

This manual is written for you the beginner in the art of checkering a gunstock. It will guide you in selecting the proper tools and will introduce you to their correct and efficient use. It will show you the way to lay out and finish a checkering job.

In this booklet I have dealt with fundamentals only, leaving the more complicated aspects of modern gunstock finishing to future manuals. You will find several simple designs on pages 10 and 12. You can use them as a starting point for designs of your own.

For you who fall in love with gun checkering as a hobby, (and I hope there will be many) I predict endless hours of enjoyment and satisfaction in checkering your own gunstocks and those of your friends.

Bill McGuire

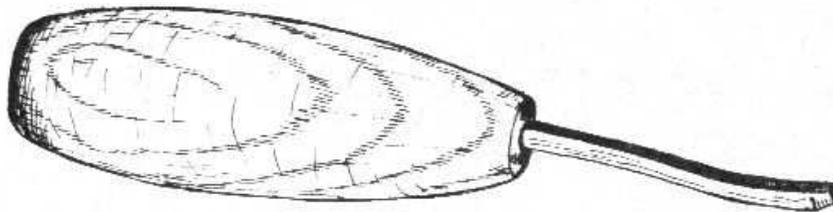
Bill McGuire
Master Stockmaker

Chapter 1

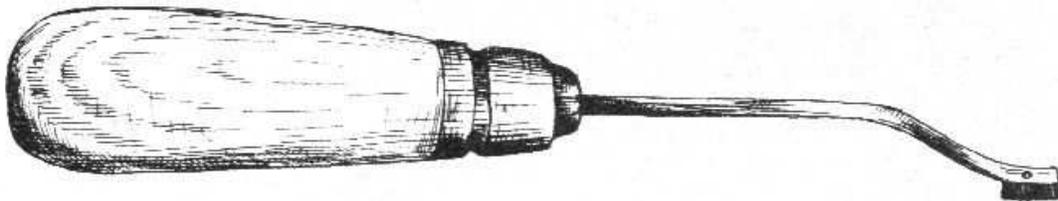
THE TOOLS YOU WILL NEED

With the tools shown here, the amateur or the professional should be able to do any job of gun checkering, from simplest point design to most intricate fleur-de-lis pattern. As in many handworking operations, success depends not only upon the skill of the worker, but also to a considerable extent upon having the proper tools at hand when they are needed.

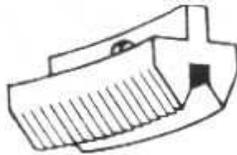
I recommend Dem-Bart tools to you because I believe they are the best-designed to do the meticulous job of gun checkering. Also, because I have used them professionally for many years and because I have had a hand in designing and making them. Today Dem-Bart tools are used and recommended by master gunsmiths throughout the world.



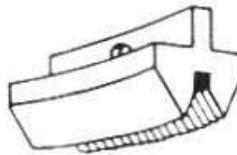
THE V-TOOL. This is probably the most important tool of all aside from the checkering cutters themselves. The V-Tool is used to lay out all fancy borders and for the careful job of cleaning out tight corners where checkering meets the border.



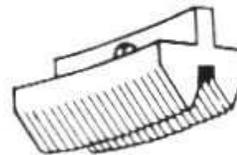
STANDARD CHECKERING TOOL. This tool holds the spacing cutters with which you do the actual cutting. The handle is comfortable and well-balanced, making it easier and faster to do a professional-looking job of checkering. There is a variety of cutters available to fit this handle and shank.



RIGHT HAND CUTTER



LEFT HAND CUTTER



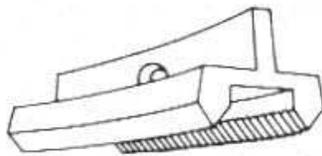
DOUBLE CUTTER

SPACING CUTTERS. These small blades do the cutting. They are replaceable and are attached to the shank of the checkering tool described above. They are machine cut from hardened and treated steel. Each cutter has a specific purpose.

