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Hammer & Mallets



Are you Worthy to learn It???

Definition

- **A hammer is a tool that consists of a heavy piece of metal at the end of a handle. It is used, for example, to hit nails into a piece of wood or a wall, or to break things into pieces.**



Hammer Anatomy

TYPES OF HAMMERS

1. Claw Hammer

Claw hammers are, by design, levers to remove nails from wood. The claw of the tool connects to the nail head and, with a firm wiggle, loosens and levers out the nail with a firm pull, like a fulcrum.

The claw works on dismantling floorboards, plaster, timber, and smaller woodcuts as well. It's one of the most simple and effective tools you'll ever have in your tool bag.



2. Ball Pein

Ball Peins — also known as an engineer or mechanics hammers — have a round, ball-shaped head that is designed to shape the surface of the metal. This practice, once known as peening, is still used by metalworkers who would use the flat face of the hammer to impact metal to harden its density.

Other uses for Ball Peins include closing rivet openings and smoothing off the edges of fasteners and metal pins.



3. Cross and Straight Pein (or Cross Pein Pin)

Cross and Straight Peins are not your typical, household hammers; the use of these tools depends on their weight, which in turn influences the head-strength. For example, heavier Cross and Straight Peins are used to shape metals, while smaller ones work best with wood.

One commonality is that all of these types of hammers share the same shape of bell (or head), and a cross or pein opposite of the head.



4. Club Hammer

Club Hammers are useful, tear-down tools that are used in tandem with chisels to chip away masonry or completely dismantle smaller structures, much like a little sledgehammer. The Club has a double-face, with a durable resin or hickory handle, and weighs up to 3 pounds on average. (Though some have been found to weigh nearly five pounds.)



5. Sledgehammer

Similar to Club Hammers, but much, much larger, Sledgehammers have a lengthier handle and can weigh nearly 15 pounds, though some versions come in smaller weights. These tools are demolition-specific and can be useful in driving down stakes



6. Joiner's Mallet

Joiner's Mallets are wooden blocks that rest on handles. These tools drive chisels into the ground or foundation, place dowels, or can be used to tap joints into position. These are excellent tools for carpenters and are ideal where a metal hammer would create unnecessary damage or unsightly bruising.

Joiner Mallet heads are tapered by design, to ensure proper contact with whatever it's striking. The handles are made of hardwood, such as a Beech or even Lignum Vitae



7. Soft-Faced Hammers (or Lathe)

Soft-faced or lathe hammers come in styles of a firm or soft rubber, with an option of copper or plastic for the face. Others have interchangeable faces and adjustable. Soft-faced hammers have the main purpose of making blows that won't cause too much damage. These are used primarily for cabinet setups or interior door installations, like closets, without harming the wood finish.



8. Blocking Hamm

Blocking Hammers are heavy-duty tools that shape or “block” sheet metal into the desired appearance before it planishes, or settles into a flattened state. Practical usage of blocking hammers leave beautiful, blemish-free metal surfaces.



9. Geologist Pick Hammer

Also known as a rock pick or geological hammer, the Geologist Pick is designed to split apart or break rocks. Field geologists use these to determine the composition of rocks and further examine their mineralogy, strength, orientation, and nature.



10. Planishing Hammer

Planishing hammers are mechanized tools that make precise, simple strikes to pre-formed metal. The goal of planishing is to restore metal or welds back to its original, smooth surface. Most planishing hammers can be bought as part of a kit that includes crown anvils, foot operation, and a mounted bench.



11. Roofers Hammer

Roofers are made of solid steel heads with nylon vinyl in the handle for useful grip. These tools cut, snip, and trip every type of shingle on roofing. They are built for comfort and are extremely durable. These also come equipped with a retractable cutting blade.



12. Scaling Hammer

Scaling hammers ensure an effective removal process of coats, most corrosion, and a variety of accumulated materials on just about any surface. Its parts are made up of steel, which provides a longer tool shelf-life.



