

# Grip & Handle Clamps

You can easily make your own with inexpensive parts, simple tools and just a little ingenuity.

story and photos  
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Rod builders have been building and using various types of cork clamps as long as they've been making cork grips. There are many ways to make good ones, but recent improvements in the realm of commercially made woodworking clamps may soon make the traditional rod building cork clamp a thing of the past. Let's take a look at some ideas for a good rod building cork clamp with an eye on where we've been and where we're currently headed.

Any rod builder who wishes to build his or her own cork or wood grips and handles will soon discover the need to clamp a set of individual rings or similar pieces during the gluing process. Failure to attain firm, even clamping pressure across the face of each ring or item leads to unsightly glue lines at best, and easily broken grip assemblies at worst. Thus the need for a quality clamp specifically made for this particular rod building task.

The standard and typical rod building cork clamp has long consisted of two small, flat pieces of wood brought to bear on opposite ends of a just glued stack of cork rings. One end is usually affixed to the ends of two pieces of all-thread rod with the other end drilled so slide over the all-thread. Wing nuts are used to bring the sliding piece down onto the cork stack and apply pressure while the glue or adhesive sets.

Such clamps work quite well and are not altogether hard to make. Although these clamps have long been offered by many of the various rod building supply dealers, any builder with even a slight modicum of manual dexterity and a few simple tools can fashion a very functional cork clamp of this description. In effect, if the builder is capable of gluing up and making a handle or grip from cork rings, he or she should certainly be capable of making such a clamp. I would imagine that most make their own and for that reason, have an excellent opportunity to fashion a version suited to their specific rod building needs.

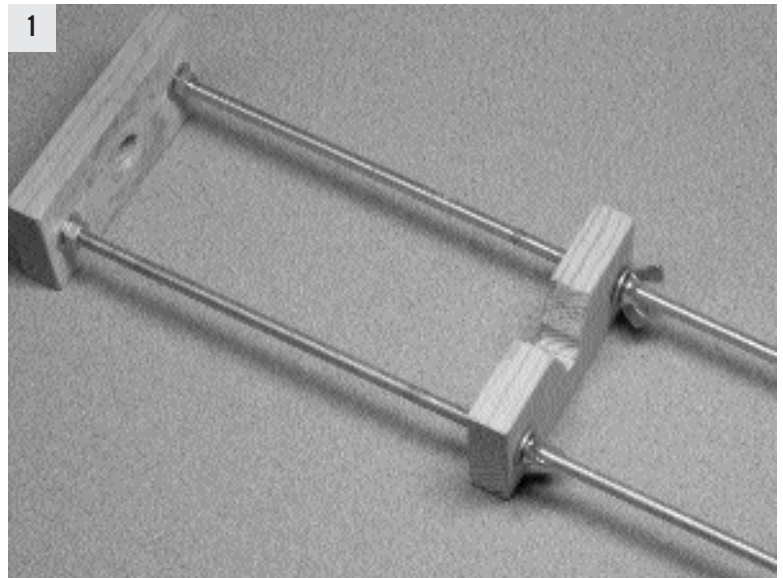
## Improvements

The typical cork clamp as just outlined is easy and inexpensive to make. It works well but over the course of using it many times, most rod builders begin to see some shortcomings and decide to make certain modifications or improvements.

Because many builders assemble their rings directly on the blank rather than on a short mandrel, they prefer to have the top piece cut with a V-notch (1) so that they do not have to remove the piece and slide it down over the rod from the tip, reinstalling it on the all-thread and spinning the wing nuts down to the tune of several minutes of repetitive finger work. The V-notch allows the builders to simply set the approximate space needed to accommodate the grip or handle, and then slide the butt into the hole on the bottom piece and drop the rod blank into the notch. This small modification to the standard cork clamp is a real time saver.

Of course, no matter what you do, having to spin the wing nuts up and down remains a minor albeit annoying task. Someone else must have thought so as well, because there is a type of nut specifically made to allow you to quickly slide it to the desired location and then have it snug up in the same manner as most common wing nuts. Named, "Fast Nuts," these specialty fasteners are threaded on one side of an elongated bore and smooth on the other (2). In use, they are simply cocked to one side which frees them from the all-thread. While cocked in this manner, they can be freely slid along the entire length of all-thread rod. No turning or spinning is needed. When you have them in position, they are rocked back perpendicular and the threads again engage the all-thread whereupon they can be tightened as usual. A neat little product that is certainly a great time saver! They make extremely long cork clamps a breeze to use.

One other modification that some builders made to facilitate the quickness and ease with which they could adjust their clamp length, was to replace the all-thread rod with light chain (3). The bottom of the clamp is fitted with eye hooks. The top of the clamp is also fitted with eye hooks but these are not fixed in place. The machine threaded ends of the top eye hooks protrude through the top piece and wing nuts are fitted as usual. To quickly adjust clamp length, the builder simply fastens the chain to the approximate length needed and then tightens the wing nuts up top. The length of clamp is limited only



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nuts up top. The length of clamp is limited only by the length of the chains and the wing nuts never have to be turned or spun more than a few turns owing to the fact that clamp length is adjusted by affixing the chains to the appropriate length. Remember, the length of the grip or handle that you can clamp with this style tool is limited only by the length of the chains you install (4). Most likely, this is the final evolution, and the best version, of the standard cork clamp.