RIGHT HAND CUTTER. This tool has two blades. The left hand blade is without teeth and will follow a guide line. The right hand blade has teeth which cut a new row as the checkering progresses from left to right. There are five sizes ranging from 16 to 24 lines to the inch.

LEFT HAND CUTTER. Identical with the above except that the left hand blade is the cutting blade. Five sizes.

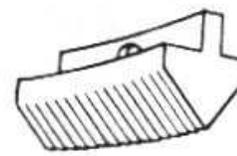
DOUBLE CUTTER. Both blades are cutters. Used for marking and deepening the rows after they are marked. Comes in seven sizes, 16 to 32 lines to the inch.



SKIPLINE (L or R)



BORDERING CUTTER

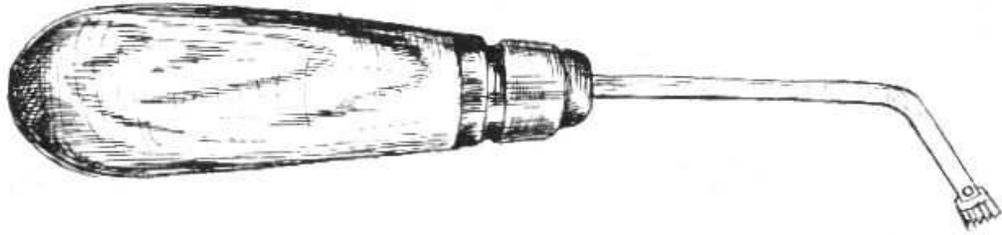


LAYOUT CUTTER

SKIP LINE CUTTER. One blade has cutting teeth, the other has none but is sharp and smooth so that it clings to the guide line while the cutting blade skips a line, then cuts on the desired line. Available with right or left hand cutter.

LAYOUT CUTTER. Used to make the first cut on the original pencilled layout or pattern and to deepen the rows after they are marked in with spacing tools. It is "V" shaped, with cutting teeth on both sides of the "V". Two styles: C-1 (coarse) for layout and deepening. F-1 (fine) for final cleanup.

BORDERING CUTTER. Used for tooling the final border around the pattern. B-1 is for wide borders, B-2 is for narrow.



S-1 HANDLE AND ASSEMBLY. This is a special tool which cuts in reverse. It is used for final cleanup at border edges.

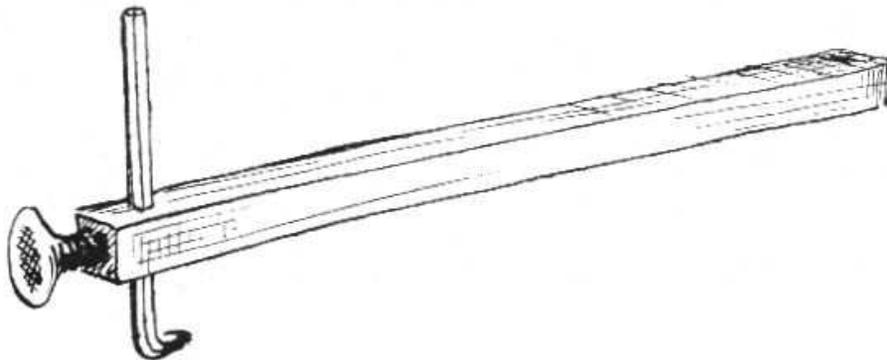


SCRIBE. There are several adequate scribes available. Be sure you choose a good, sharp one. You will use it many times throughout the checkering process.



SHORT STEEL TAPE. Nothing serves the purpose better than a 10- or 12-inch piece cut from a broken steel tape. This firm, flexible tape will be an important part of your checkering job.

A SMALL BRUSH. A toothbrush, in fact, will do as well as any. It is needed to brush out dust and particles which accumulate when you are checkering.



MARKING GAUGE. This tool is a must if you want to lay out perfect lines on the forend of shotgun and rifle stocks.

This marking gauge has been developed exclusively by Dem-Bart. So far as I know there is no comparable tool on the market for this particular job.

