All comments and questions should be addressed to:

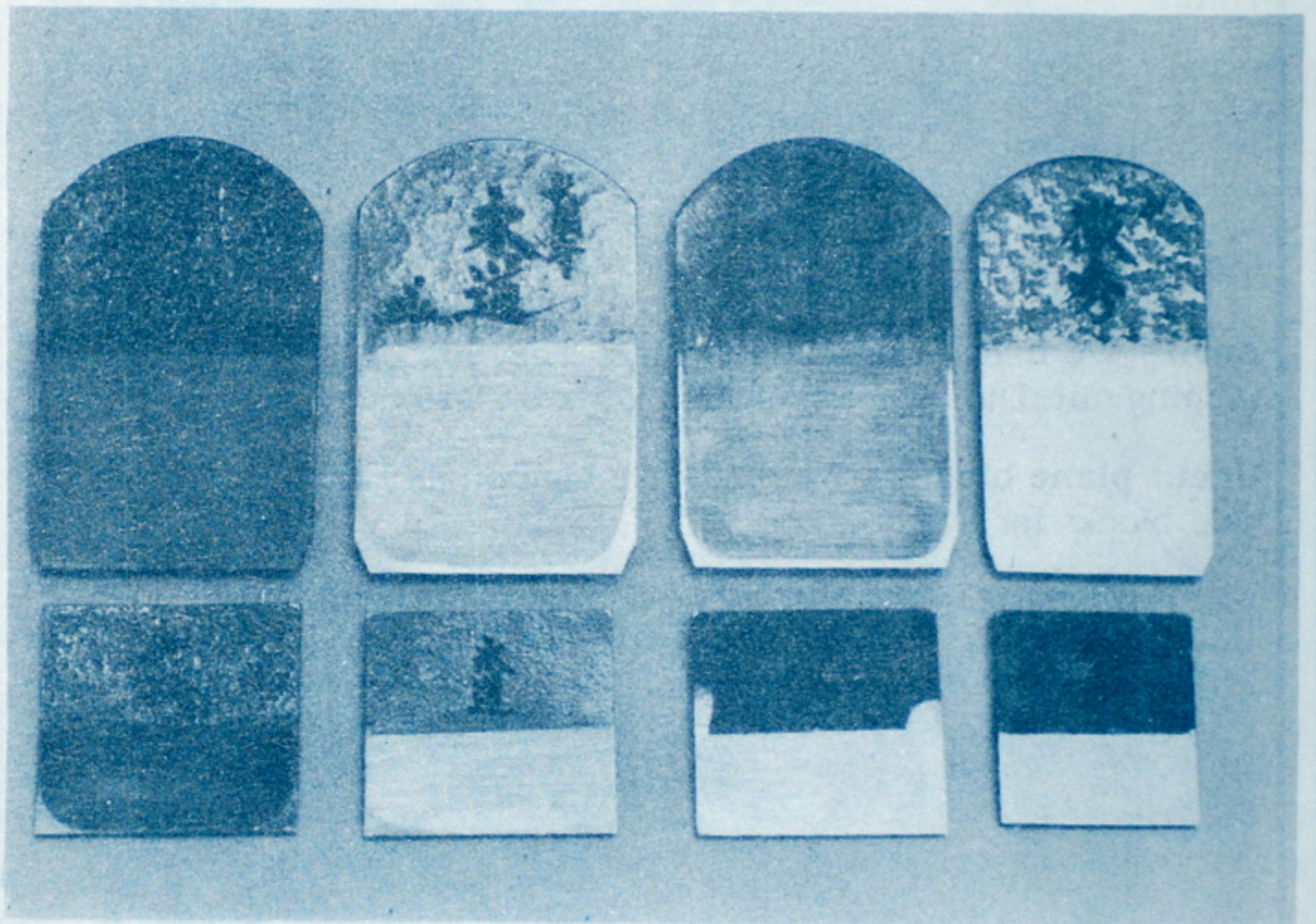
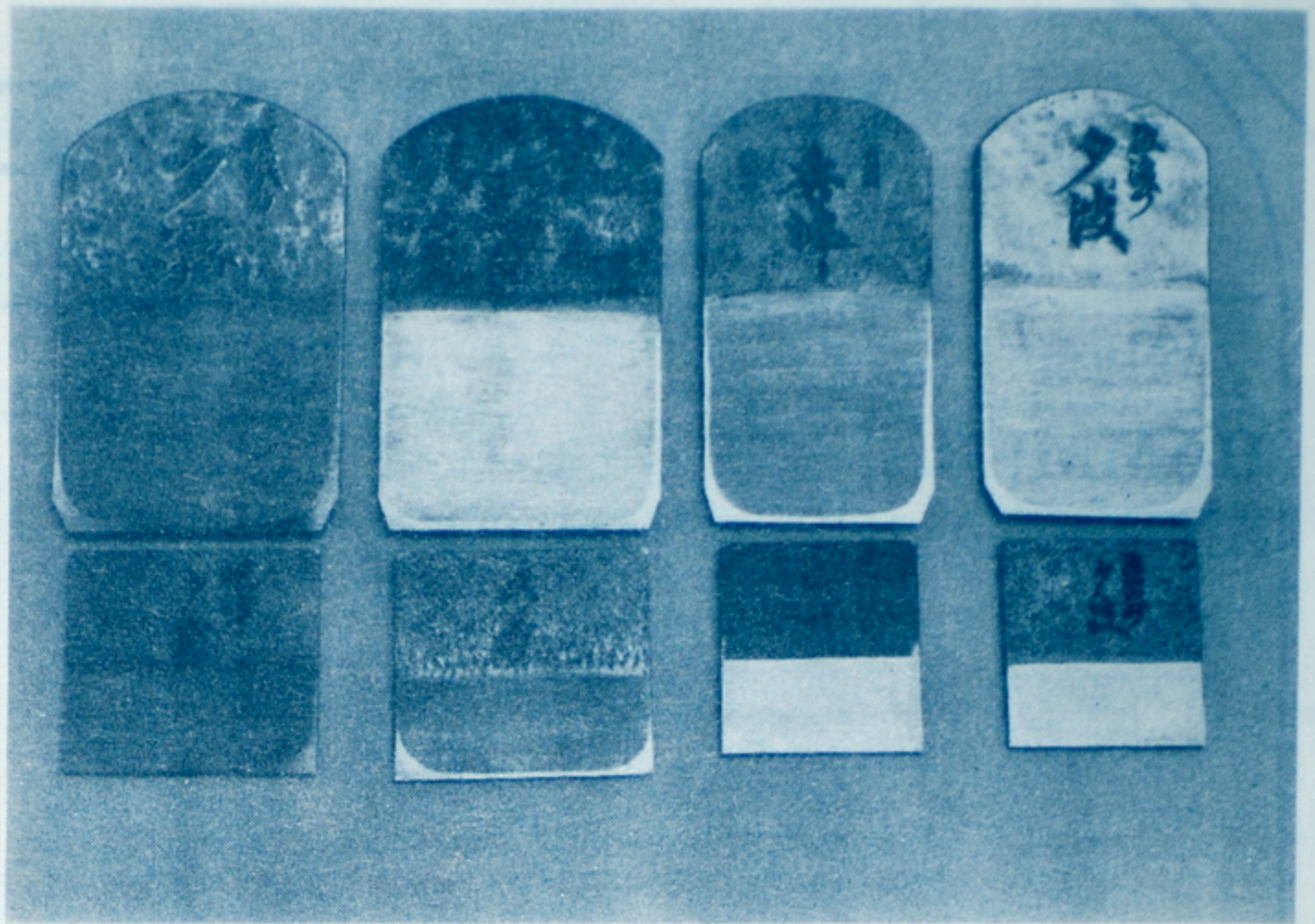
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## New Services Provided