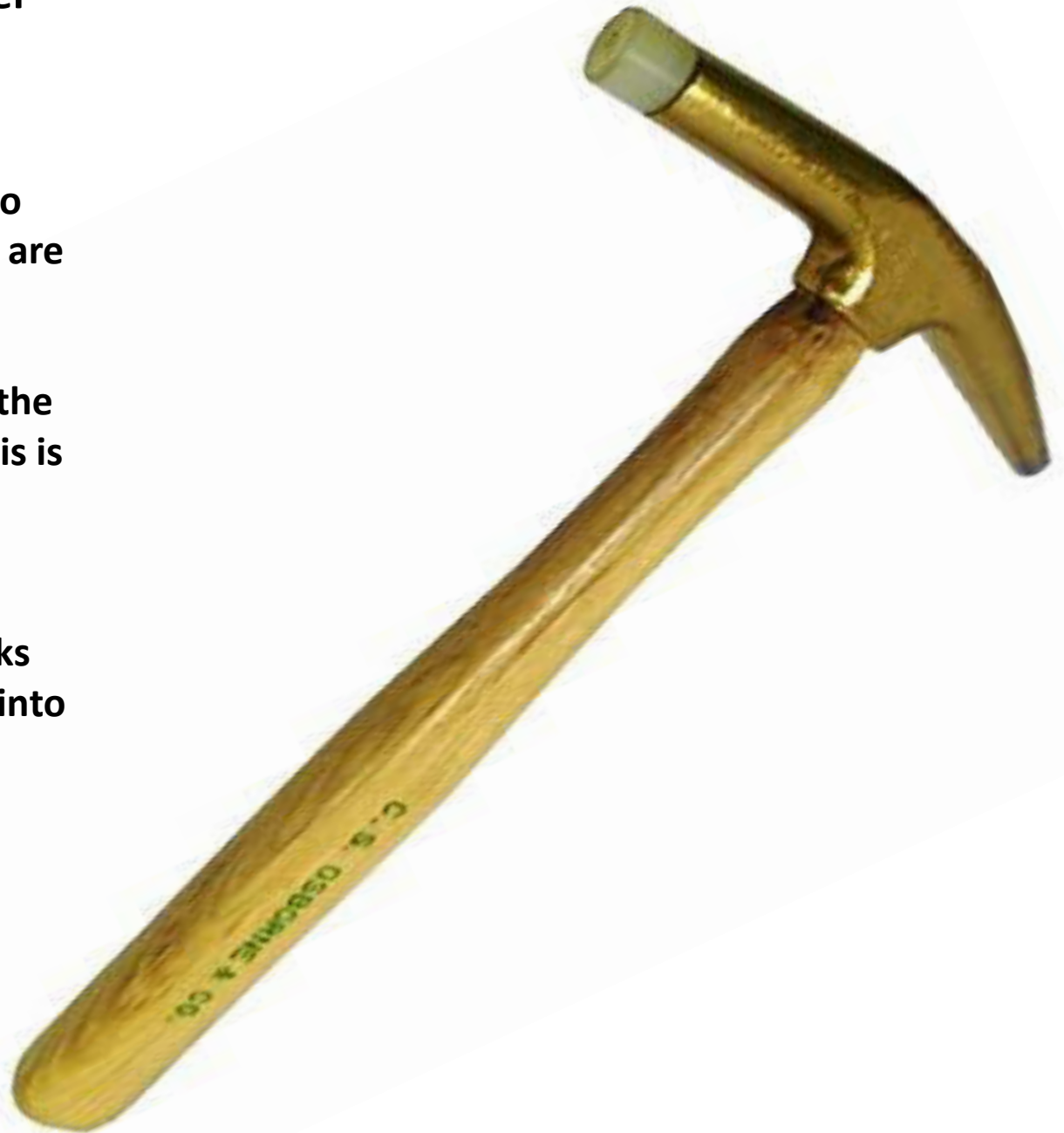
13. Scutch Hammer

Scutch Hammers can cut bricks in half or quarters, much like how chisels can deliver precise blows. Scutches come with single or double grooves in the head, which aids in user control.



14. Upholstery Hammer

Upholstery hammers, also known as tack hammers, are smaller tools that secure upholstery to the frames of furniture with the use of tacks and nails. This is made possible by the magnetized face of the hammer, which provides placement. Next, the tacks are stacked through and into place.