The tools described above are all you will need for even the most advanced gun checkering jobs. As you progress in this interesting hobby, however, you will no doubt modify or add to your tools to suit your particular taste. This is part of the pleasure of gunstock checkering.

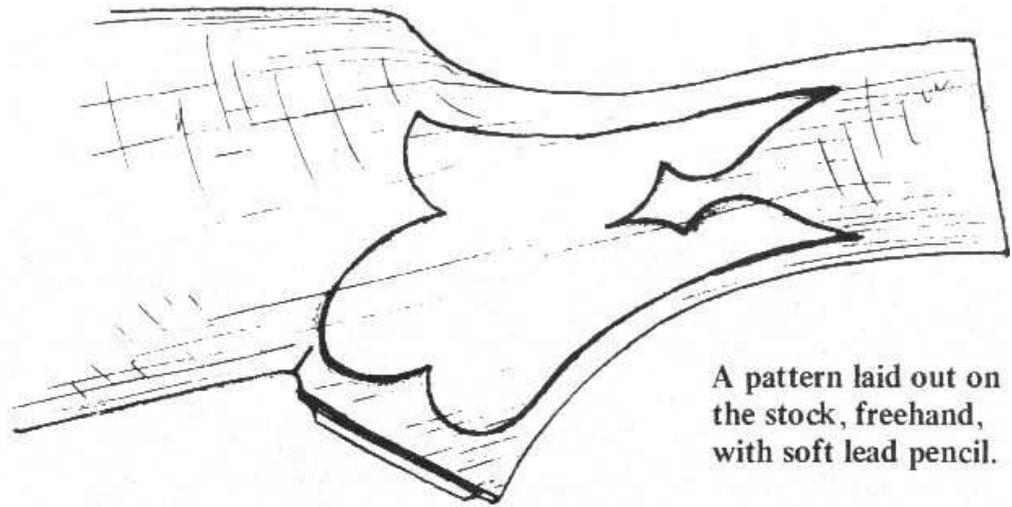
It is very important to have good light while checkering. On the market today are several satisfactory lamps which may be clamped to a workbench or an upright and may be adjusted to almost any position. 100 watts of light should be sufficient. Position your lamp close to the work, at a low angle which will cast a strong shadow. This will enable you to see the checkering pattern clearly. Do not use overhead light. It flattens the pattern and may throw your own shadow over the work.

Chapter 2

WORKING OUT AND LAYING OUT YOUR PATTERN

First, you must decide upon your pattern. Some of the designs shown on pages 10 and 12 may give you a suggestion from which you can work out a pattern of your own. Unless you have had some experience in gun checkering, keep your first job simple; perhaps a point design or one similar to the design shown below.

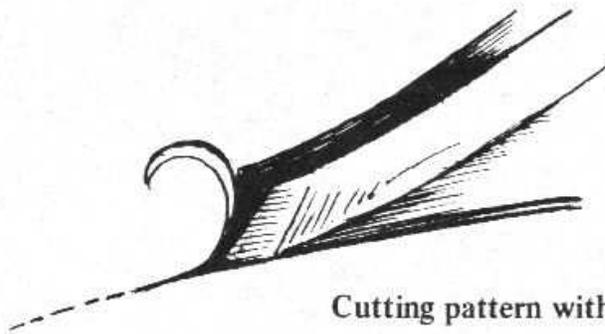
Sketch your ideas on paper and work them over thoroughly until you are satisfied. Then, with a soft lead pencil, draw your design on the gunstock. Your pencil should be soft enough not to make an indentation in the wood. You may find it necessary to alter your design a little at this point so that it will fit the curvature of the stock.



A pattern laid out on the stock, freehand, with soft lead pencil.

If you have any difficulty drawing your pattern freehand, you can cut a template out of paper and trace around it on the stock. Now that the pattern is laid out on the stock, make whatever changes appear to be necessary before you start to cut. Up to this point we are working on one side only.