### Saw Sharpening

Saw sharpening, tapping out, and *Dai* (plane body) making services are now available from the Luthierie. Robert Meadow has been authorized by the Shindo Saw Company of Japan to offer a sharpening service for their saws. He is the only person outside of Japan trained and authorized to provide this service. The Luthierie will accept any Shindo saw—Taki or Ryu brand—for servicing. The sharpening service includes straightening the saw, re-setting the teeth and re-sharpening. The price of this service is \$20.00 and the sharpened saw will be sent out within two weeks from the day we receive it. We can also accept Shindo saws which need to be re-welded, or which are so badly worn or damaged as to need a new set of teeth. These services are each \$30.00 and include re-sharpening as described above. The price reflects the cost of sending the saw to and from Japan via Air Mail; the return time for welding and new teeth is one month.



Special quality blades: Top, from left to right - Nakano Yugiri, Usui Meiju, Yamada Syuho and Nakano Yunami. Bottom - Usui Kenkon, Nakano Nagamichi, Usui Juichi and Usui Tetsuhide.

### Tapping out

Tapping out is not only a necessary process in the upkeep of Japanese planes and chisels, but it improves their performance as well. The process is usually associated with the concept of moving

metal towards the hollow-ground side of the blade to re-establish a land on that face after the blade has worn. However, this is a very limited view of the advantages of tapping out. If you try to flatten the hollow side of a new blade, most often there will be a corner of the blade which doesn't make

*Cont'd on page 8.*

# Grinding and Buffing - Sharpening Tips

This issue's drawing is for a set of jigs we have devised for our grinder to facilitate the the sharpening of plane irons, chisels, planer blades and scrapers.

A grinder is used when you want to remove more metal than is practical with coarse stones. In our shop, we use the grinder any time that our 1200 grit Aquastones are not coarse enough. We have designed a system of jigs that help you control the angle and placement of the grinding.

## Dry Vs. Wet

A few words about the pros and cons of dry versus wet grinding. The disadvantage of dry grinding is that the grit can get on you and your clothes while you grind,

and can then fall on your stones, contaminating them. Wet grinding holds the grit in the water. However, wet grinders traditionally have a larger diameter wheel, and slow speed. A smaller diameter wheel makes it easier to control the placement of your grind. The high speed of the dry wheel also provides quick removal of the metal. Each individual must weigh these factors in choosing a grinder.