15. Brick and Mortar Hammer

Brick and Mortar Hammers come in two primary forms: Rubber Mallets and Brick Hammers. These demolition style tools share similarities in function and also variations.



16. Drywall Hammer

Lightweight. Drywall hammers weigh about 12 to 13 ounces — less than a pound.

Mobile. It is the tool of choice for drywall hangers that are always on the move on a job site.

Round striking face. This surface prevents dents and impact on drywall surfaces, unlike square-faced hammers.



17. Welder's Hammer

Welder's Hammers have funnel-shaped noses and pointy, flat opposing ends with a beveled tail. The unique feature of the hammer is its hanging hook, which can suspend the tool from nails or onto pegboards. Welders will also appreciate how simple it is to remove leftover slag from welding jobs.



18. Electrician's Hammer

These are fit for the typical working occupations and hazards of electrician's, utility workers and linemen. These usually weigh up to 18 ounces or less. The forged, steel heads of the hammer has straight claws designed to reduce the difficulty in removing electrical style fixtures , such as striking inside boxes. Its one-piece design also promotes excellent strength.



19. Blacksmith's Hammer

Blacksmith's are real artists, at their core, and depend on a durable hammer to move and shift metal in different directions, all while maintaining an orderly path. Blacksmith's Hammers can consist of Ball Peens or other round-faced versions — which run metal elliptically — while humanmade, forged hammers give blacksmith's greater control of their metalwork.



20. Bushing Hammer

This tool is designed for masonry work, such as to add texture to hardscaping. However, bush hammers come in various shapes and forms: some are handheld, and others are bulky and electric. The same design of the conical, pyramid-esq points that sit on the tip of a metal slog still applies across each version. These pyramid points make rough impacts against texture to form what resembles weathered rock.

Bush hammers also can aid in increasing bonding as new concrete is applied to a pre-existing surface.



21. Lineman's Hammer

Lineman's Hammers work best with medium-duty work or less, mainly finishing nails. These tools are manufactured out of solid steel, polished, with grips that absorb shock.



22. Chasing Hammer

Chasing Hammers have a large, smooth head and face, and can be used to planish metal or strike objects. The other end of the tool has a polished, round steel head that is perfect for peening. The head weighs 3 ounces, with 2 to 3-inch head length



23. Toolmaker's Hammer

Toolmaker's Hammers come equipped with a high-powered magnifying glass that is mounted in shock-resistant rubber. This tool can make it easy for you to find your punch and strike zone while keeping your eyes fixed on the work. The hammer weighs four ounces and is made of forged steel and in a chromium finish.



24. Railroad-spike Maul Hammer

Spike mauls, also known as railroad sledgehammers, are tools used to drive spikes on opposing sides of the railing to safeguard the handle. They weigh around 8 to 12 pounds and have 30 to 36-inch handles.

Spike mauls have an elongated, twin-faced head made of hardened steel. The heads measure 12 inches and are long enough to help you use your swing to drive each spike down.

Spike mauls also come with symmetrical heads, with a longer, thinner side and larger diameter. The long side creates the opportunity for you to drive spikes over really high rails, or to drive spikes near planks that cross highways.



25. Hatchet Hammer

Hatchet Hammers, also known as half hatchets or a rigging ax, is an emblem of the past, and resembles the nifty wood-cutting ax your grandfather used long ago. The Hatchet Hammer can be used on just about any work project at home, the farm, or worksite. The head is made of carbon and steel alloy and weighs 22 ounces. It sits on an 18-inch hickory handle.



26. Trim Hammer

This tool may be a small, 10-ounce lightweight made of titanium, but it has a powerful striking force — especially in driving nails with precision or pulling polished nails at ease. The axe-style handle is durable and offers great comfort. This tool is 14 and 1/4th inches and weighs up to nearly 17 ounces



27. Piton Hammer

Piton Hammers, also known as rock-climbing hammers, walls, big walls, and aid hammers, is a specialty tool used to help rock climbers place pitons and circle-heads or apply fixed bolts.



28. Power Hammers – Nail Guns

Nail guns have revolutionized hammers by simplifying the process of fitting nails, stapling fabric, setting floorboards and driving new nails into the material. They are most useful when applying a huge number of nails to a project quickly and accurately.

