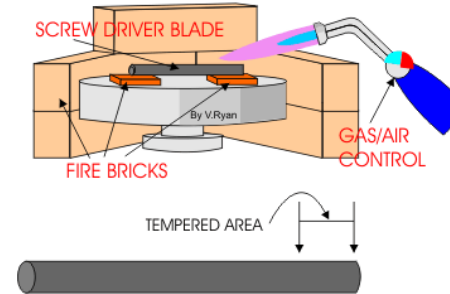


Feel the burr in the direction of the red arrow to avoid injury.  
Remove the burr with a hand file

### Key Skills

- ⇒ Marking out
- ⇒ Wasting
- ⇒ Finishing
- ⇒ Drilling
- ⇒ Riveting
- ⇒ Polishing

Heat treatment is the heating and cooling of metals to change their physical and mechanical properties, without letting it change



**High Carbon Steel**  
Approximately 1.2% carbon (this steel is also known as Tool Steel and includes Silver Steel and Gauge Plate).



### Tasks

Use notes and sketches to describe how to drill the steel blank to create the bottle opener hook.

Use notes and sketches to describe cross and draw filing.

**Polymethyl methacrylate (Acrylic)**

**Stiff, hard but scratches easily, durable, brittle in small sections, good electrical**

### Key Vocabulary

<b>Ferrous</b>	Metals that contain iron and are affected by magnetism (apart from stainless steel).
<b>Non-Ferrous</b>	Metals that do not contain iron and are not affected by magnetism.
<b>Pure metal</b>	Metals made up from only one chemical element e.g. copper or aluminium.
<b>Alloy</b>	Metals made up from a mixture of elements, e.g. copper + zinc (brass) or lead + tin (solder)
<b>Annealing</b>	The process of heating a metal to reverse the effects of work hardening. It will make the metal soft and more malleable.
<b>Tolerance</b>	An allowable variation in dimension. This can be how much larger or smaller a value can be.

### Riveting