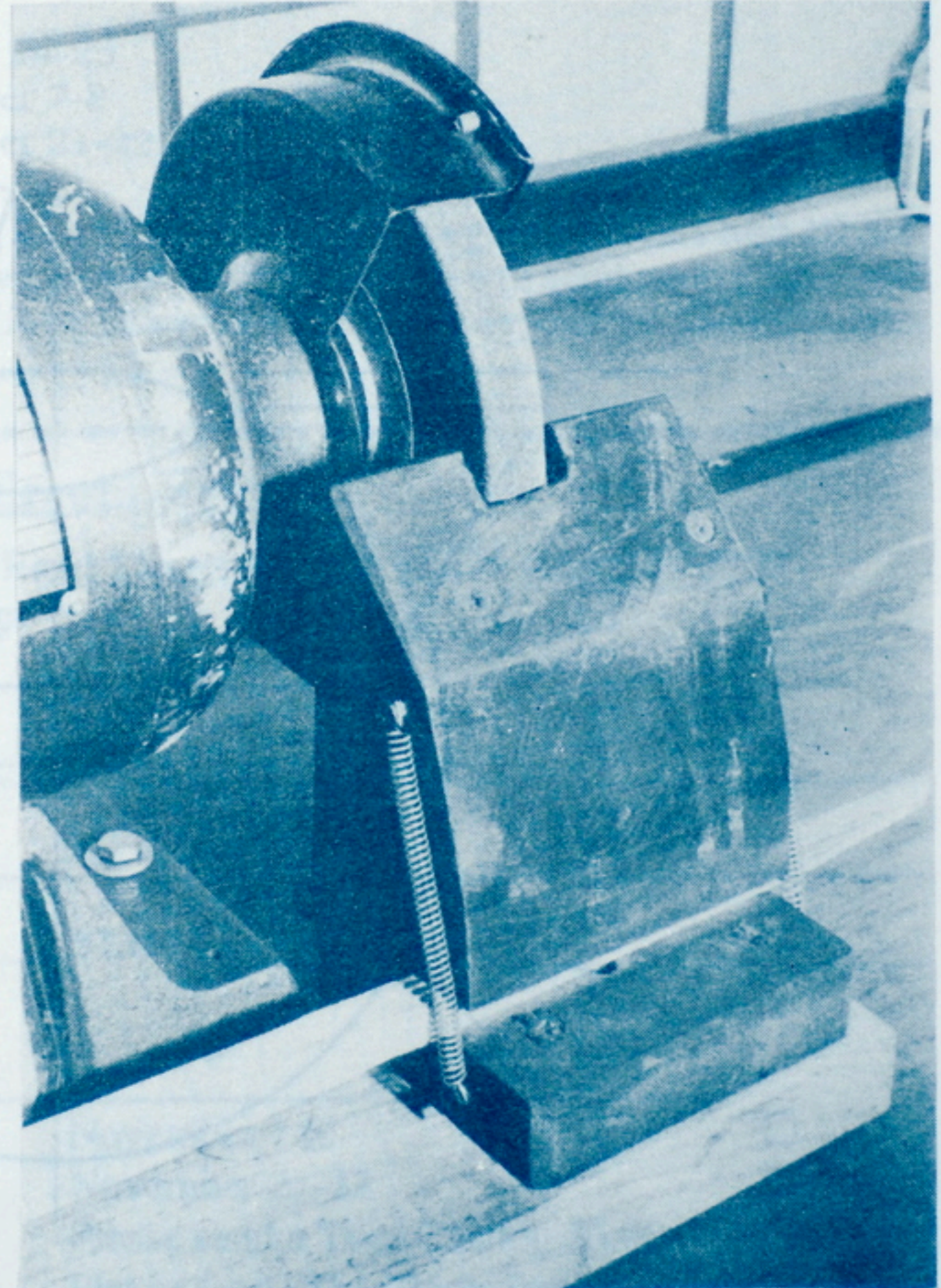
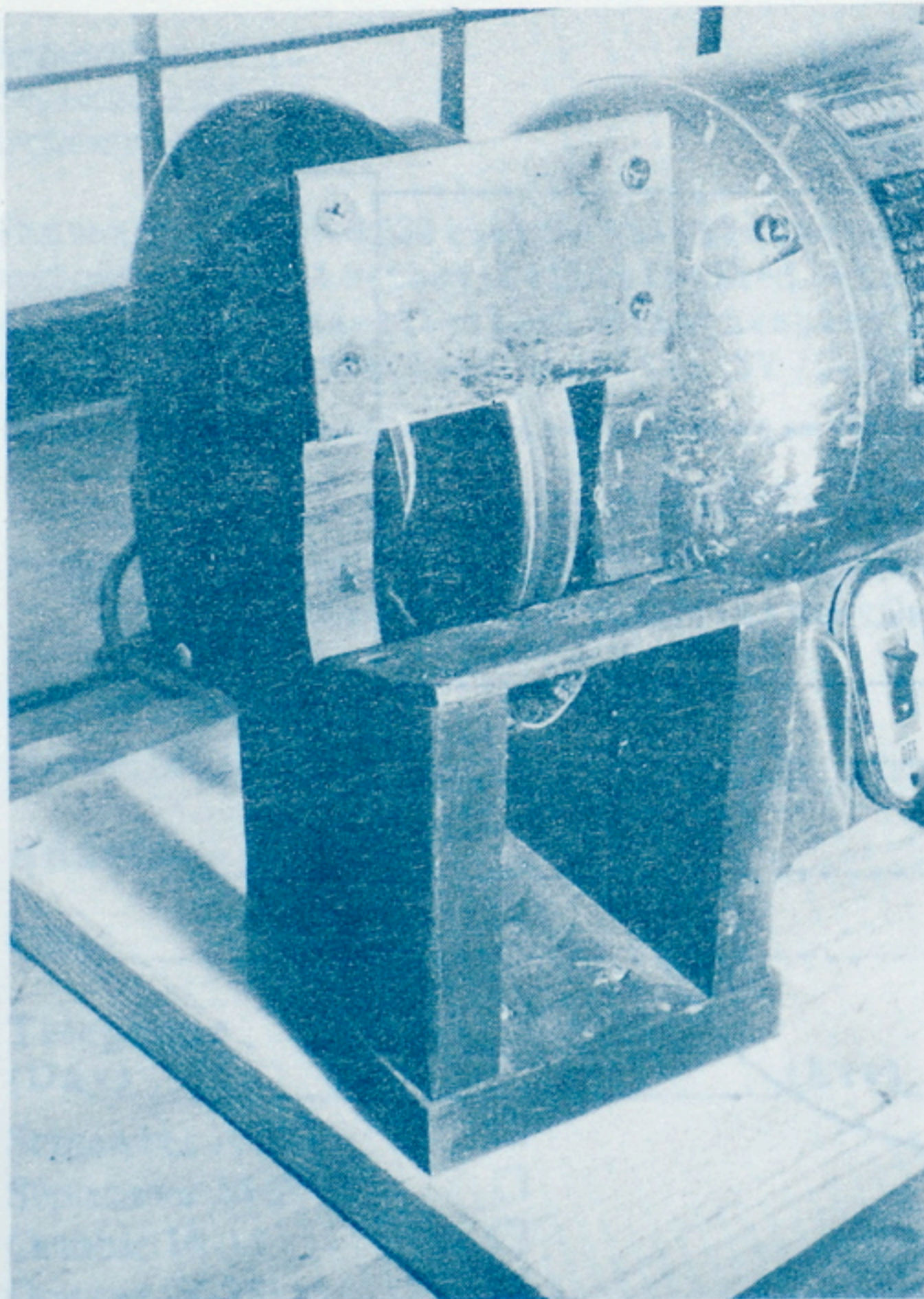
Our grinder has an 80 grit grey wheel for grinding on one side and a hard felt wheel for buffing on the other. (Special grinding wheels are available for grinding right up to the edge without burning, but these wheels are expensive and wear quickly.) Chromium Dioxide is used as a buffing compound.