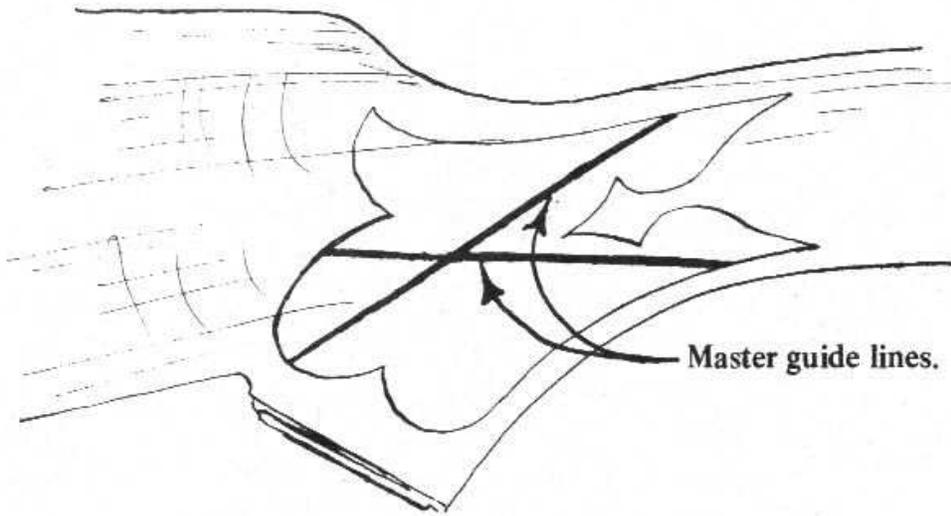
Before you touch your super-sharp tools to that prized gunstock of yours, it is wise to make a few practice passes. An evening (or more) spent in getting acquainted with your new tools may save mistakes or sloppy workmanship on your finished job. So, get yourself a piece of maple, walnut or what-have-you; try your skill and get to know your tools in safety.



Cutting pattern with V-Tool.

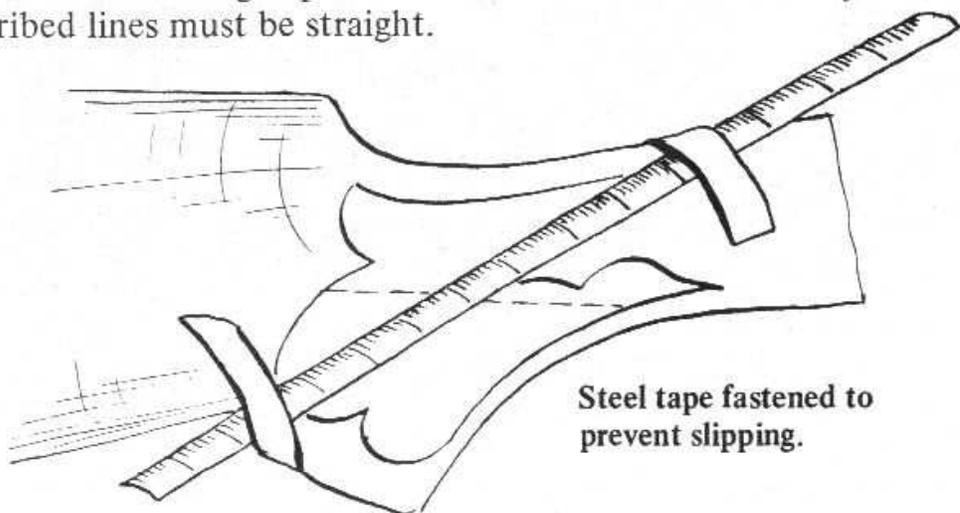
Cutting the pattern. For cutting the outline or border of your design as you have drawn it on the stock, you will use your C-1 cutter and your V-Tool. Cut the straight portion of your pattern with the C-1 layout cutter. The V-Tool (60 degrees) is for cutting curved parts of the pattern or fancy designs such as the fleur-de-lis.

