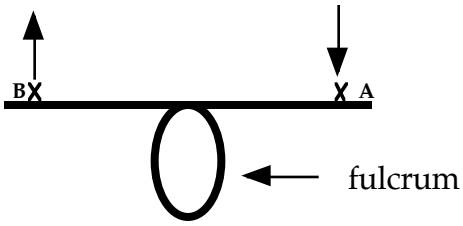
# The Bevel

The bevel is the system of reed-making that improves the opening of reeds by causing the tip to spring open when clipped. Since one of the major contributing factors to failure in reeds is the collapse of the opening from the moment of clipping, this is an invaluable technique toward more successful reeds.

Beveling is based upon the principle of the lever. if you view the following diagram you will see how the principle of the lever/beveling works.

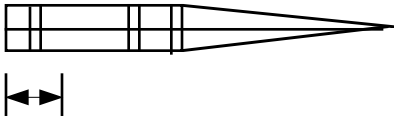



If downward pressure is placed upon point A, it will cause point B to rise. In the case of bassoon reeds, we create a fulcrum a bit above the point where we place the third wire. This is accomplished by constructing the reed to the point of having forced the mandrel to form the tube and letting it dry on a long-mandrel tip. After it has sufficiently dried in this position (from the minimum of a couple of days to the more desirable two weeks), take the temporary wire off the tube, open the formed tube, and sand equal amounts off of the sharp edge of both sides of the tube back to a point just above the eventual position of the third wire.


Below I will outline the process for beveling using the short bevel. I feel it is the best all-around bevel option for general playing conditions.

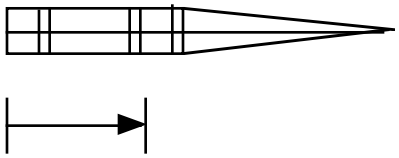
Place Sharp edges A and B on a piece of sand paper held flat against the top edge of a desk or block of wood and evenly sand back about 8 mm from the back of the reed up to the bark. There should be a gap when you bring the two halves together. Wrap some string around the middle of the tube to hold it in place, put the reed on a long mandrel and rewire the reed: third wire first, followed by the second and then the first, being very careful to line-up the two blades above the first wire with no slippage. You now have a finished blank and can wrap it and begin to scrape the blades.

Diagram A



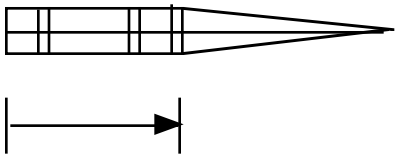

By using a longer bevel one can use the procedure to give a reed a rounder throat. this is accomplished by sanding the edges further up on the reed.

Diagram B



By beveling just above the second wire as in "B", you will cause the second wire to be rounder than the bevel in "A".

Diagram C



By beveling to the first wire as in "C", you will cause the entire tube to be rounder. Please refer to the chart in the section on wires to ascertain the results of this procedure.