The grinding jig is designed with a tapered shim for easy adjustment of the grinding angle. As you push in the shim, the angle is increased. You can gradually increase the angle until you are grinding almost up to the edge. You should not create a burr on the grinder because the thin steel at the edge cannot dissipate the heat of grinding and will burn.

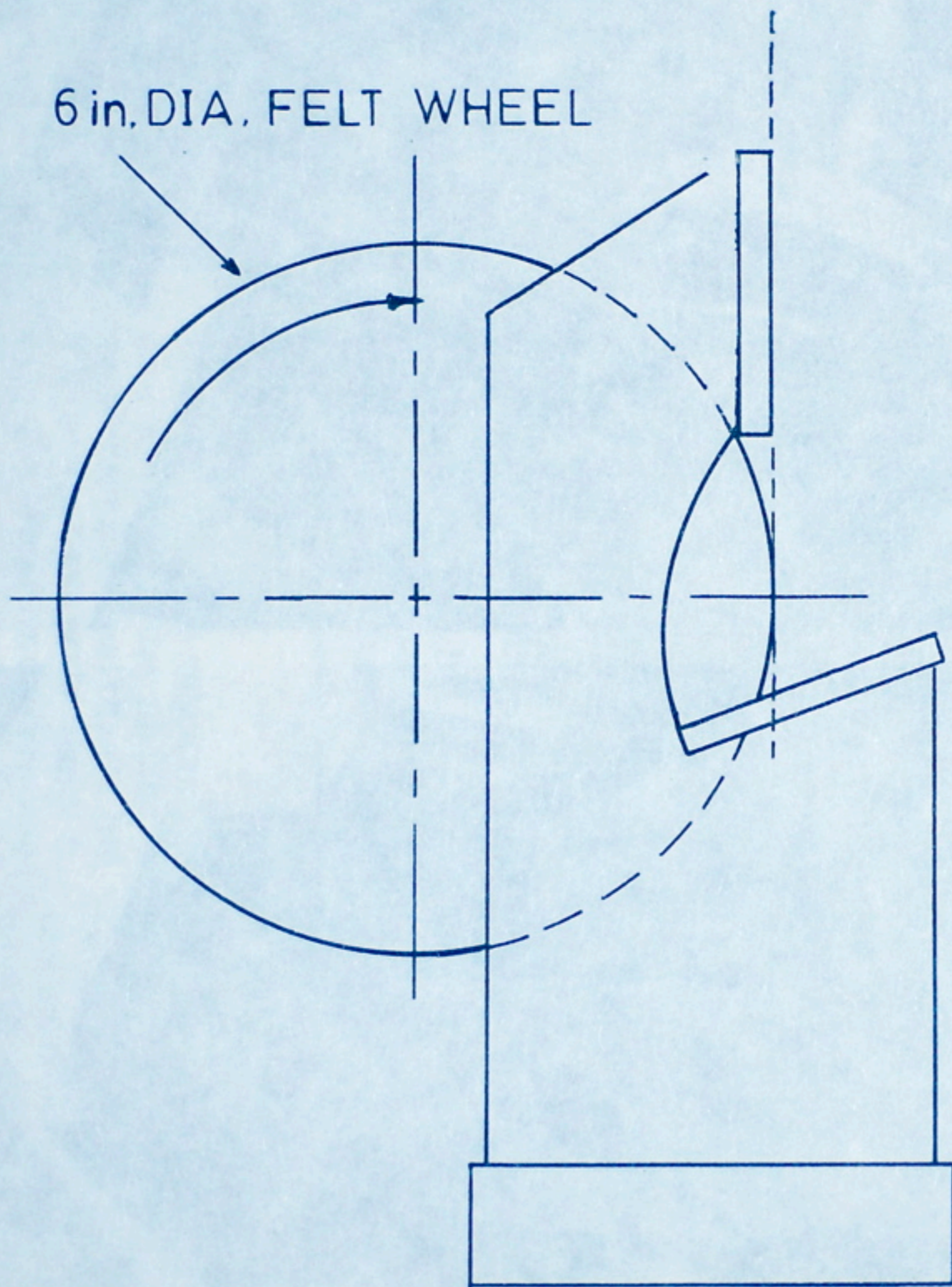
## Planes and Chisels

Plane irons and chisels can be ground on the bevel to thin out the dullness. The circumference of the grinding wheel creates a very shallow hollow. The grinding marks can then be removed in just a few strokes on the 1200 grit Aquastone. The hollow should be gone by the time you raise a burr.