Your first cut should be about 1/32" deep. Do not force the tool. Gentle, uniform pressure will take off a thin, even shaving, which is all you want for the first cutting of the pattern. Do this carefully and deliberately; never hurry.

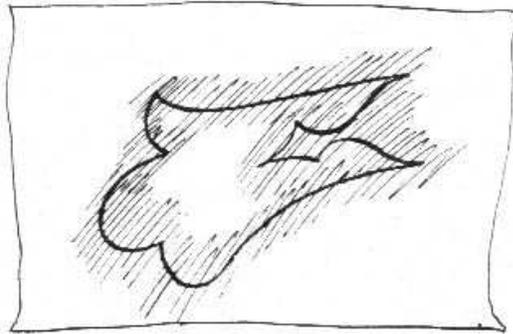


Laying out the master guide lines. This stage of the operation establishes the form of the diamonds. Although you can put the guide lines wherever you choose, I prefer to position them so that they will be as long as possible within the boundaries of the pattern. (See illustration). Place them at an angle that will result in the diamonds being about $3\frac{1}{2}$ to 1, that is, $3\frac{1}{2}$ times longer than they are wide.

Using the scribe, with the steel tape, mark in your guide lines. The tape is flexible and will allow you to maintain a straight line while working on a contour. If the tape slips, lay pieces of masking tape over each end to hold it steady. Your scribed lines must be straight.



Scribe the second master guide line in the same manner as the first. Make sure your guide lines follow your pattern exactly. The uniformity of your checkering job depends greatly upon clean, accurate guide lines.



Now that your guide lines are scribed on one side of the gunstock, lay a piece of paper over the pattern and with your soft lead pencil, scrub back and forth until the outline of the pattern shows through the paper.

Cut out the pattern with scissors and transfer it to the other side, making sure that it is in the same position as on the original side. Mark the position of the master guide lines and scribe them in as before.

Now take the Dem-Bart C-1 cutter and go over the scribed master guide lines on both sides of the stock. Deepen the lines slightly to the form of an even V. You are now ready to start checkering your gunstock.

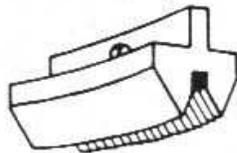


C-1 CUTTER

Chapter 3

CHECKERING THE GUNSTOCK

Now is the time to choose the number of lines per inch you want for your checkering job. Spacing tools usually run from 16 to 32 lines per inch, but the finer the job the more painstaking must be the work and the sooner the checkering will fill in or become smooth. Coarse checkering, say 18 or 20 lines to the inch, is not only easier to do, but also will give you a better grip and a longer-lasting job.

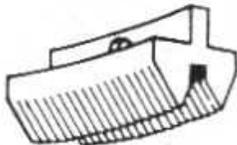


LEFT HAND CUTTER

You have chosen your spacing. Now use your left hand cutter for working and deepening the rows, starting with the master guide lines which you scribed in and then deepened slightly. One blade of your cutter (without teeth) follows the guide line while the other blade cuts the next line. Use a sawing motion and let the tiny sharp

teeth of the tool do the cutting. Then move your tool to the next row; deepen it a little (not yet to full depth) and again mark the next row.

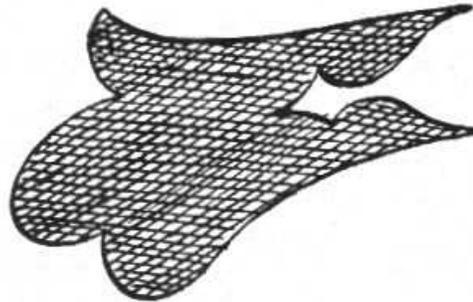
RIGHT HAND CUTTER You may choose to use the right hand cutter, which, of course, is the same as the left hand cutter except that the cutting blade is on the opposite side. A complete job can be done with either one of these spacing cutters, but your job will be made easier by having both left and right hand tools.



