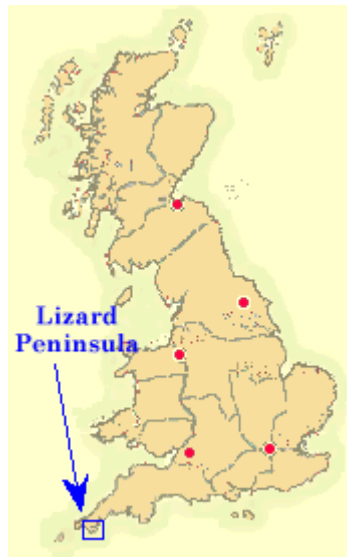


Doctrine of Brass

1. The word for brass in the Authorized Version is better translated bronze (Hebrew, *nehoshet*; Greek, *chalchos*; Latin, *aes*).
2. Bronze is an alloy of copper and tin. It was used to an enormous extent in ancient times.
3. Bronze was the principal material for all manner of articles, both of ornament and use, as far back as the Chalcolithic Age (Greek *khalkos* + *lithos* = *copper stone*; c. 3500 BC - 3000 BC), a period characterized in archeological terms by the transition from stone to copper.
4. Great interest has arisen as to the source of the tin so largely used in the manufacture of the ancient bronzes, as tin occurs in but few localities.
5. Most of the tin is understood to have been brought from the great tin mines of the Cornwall peninsula and the Scilly Islands by the Phoenicians, who maintained for many centuries steady commerce by sea.



6. The bronze articles then manufactured in the Punic [Phoenician] cities [in the north of Canaan] and colonies were exported all over the world in exchange for the products of every region, to enhance the wealth of Tyre and Carthage [North Africa].
7. The bronze, however, varied a great deal in composition, and some contained an admixture of zinc, approaching brass. Such may have been the "*and two vessels of fine bronze, precious as gold*" (*Ezra 8:27*).
8. The zinc mines at Laurium, in Greece, were extensively worked in ancient times; and it seems probable that various proportions of the three metals were employed; giving alloys all the way from bronze to brass; but the Punic cities are the more ancient once and the most frequently used.

9. Palestine archaeology distinguishes several Bronze Ages:

- Early Bronze Age 3000 BC - 2000 BC
- Middle Bronze Age 2000 BC - 1500 BC
- Late Bronze Age 1500 BC - 1200 BC

10. The Bronze Age was followed by the Iron Age (1200 BC - 300 BC).

11. Bronze was abundant among the Hebrews and their neighbors from early times though it is mistranslated brass (Exodus 38:1-31).

- *2 Samuel 8:8 And from Betah, and from Berothai, cities of Hadadazer, king David took exceeding much brass.*
- *1 Chronicles 18:8 Likewise from Tibhath, and from Chun, cities of Hadarezer, brought David very much brass, wherewith Solomon made the brasen sea, and the pillars, and the vessels of brass.*
- *1 Chronicles 29:7 And gave for the service of the house of God of gold five thousand talents and ten thousand drams, and of silver ten thousand talents, and of brass eighteen thousand talents, and one hundred thousand talents of iron.*

This last passage is of particular interest because it reveals that in David's time iron was more abundant than brass [bronze]. The "bronze age" ended in Palestine prior to 1000 BC.

12. In many other passages brass [bronze] is used to describe various objects:

- Mirrors. *Exodus 38:8 And he made the laver of brass, and the foot of it of brass, of the looking glasses of the women assembling, which assembled at the door of the tabernacle of the congregation.*
- Weapons and armor. *1 Samuel 17:5 And he had an helmet of brass upon his head, and he was armed with a coat of mail; and the weight of the coat was five thousand shekels of brass. 6 And he had greaves of brass upon his legs, and a target of brass between his shoulders.*
- The bronze serpent. *Numbers 21:9 And Moses made a serpent of brass, and put it upon a pole, and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived.*
- The furnishings of the Tabernacle. *Exodus 26:11 And thou shalt make fifty taches of brass, and put the taches into the loops, and couple the tent together, that it may be one. Exodus 26:37 And thou shalt make for the hanging five pillars of shittim wood, and overlay them with gold, and their hooks shall be of gold: and thou shalt cast five sockets of brass for them.*

- The furnishings of the Temple. *1 Kings 7:14 He was a widow's son of the tribe of Naphtali, and his father was a man of Tyre, a worker in brass: and he was filled with wisdom, and understanding, and cunning to work all works in brass. And he came to king Solomon, and wrought all his work. 2 Chronicles 4:1 Moreover he made an altar of brass, twenty cubits the length thereof, and twenty cubits the breadth thereof, and ten cubits the height thereof.*

13. The word for brass [bronze] is used not only in a literal way but also in a figurative sense.

- The word appears in various metaphors, such as for a hot, rainless sky. *Deuteronomy 28:23 23 And thy heaven that is over thy head shall be brass, and the earth that is under thee shall be iron.*
- The word speaks of a parched soil. *Leviticus 26:19 And I will break the pride of your power; and I will make your heaven as iron, and your earth as brass:*
- The word stands for baseness as contrasted with the precious metals. *Isaiah 60:17 For brass I will bring gold, and for iron I will bring silver, and for wood brass, and for stones iron: I will also make thy officers peace, and thine exactors righteousness.*
- The word is associated with the opposite idea of value, as compared with wood *Jeremiah 6:28 They are all grievous revolters, walking with slanders: they are brass and iron; they are all corrupters.*
- The word speaks of concepts such as physical strength, power, and durability.
 - ❖ Physical Strength. *Job 6:12 Is my strength the strength of stones? or is my flesh of brass? Job 40:18 His bones are as strong pieces of brass; his bones are like bars of iron. Job 41:27 He esteemeth iron as straw, and brass as rotten wood.*
 - ❖ Power. *Psalms 107:16 For he hath broken the gates of brass, and cut the bars of iron in sunder.*
 - ❖ Durability. *Isaiah 45:2 I will go before thee, and make the crooked places straight: I will break in pieces the gates of brass, and cut in sunder the bars of iron:*
- The word is used to indicate a moral quality.
 - ❖ Firmness. *Jeremiah 1:18 For, behold, I have made thee this day a defenced city, and an iron pillar, and brasen walls against the whole land, against the kings of Judah, against the princes thereof, against the priests thereof, and against the people of the land.*
 - ❖ Obstinacy. *Isaiah 48:4 Because I knew that thou art obstinate, and thy neck is an iron sinew, and thy brow brass.*

Special Note.

- Brass is a buttery yellow alloy of zinc and copper which has been manufactured for thousands of years all over the world.
- Bronze is a metal alloy produced by blending copper and tin in various amounts, depending on the application. Additional elements such as manganese, lead, and phosphorous are added to create bronze with specific properties.
- Copper is a reddish brown nonferrous [without iron] mineral which has been used for thousands of years by many cultures. The metal is closely related with silver and gold, with many properties being shared among these metals.
- Tin is a malleable, silvery metallic element obtained chiefly from cassiterite. It is used to coat other metals to prevent corrosion and is a part of numerous alloys, such as soft solder, pewter, type metal, and bronze.
- Zinc is a bluish-white, lustrous metallic element that is brittle at room temperature but malleable with heating. It is used to form a wide variety of alloys including brass, bronze, various solders, and nickel silver, in galvanizing iron and other metals, for electric fuses, anodes, and meter cases, and in roofing, gutters, and various household objects.