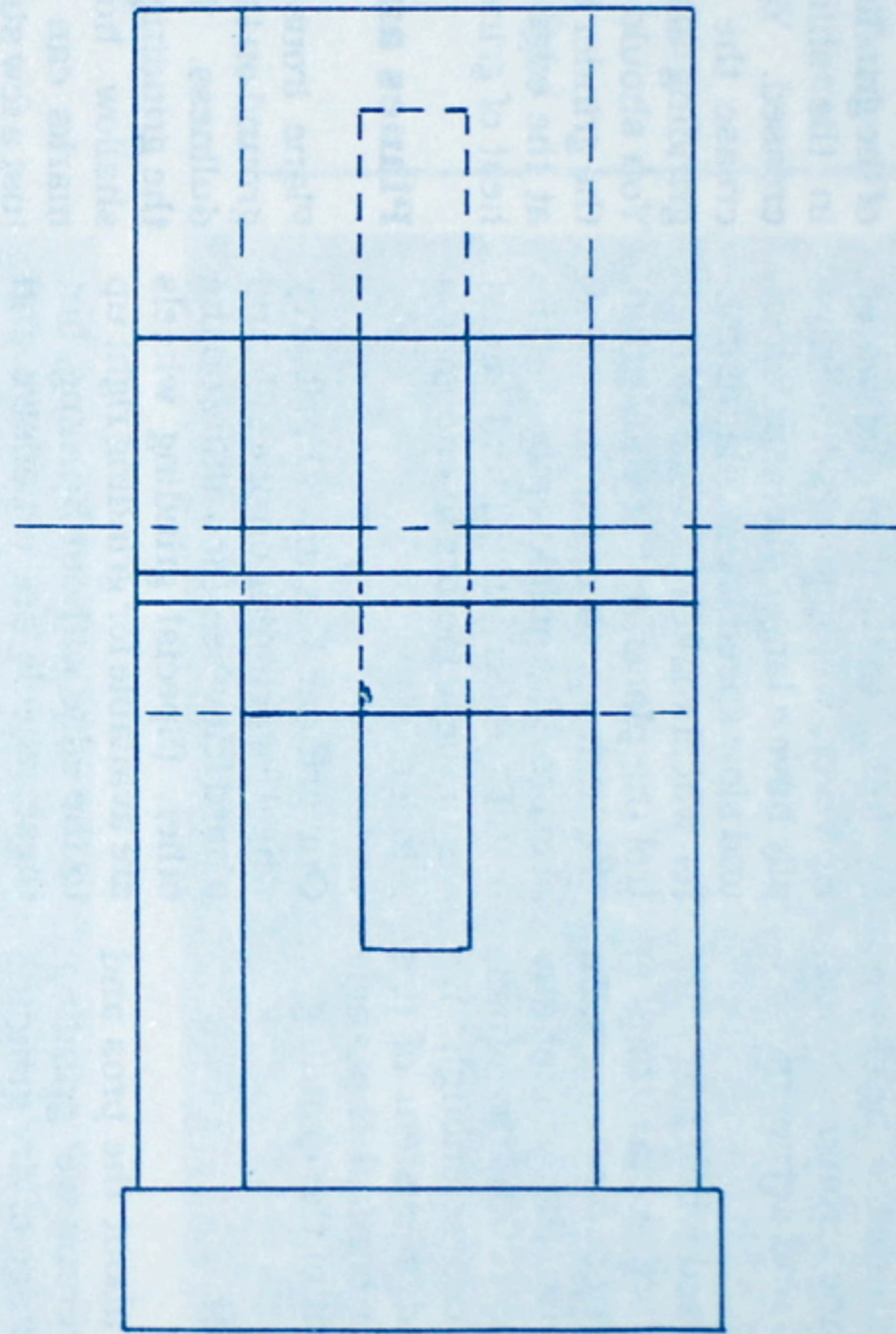
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Grinding Jig: Left - buffing set-up; right - grinding set-up. Plans on pages 4-5.