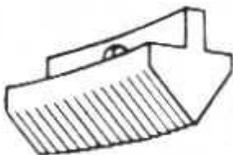
DOUBLE CUTTER

You may prefer to go over your checkering with the double cutting tool. This helps to straighten lines which may have strayed a little. Be careful not to run over the borders.

Pattern shown after all lines have been cut with spacing tools.



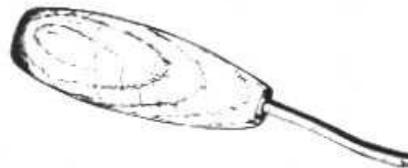
Now your pattern is completely cut on the gunstock and needs only to be deepened and finished. Take your C-1 cutter, with which you deepened the master guide lines. With the C-1



C-1 CUTTER

you deepen all lines of your pattern; the depth depending upon the number of lines per inch. An 18-line pattern will be deeper, of course, than a 32-line pattern. Be careful not to run over the borders.

Now the pattern is full depth; the diamonds show up clean and sharp. This completed, go back to your V-Tool, working carefully toward the borders. With the V-Tool, clean out the final ends of checkering where they meet the border. A 90-degree V-Tool is best for this part of the job. Again, don't run through the border!



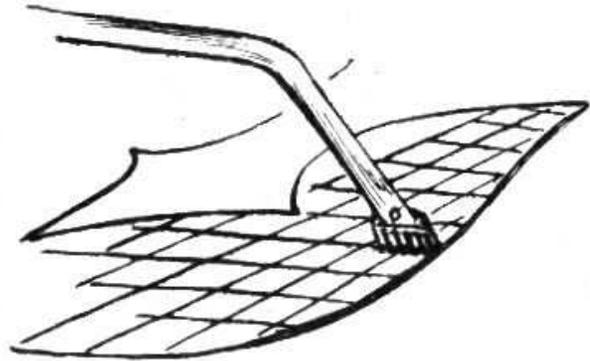
V-TOOL

Clean to the bottom of
the V in the border.



Now take your S-1 tool. This cuts in reverse. Lay the tool on the border and pull back from it. Clean out the checkering about 3/8 to 1/2 inch from the border. This is a smoothing tool and will finish the diamonds at the border areas.

S-1 tool. Lay to border
and pull back.



F-1 CUTTER

Finally, with your F-1 cutter, go over the entire checkering job. This will smooth and finish your checkering to fine-pointed diamonds. Your checkering job is now completed.

If you have practiced faithfully "on wood blocks" and have followed carefully the steps described here, you should have a job that will enhance the appearance of your gunstock and will give you a practical, non-slippery grip.

Finishing the checkering. The final step, a finishing coat, comes next. Again I recommend a Dem-Bart product because I have watched it being developed carefully for this specific purpose. First, thoroughly brush the dust and particles out of your checkering with a firm brush. Then, with another, softer brush, lay on a generous coat of Dem-Bart Checkering Oil.

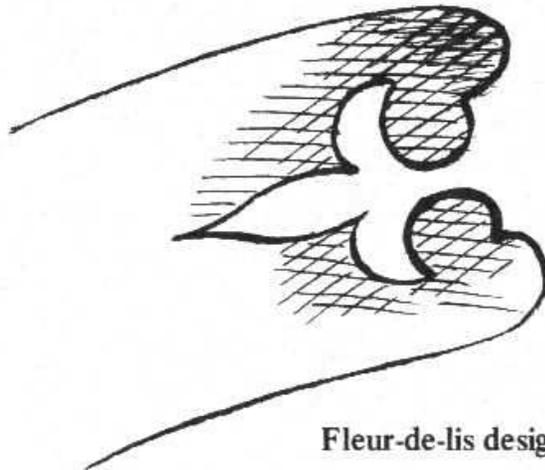
Wipe off excess oil from surrounding areas and let soak for 15 minutes. It will not gum. Brush out excess oil and wipe off any oil left outside checkered areas.

One coat of Checkering Oil is usually sufficient. It leaves the checkering sealed and gives the dry look which good checkering deserves. If you prefer a shinier finish, repeat the oiling process after a few hours. Let it soak in for 15 minutes, then brush out and wipe off all excess oil.