### The Modern Era

Not so many years ago, the old fashioned pipe clamp, one fixed end with one adjustable end mounted to a piece of steel pipe, was updated for easier use. The newer models feature a main bar sporting one fixed end and a moveable end held in place by friction (5). The moveable end can be quickly slid from end to end and clamping pressure is provided by a hand trigger. An automatic backwards cocking action locks this end and maintains whatever clamping pressure has been applied.

Although made for the woodworking trade, other craftsmen soon began using these clamps for a great many other chores. In these new clamps, rod builders saw the potential for making a better cork clamp. They're quick and easy to adjust and the main bar length can be purchased in lengths up to at least 3 feet. The only modification needed regards the molded clamp ends so that they will accommodate a stack of cork rings and the mandrel or blank upon which they are mounted.

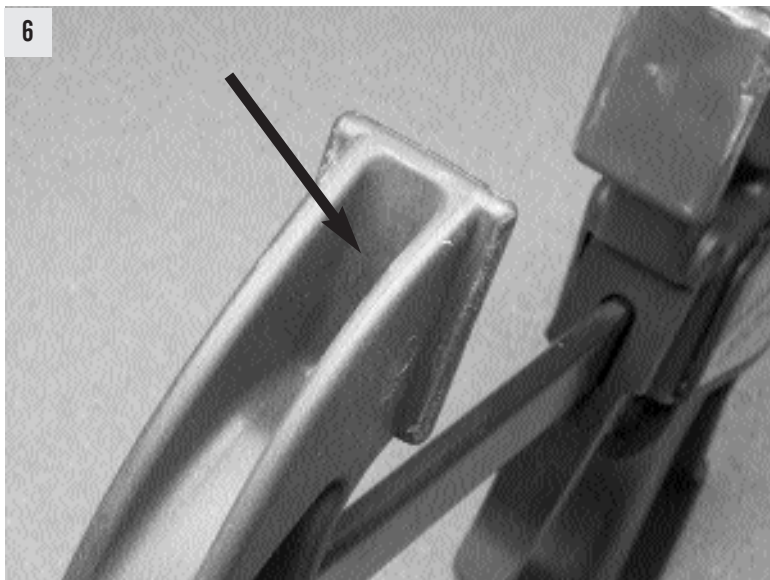
On the larger clamps, a hole or bore can often be made in the end of each molded clamp end to accept the mandrel or blank. It helps if the clamp you choose has an indent or opening inside which such a hole can be bored (6). The width of the supports is the limiting factor, however, in just how large a mandrel or rod blank can be accepted. And, if too large a hole is made in too small a clamp end, the result can be a weak area that will not bear the strain of heavy clamping pressure. For this reason, most such clamps are modified with the addition of larger, wooden face plates that are fastened to the molded clamp ends.

The best way to do this, is simply to bore a hole through each molded clamp end (7) and fasten a larger wooden face plate to the clamp with a nut and bolt (8). Depending on the particular type and style clamp you purchase, you

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may have to devise a different type of mounting system. Keep these things in mind when shopping for a clamp to modify for use as a cork clamp - if you can't easily attach larger wooded face plates, the clamp may not be suitable for use in rod building cork work.

Because these clamps feature at least one removable end, there may not seem much reason to bother with the old V-notch. To set the clamp when working with an entire rod blank, you just remove one end and slide it over the tip and then reengage the clamp bar and go to work. However, in those instances where you may be doing repair work to a grip and have to use the clamp on a rod with guides already mounted, the V-notch will allow you to sidestep the line guides by just dropping the rod into the clamp in the desired position. Consider this if you plan to use your clamp for any manner of work or repair on finished rods. The clamp piece in the photo (8), has a V-notch in the end on the right hand side.

### One Problem

Of course, not everything is as rosy as it might seem. Because the clamp ends are supported and drawn tight only on one end, it is possible for the clamp to "rack." When this happens, the top ends of the clamping surfaces tend to spread wider than the bottom edges. This can result in uneven clamping pressure on the faces of the grip or handle you're working with.

Most of the better clamps allow for this problem by molding the clamp ends with a slight "lean" to them. Once under pressure, they square to the item being clamped. However, don't exacerbate the problem by making your wood extensions overly long. Keep them as short as practically possible.

Finally, you may find it impossible to draw a nut and washer up squarely against the sloping ends of the clamp arms. In that event, cut short sections of aluminum tubing and sleeve the bolts so a nut can be drawn up squarely (9&10).

Rod building grip work requires specialty tools. Fortunately, most of these are easy and inexpensive to make. Whether you opt for a homemade unit or just wish to modify a commercial clamp, spend a rainy afternoon making yourself some good grip/handle clamps. The day will come when you'll be more than a little glad to have them on hand. 🛠️