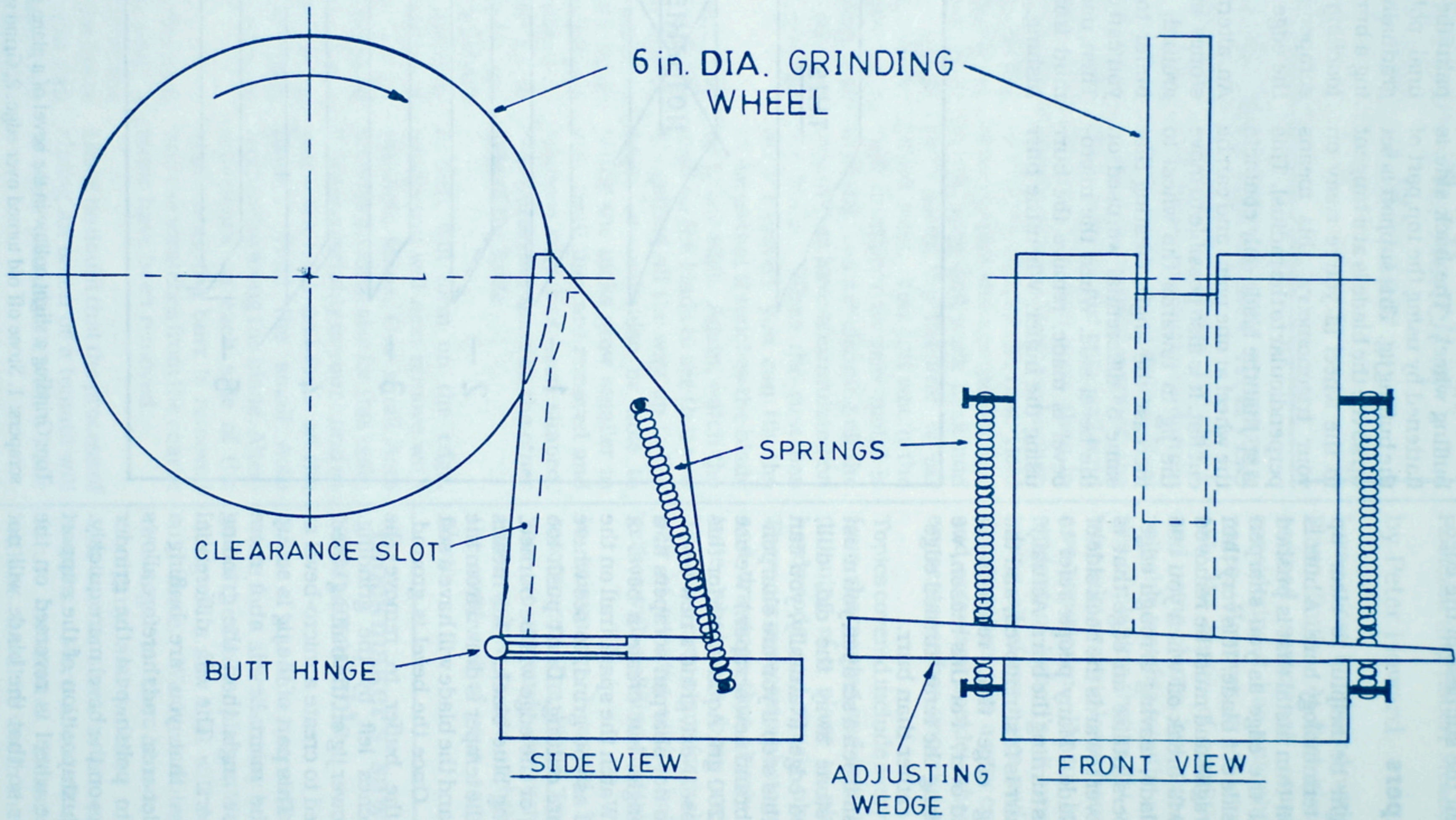


SIDE VIEW



FRONT VIEW

SCRAPER BLADE BUFFING JIG  
 — ONE HALF SCALE — G



GRINDING WHEEL TOOL REST  
 — ONE HALF SCALE — G<sub>r</sub>

Cont'd from page 3.

If you grind a large hollow you will weaken the stiffness of the edge.

## Scrapers

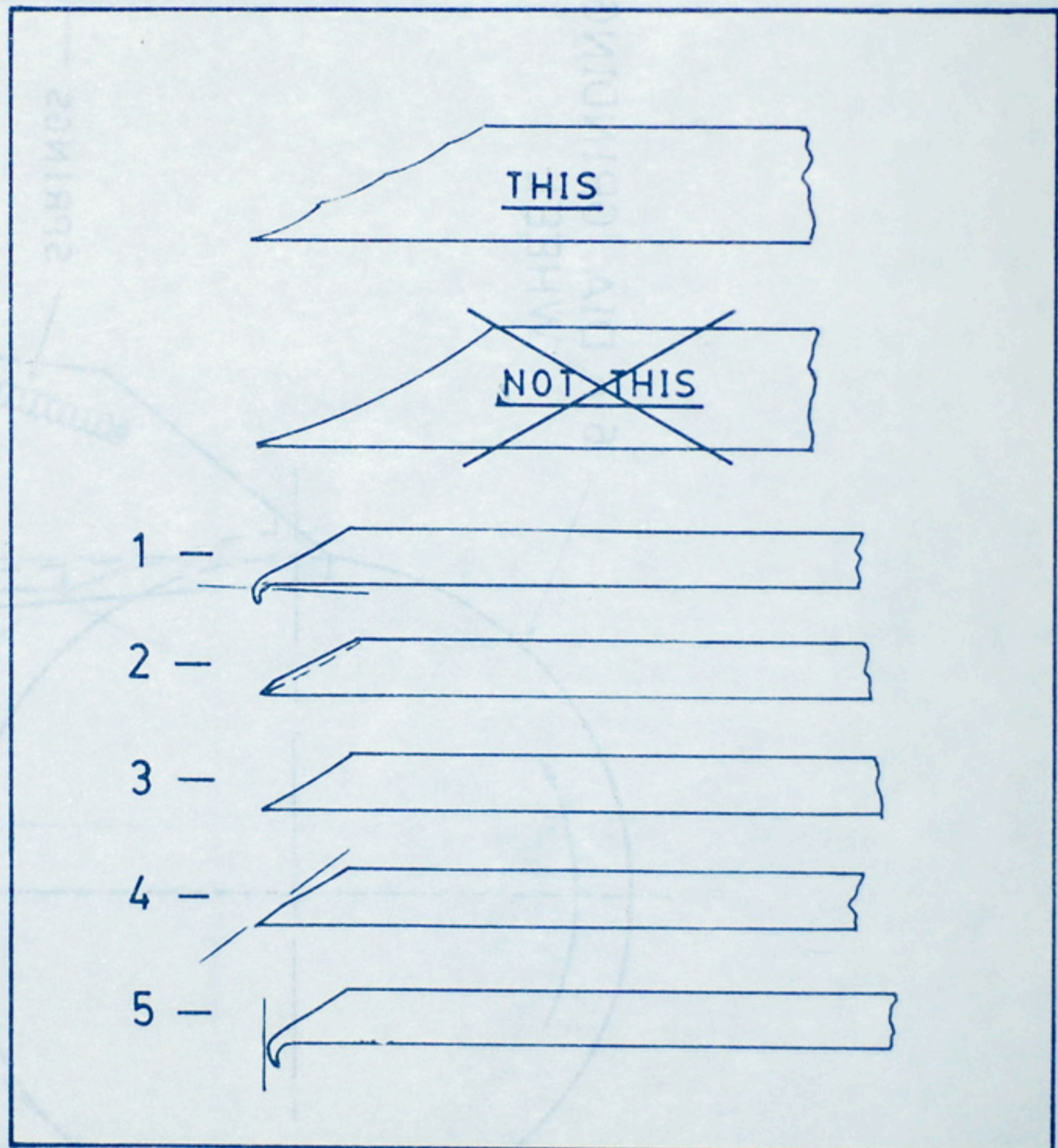
It might be helpful to clear up some terminology here. A burr is the foil-thin metal that is pushed out at the edge as you sharpen each side of a blade. It is very thin and fragile and must be removed or it will break off when you use the blade, leaving a rough edge. Scrapers utilize an edge that is bent over towards the back side of the blade. Many people refer to this as turning the burr. Actually, the burr is first removed, and the strong edge that remains is turned over. For this reason, we are using the term "turned edge" here, rather than burr.

