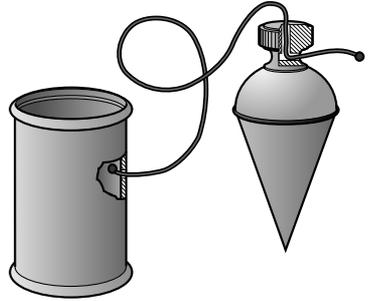


This plumb bob is machined from solid brass and is perfectly balanced. The method of cord attachment maintains this balance and the case protects the accuracy of the plumb bob point.

Attaching the Cord

To attach the cord to the plumb bob, thread it through the center hole until it projects into the cross channels. Using a pin or toothpick, bring the cord out of one of the cross channels and hold the tip of the cord near a flame until a small molten bulb forms at the end. When this has cooled, it can be pulled back through the cross channel, but the cord will now be trapped in the top of the plumb bob.

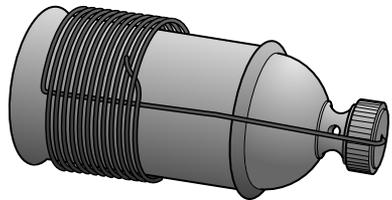


If you have trouble threading the cord through the top of the plumb bob initially, heat the tip of the cord momentarily until it softens and then draw it through a bit of paper or cloth held between your thumb and forefinger. This will create a needle-like tip on the cord, which will make it easier for threading.

Attaching the Cord to the Case

A case is provided primarily to serve as a spool for the cord as well as to prevent the tip of the plumb bob from being accidentally deformed. The cord can be attached to the case using the method just described for attaching the plumb bob.

Alternatively, you may wish to leave the end of the cord free. In this case, when you are finished using the plumb bob, you would first insert the plumb bob in the case, draw a portion of the cord down the edge of the case and then overwrap that portion with the remaining cord, finishing off by slipping the end of the cord under the last coil of your wrapping. This will stop the cord from unwinding.

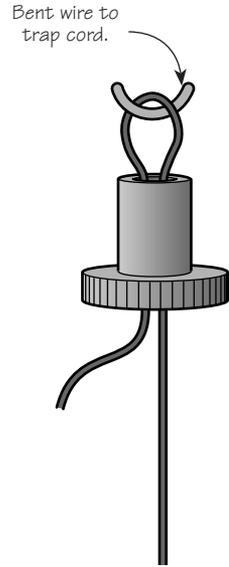


Using the Plumb Bob

There are many uses for a plumb bob in woodworking, but we will explain only a couple of the most common.

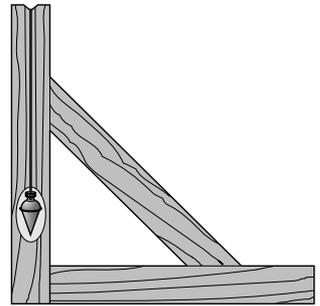
Centering Device

In the bottom of the plumb bob case you will find a small brass collet that is used to solve a common shop problem. When you are faced with the problem of getting a perfect axial alignment on your drill press when drilling the end of something long (such as a table leg), you can use the plumb bob to find the point on your support table that is exactly under the chuck. Obviously your drill press column should be perfectly erect for this to work well, but that will be dealt with in a moment. To use the collet, take just a bit less cord than you need to reach from the tip of the drill chuck to the support table, form a loop in it, put the loop through the collet putting a small piece of bent wire (or similar) in the loop to lock it in position and then tighten the collet into the drill chuck. The plumb bob should now hang just short of your support table. You can use the travel of the drill press quill to bring it down to a point where it touches the support table so that you can mark the table as you wish.



A Plumb Bob as a Level

The very earliest form of level was a plumb bob. It can be extremely accurate. Used in a simple A-frame as shown, you can use it as a level as well as ensuring that vertical members are plumb. You would use such a frame to ensure that the column of your drill press was plumb before using the plumb bob as a centering device.



Other Uses

Many people would not think of using a plumb bob for drill press alignment. Some may not have been aware of how to use a plumb bob for accurate levelling. If you have a particularly cunning way of using a plumb bob, we would like to hear about it.