

PHOTOGRAPHS OF CHARTS ON SMITHY

<p>SMITHY (SM - 1) SMITH'S HEARTH / SMITH'S ANVIL / SWAGE BLOCK</p> <p>SMITH'S ANVIL Anvil is used for supporting the work piece if it is struck with the hammer.</p> <p>SWAGE BLOCK Swage block is provided with holes which are useful for holding bars whilst bending, and knocking up heads.</p> <p>SMITH'S HEARTH In smith's hearth, layers are cooled by water circulated around them. There is a water tank for cooling the job.</p>	<p>SMITHY (SM - 2) BLACKSMITH'S HAMMERS</p> <p>DOUBLE-FACE SLEDGE HAMMER</p> <p>STRAIGHT PEIN SLEDGE HAMMER</p> <p>CROSS PEIN SLEDGE HAMMER</p> <p>THE SMITH'S HAMMER</p>	<p>SMITHY (SM - 3) BLACKSMITH'S TONGS</p> <p>FLAT TONGS</p> <p>Open mouth, Clamping ring, Closed mouth</p> <p>TONGS FOR ROUND WORK</p> <p>Hollow bill, Round mouth</p> <p>TONGS FOR SQUARE WORK</p> <p>Square mouth, Vee mouth</p> <p>PICK-UP TONGS</p>	<p>SMITHY (SM - 4) BLACKSMITH'S SWAGES</p> <p>SPRING SWAGE</p> <p>USE OF SWAGES</p> <p>TOP AND BOTTOM SWAGE</p> <p>Top swage, Bottom swage</p>	<p>SMITHY (SM - 5) BLACKSMITH'S CHISELS</p> <p>Hot chisel, 30°</p> <p>Cold chisel with wire handle, 60°</p> <p>Sledge, Work, Chisel, Hardie, Anvil</p> <p>Showing use of top and bottom chisels</p> <p>Shank fits square hole in anvil</p>	<p>SMITHY (SM - 5) BLACKSMITH'S FULLERS</p> <p>(A) TOP AND BOTTOM FULLERS</p> <p>Fullers are used for necking down a piece of work. They are made in top and bottom pairs, bottom tool fitting in the handle hole and the top held by the smith and struck by the sledge.</p> <p>(B) ROUNDED FULLER FOR CIRCULAR WORK</p> <p>(C) USE OF FULLERS TO NECK BEFORE SETTING DOWN</p>
<p>SMITHY (SM - 7) FLATTER AND SET HAMMER</p> <p>BLACKSMITH'S FINISHING TOOLS</p> <p>FLATTER</p> <p>Blacksmiths use tools called flatters and set hammers to finish their work. The use of a flatter helps the blacksmith provide a finishing touch. She places the flatter on the work object and then strikes the flatter using a sledgehammer. This touch helps finish flat surfaces. The set hammer finds use in setting shoulders.</p> <p>SET HAMMER</p> <p>Used for setting down square shoulders or similar work.</p> <p>USE OF A FLATTER</p>	<p>SMITHY (SM - 8) PUNCHES AND DRIFTING</p> <p>ROUND PUNCH</p> <p>SQUARE PUNCH</p> <p>PUNCHING A HOLE</p> <p>DRIFTING</p>	<p>SMITHY (SM - 9) BLACKSMITH'S WELDS</p> <p>(A) BUTT WELD</p> <p>(B) SCARP WELD</p> <p>(C) VEE OR SPLICE</p> <p>(D) ENDS PREPARED FOR SCARP WELD</p> <p>(E) PREPARATION FOR SPLICE WELD</p> <p>(F) APPLICATION OF SPLICE WELD</p>	<p>SMITHY (SM - 10) HAND FORGING OPERATIONS</p> <p>CUTTING</p> <p>Hammer blow, Soft chisel, Hard chisel, 60° angle, Hardened and tempered, Cold chisel</p> <p>SWAGING</p> <p>Hammer blow, Swages, Work</p> <p>UPSETTING</p> <p>Hammer blow, Sledge hammer, Work, Anvil, Heater portion being upset</p> <p>DRAWING DOWN</p> <p>Hammer blow, Top fuller, Original length, Displaced material causes increase in length, Bottom fuller, Finishing on small face with a flatter</p>	<p>SMITHY (SM - 11) HAND TOOLS USED IN SMITHY</p> <p>BLACKSMITH'S CHISEL</p> <p>COLD CHISEL WITH WIRE HANDLE, Edges slightly rounded, SHANK FITS SQUARE HOLE IN ANVIL, BOTTOM CHISEL</p> <p>FLATTER AND SET HAMMER</p> <p>FLATTER, SET HAMMER</p> <p>SWAGES</p> <p>TOP SWAGE, BOTTOM SWAGE</p> <p>DRIFT</p> <p>Hammer, Drift</p> <p>FULLERS</p> <p>FLAT TONG</p> <p>Clamping ring</p> <p>ROUND PUNCH</p> <p>SMITH'S HAMMER</p> <p>Head, Handle, Tail</p>	