To resharpen a scraper, you must first stone away the old, dull, turned edge. (Naturally, you can skip this step if you are sharpening a brand new scraper.) We use the 1200 grit Aqua stone for this purpose. Next, grind a new bevel. We do not sharpen scrapers at a 90° angle, but create a bevel of 35°. Watch the spark trail on the wheel as you grind, to see where you are cutting. Don't push too hard, or the edge will be burned, turning blue-black. This means that the temper is drawn from the steel and the blade will have a soft spot. Once the bevel is ground, use the buffer to remove the scratches left by the grinding. The lower jig on the buffing wheel is used to create a micro-bevel at 40°. This part of the jig is set up for the micro-bevel, at a more obtuse angle than the grinding support. The 5° differential means that you are buffing a smaller area, and therefore allows you to polish past the grinder marks on the bevel more quickly. The juxtaposition of the support to the wheel is reversed on the buffer so that the blade will not catch as the wheel rotates to-

wards you. This is an important feature, because a tool can be violently thrown if it catches the buffing wheel. The back side is flattened by using the top part of the buffing jig. This support is set up so the the blade is at a tangent to the wheel (if you're rusty on your trigonometry, this means perpendicular to the radius). This is so that the blade only contacts the wheel at one point and can be cut flat. It is also possible to move the jig in towards the wheel to increase the angle, creating that same 5° differential we used on the bevel side. When the micro-bevel is made, remove the burr using the buffer. When the burr

has been removed, you should be able to shave with the blade. Next strop the edge on the skin of your palm (be careful, please), for the final polish. Now you want to gradually turn the edge over using a burnisher, *without actually touching the edge itself*. The scraper should still shave after the edge has been turned!

An alternative method is to use stones after the bevel has been ground. Instead of using the buffer to make the micro-bevel, you can do this on an Aoto stone. Then, use a wooden strop with the mud from the Aoto before burnishing.



Top: Grinding a slight hollow in the bevel of a plane iron. Steps in sharpening scrapers: 1. Stone off old turned over edge. 2. Grind new bevel. 3. New bevel. 4. Buff micro-bevel. 5. Burnish to turn over edge.



## From The Bench of Robert Meadow

### SHARPENING JAPANESE KITCHEN KNIVES

Japanese kitchen knives come in a variety of sizes and shapes, designed for specific uses in Japanese cuisine. Like other Japanese tools, they are laminated; tool steel is sandwiched between two layers of mild steel or wrought iron. You can get a better edge on a Japanese kitchen knife than on any other kitchen knife we have used, and they are simple to sharpen. The following method is one I developed for ease and efficiency, keeping in mind that the person who needs his/her kitchen knives sharpened is not always a woodworker.

What is different about this method of sharpening is that it is somewhat upside down. That is, holding the knife in one hand, you hold the stone **on top** of the blade to sharpen. This means that you can see the area you are sharpening as you work. You can watch the changes in the blade and where the trail of mud is, which will indicate where you are cutting. This method also makes it easier to deal with the subtle curves in the edge of the knife and to control the angle at which you are cutting. The stone is following the curve of the blade, rather than trying to get the curved blade to conform to the stone.

If the blade is very dull or nicked, you will want to begin with a coarse stone. I recommend the 1200 grit Aqua stone. If the blade is not severely dulled, you can begin with a middle stone, such as the small Aoto. The clay coating that is put on the steel before

heat-treating leaves the black finish that protects the blade from rust. Unlike a stainless steel knife, the exposed part of the blade, towards the edge, will tend to rust. The first step, then in resharpening a Japanese kitchen knife is to remove the rust. Hold the wet Aqua stone perpendicular to the edge and work back and forth along the flat area of exposed steel. You can watch the rust disappear as new metal is exposed. You are cleaning off the oxides that have accumulated on the blade. When the rust has been removed, you can tilt the stone so that it touches the blade up to the edge. Again, watch the mud on the blade to see that you are getting all the way up to the edge. You will also be able to watch the nicks grow smaller in size, until they are removed and an even edge has been shaped. You will do the same on the other side of the knife.

A burr will form on the edge, which you will next remove with the Aoto stone. Our small Aoto stone is an ideal size for this task; it fits comfortably in your hand as you work back and forth on the blade. Hold the small Aoto lengthwise along the blade. Alternate work on each side of the blade until the burr is removed and the scratches from the coarse stone have been removed.

I have no doubt that the process of slicing an onion or a tomato will be most pleasurable with a knife

*Cont'd on Page 8.*

### Review:

**The Plane Truth** by Bonnie Robiczek and Robert Meadow

by Peter Howard

I was most impressed with The Plane Truth. At first glance it seemed somewhat expensive considering it has only thirteen pages. However, it contains not only the basics of conditioning and using planes, but also many valuable insights into the subtleties of planing that might otherwise take years to learn from your own experience. Having been a student of Robert's, it was like taking all of my notes and condensing them into a very concise and organized booklet where every sentence has importance.

Topics covered include everything from sharpening and initial conditioning of a plane to planing hardwoods and finish planing. There are numerous photographs and drawings that clearly illustrate what has been written. There are even plans for making a pair of winding sticks held together with a sliding dovetail key.