Nail guns can perform light-duty work, such as upgrading moldings and picture frames, or heavy-duty, like floorboard maintenance and building a garden deck. They come in many different varieties and functions.



HAMMER SAFETY

- While a very basic tool, hammers can cause serious injury when not used properly. In fact, a misplaced hammer alone can break a bone in your wrist, hand or fingers, as well as cause minor scrapes, cuts and bruising to any part of your body. Here are basic and very important guidelines in using hammer safety:
- Always keep your work area free of debris and other objects that may cause trip or slip hazards.
- Before using a hammer, ensure that its handle is not loose, cracked or splintered. Make sure, too, the handle fits securely.
- Use hammers or mallets with electrically insulated handles for work on or around exposed energized parts.
- Wear appropriate eye protection since flying debris from shattered materials can injure your eyes.
- Make sure you have enough clearance from fellow workers when performing work with a hammer or mallet.
- Choose a hammer with a cushioned handle to protect you from vibration, impact and squeezing pressure.

- Select a hammer with a weight appropriate to your size and capacity, as well as the job at hand.
- Ensure that you have secure footing and good balance while using a hammer.
- You can use clamps or a vise to secure the piece you are striking with a hammer.
- Use only a hammer when driving nails into an object or material. Never use a rock, brick or other tools for this purpose or risk getting injured.
- Avoid using hammers with sharp edges as they can cut off circulation in your finger after long periods of use.
- When pulling nails or prying material apart, ensure that the claw of the hammer is in the proper position and the right leverage is applied.
- Avoid awkward positions when using the hammer to prevent strains and other kinds of stress.
- While working on a ladder, never hammer by extending your torso outside the side rails of the ladder.
- Keep hammers and other tools organized by placing them in tool chests or tool boxes.
- Never leave hammers and other tool strewn about in your work area.
- Use pegboards for larger tools so that you can hang them securely and save space at the same time.
- Make sure to immediately repair damaged or defected hammers and other tools. Only qualified personnel must perform repairs

Mallets



Definition

- **A mallet is a kind of hammer, often made of rubber or sometimes wood , that is smaller than a maul or beetle, and usually has a relatively large head. The term is descriptive of the overall size and proportions of the tool, and not the materials it may be made of, though most mallets have striking faces that are softer than steel.**

1. THE JOINER'S MALLET

The joiner's mallet is characterized by two slightly angled flat faces and a large head. They vary in size, but are usually quite large. They excel at heavy chisel work, where both power and precision are required. The flat faces provide you with accuracy, while the heft provides power. This is my go-to mallet for chopping big mortises. The flat faces provide you with accuracy, while the heft provides power. This is my go-to mallet for chopping big mortises.

The joiner's mallet pictured above is approximately 16 ounces and made of solid beech. The handle fits through a wedged mortise, so that either can be replaced. The centrifugal force from using the mallet keeps the handle tight in the head.



2. THE CARVER'S MALLET

The carver's mallet is round and often turned from a single piece of wood. It excels at driving gouges and other various tools to create intricate carvings. The round shape gives the user excellent directional control. This one is on the larger side, however, carving mallets can vary greatly in size. Large mallets do the heavy lifting, while smaller ones are used for detailed work.

I originally used this one in place of a joiner's mallet. I had issues with the round head glancing off of chisel handles and ruining mortises.



3. THE DEAD-BLOW Mallet

The dead-blow mallet is an unusual one. It is characterized by a hollow body filled with sand or metal filings. It shines at driving pieces of furniture together. The heavy material inside the hollow body provides a lot of mass to persuade joinery together. I recently used this one to drive half-inch pegs into 5-inch deep holes for a workbench build.



4. THE RUBBER Mallet

The rubber mallet is a frequent staple, both inside and outside of the wood shop. I mention it here, because it excels when the dead-blow mallet cannot. The soft rubber head won't mar delicate woods and finishes. However, it just doesn't have the mass that helps the dead-blow mallet to excel at difficult joinery tasks.



