Knowledge domain: Mechanical
Unit: Attachment
Skill: Nails and Hammer

Tools and Parts Required

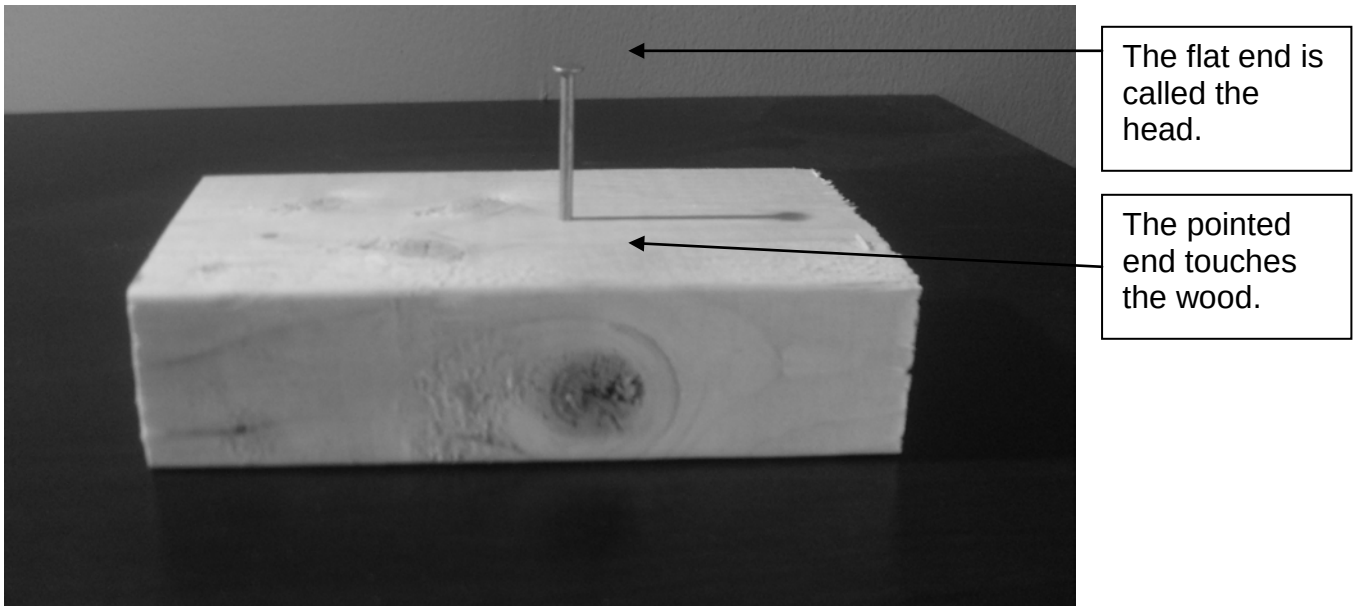
1) Nails
2) Hammer
3) Piece of wood
4) Safety goggles
5) Work gloves

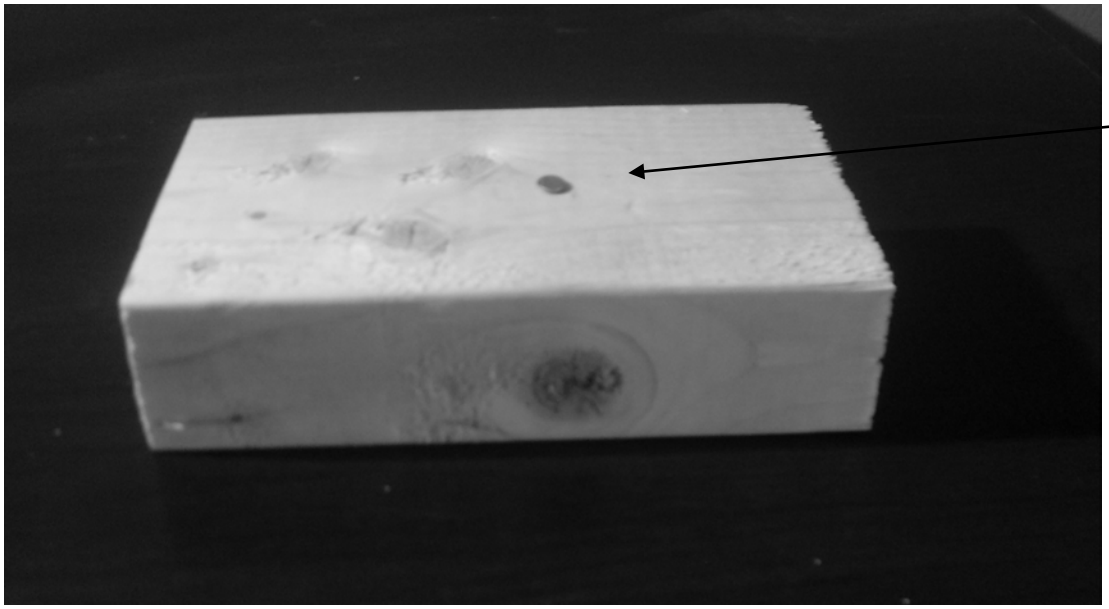
Introduction

A nail is a metal fastener. A nail is not threaded. A screw is threaded. Nails hold parts together. Nails are mostly used with wood. A nail is inserted into the wood with a hammer. Nails can be used to build wooden structures.

Example

Below is a picture of nail before, and after it has been completely hammered into a piece of wood.





Identification and Diagnosis
Two pieces fastened together with a nail will easily separate. However, they cannot slide against one another. Use a nail and hammer if the part cannot be reattached with a bolt, epoxy, super glue or welding. Use a nail and hammer if you are attaching two wooden pieces and wish to prevent them from sliding against one another.

Procedure
Position the nail at the location of attachment. Grip the handle of the hammer firmly. Use your forearm to raise and lower the hammer. Hit the nail on the head. Repeat this motion until only the head is visible. Never hit two hammers together. This will produce dangerous flying metal.

Exercise
Your instructor will give you a piece of wood. Use a hammer to insert the nail into the wood. Separate the wood by prying it apart (this is possible). Attempt to slide the two pieces against one another (this is impossible).

Your instructor must verify your work before you continue.

Preventative Maintenance and Calibration
Over time, nails become old and begin to fail. Check equipment for protruding nails. Hammer them into the material. Check for rusty nails. Remove the rusty nails. Add a new nail near the site of the old attachment. Sometimes the hole in the object or the wall becomes too big. The nail becomes loose. Check for loose nails. Remove loose nails. Use a hammer and nail to reattach the objects. If the objects are separating, a screw must replace the nail.

Always calibrate every medical device before returning it to use.