In summary, I would highly recommend The Plane Truth if you are seriously interested in learning how to use and get the most out of your Japanese plane.

### "Blockmaker's" saw soon available

Some of you have been waiting a while for a saw that may be used to cut the *Dai* for planes. We have designed a saw that will do this and more. We have submitted drawings to the Shindo Saw Company, and we hope to have this saw in stock in the coming months. More about this in a future newsletter. Please bear with us. It will be worth the wait.

## Services

*Cont'd from Page 2.*

contact with the stone. This means that the blade should be tapped out so that the land on the hollow face can be made truly flat. Beyond this practical use for tapping out, there is a beneficial effect of the process on the edge. Tapping out changes the direction of the crystals in the steel, tensioning the blade. This will improve the performance of any blade by reducing the deflection of the edge and minimizing the leverage on the crystal structure. You can learn tapping out at one of our workshops, or have your blade tapped out for you. The prices are \$20-30 for a plane blade, \$15-20 for a sub-blade and \$5-10 for a chisel, depending on the size. This service is available only on tools purchased from us. We cannot account for the quality of the steel in other blades.

### Custom Plane Bodies

Finally, you can now have a plane body custom-made at The Luthierie. One of the problems with buying planes made in Japan is that the wood, cut in Japan, can shift drastically when the plane comes to the U.S. This service provides a *Dai* custom cut in the US to fit your blade. The bodies used are seasoned, water-cured Japanese white oak, personally selected by Robert Meadow. The blade is fit to the body, the blade and sub-blade are tapped out, tensioned and sharpened. The sole of the plane is adjusted and the plane is completely set up to work. The cost of this service, is \$300 for a smoothing plane and \$200 for a scraper plane. The delivery time is two weeks from the time of receipt of the order. The price includes the *Dai*, but does not include the blades. We are now carrying a line of blades and sub-blades. (See pages 1 & 2.)

## EXPERIENCING JAPAN

By David Geer



The tour group poses in front of The Black Castle of Matsumoto.

Last May I joined Robert Meadow and a congenial group on a woodworker's tour of Japan. This was more than an ordinary trip for me. The quality of our accommodations and cuisine were superb and well worth the trip alone. The first hand experience of another culture was educational and rewarding. To observe and be a part of another people's lifestyles, habits, and traditions opens the mind and heart. But what made

the most lasting impression on me as a woodworker, was the subtlety of care and refinement in the simplest of objects. For example, the execution of a fence or railing along the border of a property, although simple in appearance, was done with so much precision and attention. This quality of thought was present wherever we went and in whatever architectural work, great or small, we saw, from large temples to the shoji screens at our lodging.

### Kitchen Knives

*Cont'd from Page 7.*

thus sharpened. I also consider this sharpening exercise a good lesson for one who sharpens woodworking tools as well. The unique opportunity to watch the sharpening take place provides a valuable experience that can help you perceive what is taking place when, in sharpening your woodworking tools, the area being sharpened is once again hidden under the blade.

My lesson and goal from this trip is to carry this into my own life and woodworking practice. So many times in the past, in my Western approach to a design or construction problem, for the sake of speed, I've ignored that everpresent, quiet inner voice that's requesting my best and highest approach to the problem or task at hand. Being in Japan, and in an environment of seemingly unending quality in craft and architecture, rekindled and renewed that spark and desire in myself.



## TOOLS ON SALE

The following sale prices are available to subscribers of Beyond The Edge only. These discounts are in effect until November 1, 1987 .

<u>Item</u>	<u>Reg. Price</u>	<u>Discount</u>	<u>Sale</u>
Softwood Dovetail Plane	\$61.60	20%	\$49.25
Tengu Slick 36mm	25.00	20%	20.00
Aqua Stones 800 grit	14.80	15%	12.55
Finish Stone TSY1	25.00	15%	21.25

## Hand Tool Workshops

The Luthierie provides an ongoing opportunity to pursue and perfect woodworking skills. Our workshops are small, so we can deal with individual goals and needs. If you are new to Japanese tools, we suggest that you work on sharpening and setting up a plane during a week-end workshop. In so doing you will learn to use Japanese waterstones, to tap out and sharpen the main blade and sub-blade, to fit the blades to the body and adjust the sole of the plane. You will finish off the week-end with the satisfaction of feeling those shavings glide off your blade with ease. (Is there a sensation more delicious to a woodworker?)

Another reasonable goal for a week-end is to work on joinery. This combines the skills of marking out and the use of Japanese saws and chisels. Those who have experience in the fundamental aspects of this style of woodworking may want to bring projects to complete over one or several workshops. We are interested in helping you learn what you need to learn.

### Fall Workshop Dates

September 12-13	October 24-25
September 26-27	November 7-8
October 10-11	November 21-22

The workshops are \$100 each for two days, including lunch. The workshops begin between 9 and 10 AM, and end at 6 PM. A deposit of \$30 is required. When we receive your deposit we will send you a map, and a list of places to stay in the area. Please complete the form below and send your deposit to: The Luthierie-2449 West Saugerties Road-Saugerties, NY 12477

### Workshop Enrollment Form

Please send to: The Luthierie-2449 West Saugerties Road-Saugerties, NY 12477 (914)246-5207  
 Deposit \$30 per person per workshop.

PLEASE PRINT

Name: Mr/Mrs/Ms \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone

(Day) \_\_\_\_\_ (Eve) \_\_\_\_\_

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| September 26-27 | <input type="checkbox"/> | November 21-22                       | <input type="checkbox"/> |
| October 10-11   | <input type="checkbox"/> | Please send a Tool Catalog \$3.00    | <input type="checkbox"/> |
| October 24-25   | <input type="checkbox"/> | Please send "The Plane Truth \$14.95 | <input type="checkbox"/> |
|                 |                          | Please send a free price list.       | <input type="checkbox"/> |