Chapter 4

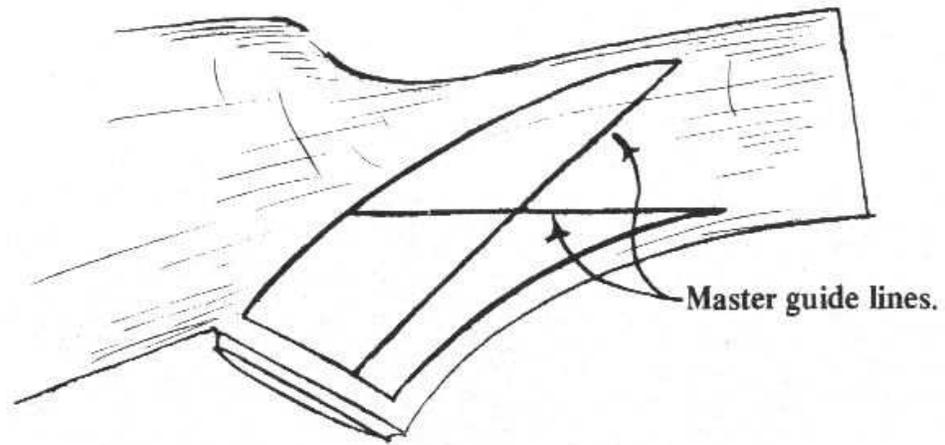
PATTERNS FOR YOUR PERUSAL

With the foregoing instructions you can lay out any pattern you wish. As you practice and gain skill, you will find it easy to lay out more intricate patterns such as the fleur-de-lis design shown here.



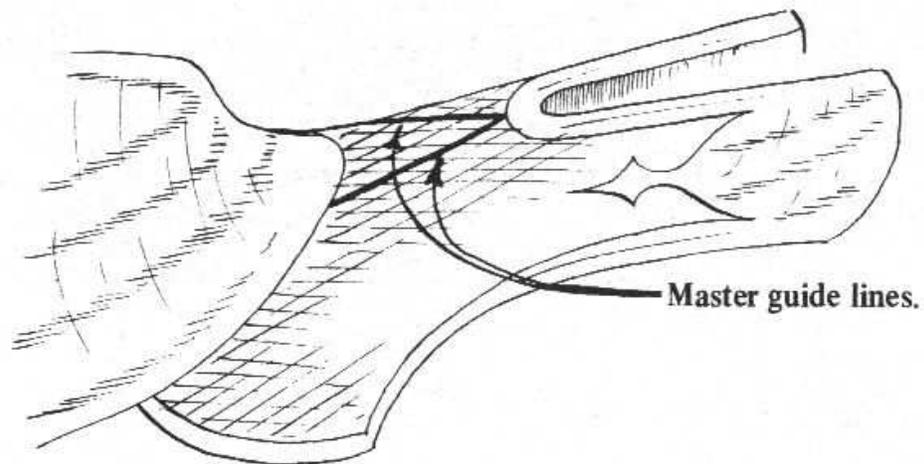
Fleur-de-lis design.

The same basic methods and tools are used in checkering an intricate pattern as are used for a simple one. You must, however, have greater mastery of your tools. This can come only from practice and experience.