5. THE JOURNEYMAN'S MALLET

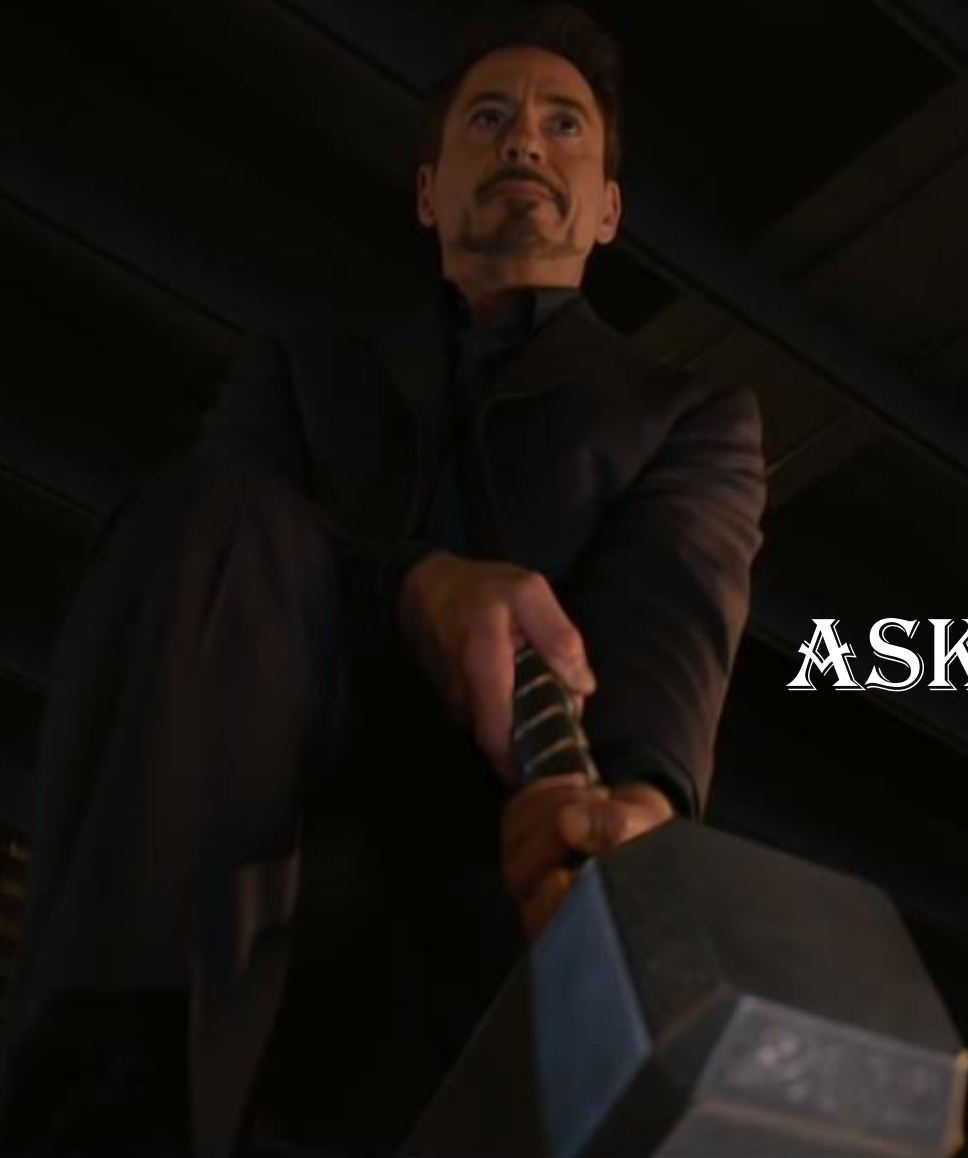
This might be my favorite mallet of all. The journeyman's mallet is characterized by its small size.

This one has a turned handle and round, brass head, but they do come in many shapes. Many woodworkers prefer one that has a head with flat faces like those found on the joiner's mallet.

The short handle and heavy brass head gives you a lot of precision without sacrificing power. The small size also allows you to get into tight spaces. This mallet sees most of its use on fine joinery, such as chopping the waste between dovetails



Are you Worthy??????



**THEN
ASK QUESTIONS**



Today's Amazing Fact???????

A Boeing 747 can carry 183,380 liters of fuel in a labyrinth of tanks so large that people can actually *walk and crawl* inside them.



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