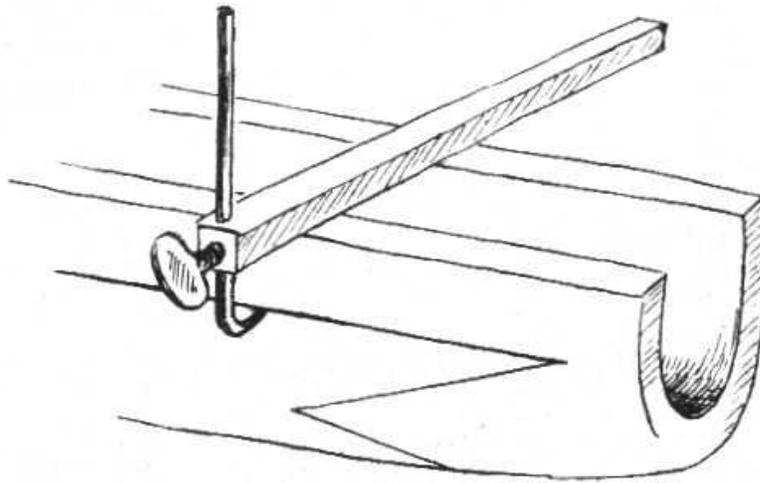


The Point Design. Done in the same manner as previous patterns, except that here the guide lines form the borders of the front part of the pattern.

Over-The-Top Pattern. In this design, the guide lines are started on top of the gunstock.

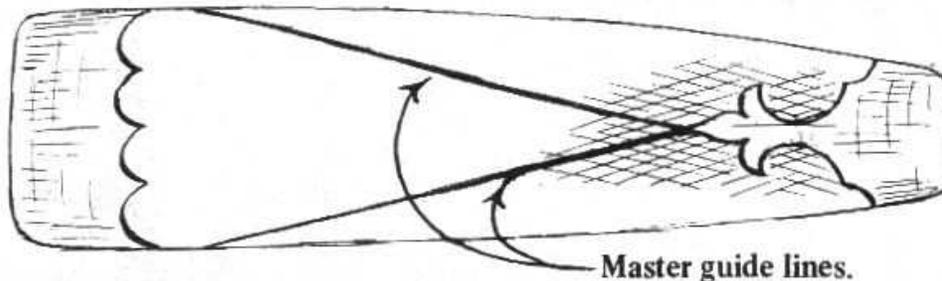


Checkering the Forend. The same procedure is followed as in checkering the grip areas, except for use of the Forend Marking Gauge, a tool which up to this point you have not used. This gauge is shown here scribing the top lines of the forepiece.



Because it is always parallel to the top of the forepiece, the Forend Marking Gauge will do a perfect job. The top lines also can be laid in with steel tape and scribe as explained in an earlier chapter. The Marking Gauge, however, makes the job easier and more accurate.

If your pattern is to cover the bottom of the forepiece, too, lay out the pattern with tape and scribe, making sure both sides are the same. The guide lines, however, should be on the bottom of the forepiece.

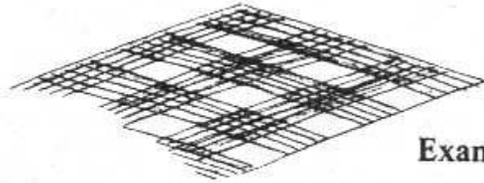


Master guide lines.

To be sure that you keep the lines parallel going around curved areas such as are found in sides and bottom of the fore-end, (1) be sure your cutter is always at right angles to the wood, and (2) do not apply too much pressure. Let the cutter do the work. A light, steady pressure will work best.

Skipline Checkering. The same technique is used for skip-line checkering as for regular checkering, except that every four or five lines you skip one. You will need a special Skipline Tool for this work. If you are checkering 20 lines to the inch, you will need a No. 10 Skipline Tool which gives you twice

the regular spacing. If you are checkering 24 lines to the inch, you need a No. 12, etc.



Example of skipline checkering.

When you are doing skipline checkering, be very sure to count your lines when you skip. Uniform checkering is beautiful. If it isn't uniform, it isn't beautiful!

FOR THE "GRADUATE"

For those of you who wish to read further concerning the fascinating hobby of gun checkering, I recommend the one and only book which deals at length with this subject: "Checkering and Carving of Gunstocks" by Monty Kennedy.

The writer of this booklet hopes someday to lay down his gunsmithing tools long enough to write a more detailed volume of his own. I hope you will watch for it!

All tools described in this booklet are available from:

**Dem-Bart Checkering Tools, Inc.
6807 Highway #2
Snohomish, Washington 98290**