

Gopherwood and the Construction of the Ark

By: Arnold C. Mendez, Sr.

Gopherwood and Current Scholarship

The Bible states that the Ark of Noah was to be made of Gopherwood see figure 1 (1). The Hebrew word (2) is *gopher*-גפר (#1613). This word only appears once in the entire Bible. The following verse, Genesis 6:14, is from the New King James Version of the Bible.

Make yourself an ark of gopherwood; make rooms in the ark, and cover it inside and outside with pitch.

What was gopherwood? The response of one Bible dictionary is typical (3).

Gopher Wood: the wood from which Noah's ark was made (Gen. 6:14). The word "gopher" is unknown elsewhere in Hebrew or allied languages. It may refer to some resinous wood, like pine, cedar, or cypress; or the reference may be to boats made of interwoven willow branches and palm leaves, coated on the outside with bitumen.

Many Bible commentaries have entries for gopherwood. Unfortunately they do not shed much light on the subject of what exactly gopher wood is. The two citations below are representative of the comments that will be found in most Bible aids about Noah and the ark.

Both the providence of God, and the grace of God, own and crown the endeavours of the obedient and diligent. God gave him very particular instructions concerning this building, which could not but be admirably well fitted for the purpose when Infinite Wisdom itself was the architect. It must be made of *gopher-wood*. Noah, doubtless, knew what sort of wood that was, though we now do not, whether cedar, or cypress, or what other (4).

Make thee an ark—ark, a hollow chest (Exodus 2:3).
gopher wood—probably cypress, remarkable for its durability and abounding on the Armenian mountains.
pitch it within and without—mineral pitch, asphalt, naphtha, or some bituminous substance, which, when smeared over and become hardened, would make it perfectly watertight (5).

Bible translations are not much help. The New Living Translation (6) and the New Revised Standard Version (7), respectively, translate Genesis 6:14 as follows:

Make a boat from resinous wood and seal it with tar, inside and out. Then construct decks and stalls throughout its interior.

Make yourself an ark of cypress wood; make rooms in the ark, and cover it inside and out with pitch.

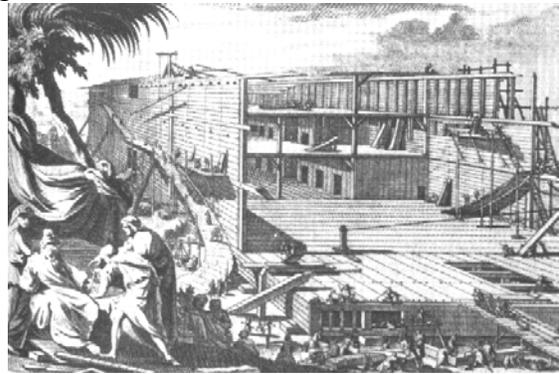


Fig. 1. Gopherwood was used in the construction of the ark. Illustration from the Renaissance period showing the building of the ark.

Almost all the other Bible translations use the word cypress, cedar, or gopherwood in describing the wood used in the construction of the Ark. Although cypress wood is often used in the place of gopherwood the two terms are not equivalent. The Hebrew word for cypress is *Tirzah* תִּרְזָה (#8645). If the translators of the Bible wanted to say cypress they would have used the word cypress just as they did in the book of Isaiah 44: 14 (NKJV).

He hews down cedars for himself, and takes the cypress (*Tirzah* תִּרְזָה) and the oak; he secures it for himself among the trees of the forest. He plants a pine, and the rain nourishes it.

Another common word that is used in the place of gopherwood is the word cedar. Once again there is a Hebrew word for cedar *'erez* אֶרֶז (# 730) that could have been used by the translators. This word is used more than 67 times in the Old Testament where it is translated cedar tree, cedar timber, and cedar wood. A good example is found in the book of 1Kings 6:9 (NKJV).

So he built the house, and finished it; and covered the house with beams and boards of cedar (*'erez* אֶרֶז).

Obviously the word gopherwood used in Genesis 6:14 cannot be interpreted or translated as cedar, cypress, or any other type of modern day wood. Thus one can see that Biblical scholarship is silent on the meaning of this word.

Similarity to Other Hebrew Words

Although the word gopher (#1613) only appears once in the Bible, there are some Biblical words that are very similar to the word used for gopher (*gopher*-גֹּפֶר). The word for pitch that is used twice in Genesis 6:14 (KJV) is translated from two closely related Hebrew words.

Make thee an ark of gopher (#1613) wood; rooms shalt thou make in the ark, and shalt pitch (#3722) it within and without with pitch (#3724).

These Hebrew words are shown in Table 1. Notice that the words for gopher, kaphar, and kopher are all very similar in their English translation, in their Hebrew spelling, and in their pronunciation.

Translation	Hebrew	Pronucation	Strongs #	Lexicon Definition (8)
Gopher	גֹּפֶר	go'-fer	1613	Cypress?, gopher, gopherwood, wood of which the ark was made, meaning and exact type unknown.
Kaphar	כָּפַר	kaw-far'	3722	To cover, purge, make an atonement, make reconciliation, cover over with pitch.
Kopher	כֹּפֶר	ko'-fer	3724	Price of a life, ransom, bribe, asphalt, pitch (as a covering), name of a plant.

Table 1. Showing the similarity between the Hebrew words translated gopher and pitch in Genesis 6:14.

The Hebrew Names Version of the World English Bible (9), which uses Hebrew names and words in the text for clarity, has an interesting translation of Genesis 6:14.

Make a teivah of gofer wood. You shall make rooms in the teivah, and shall seal it inside and outside with kofer.

The word for gopherwood and the word for pitch are very similar. The word kopher comes from the root word kaphar (see table 1), kaphar is often translated atonement (Leviticus 16:6). This was similar to the effect that pitch or kopher could have on the surface of the material it covered. It would have a covering or purging effect, which is what atonement, means in a spiritual sense. An Old Testament play on words is taking place in Genesis 6:14. The word kopher meant to cover, protect, purge, and atone for sin. The very similar word gopher, which was wood covered with pitch, would imply the same in a physical sense. The gopherwood (pitch covered wood) would cover, protect, and purge any harm directed toward the family of Noah by the rising floodwaters. The gopherwood was a type of atonement barrier. It pictured the protection and salvation of Jesus Christ through his payment of his life as a ransom and atonement for humanities sins.

This atonement scenario and the similarities between the Hebrew words in Genesis 14 seem to indicate that the word gopher and gopherwood are closely related to the word for pitch. In other words the word gopherwood is not a type of wood but a wood process. Specifically the process of using pitch or bitumen combined with wood. It has often been assumed that the pitch process applied to the wood may have been only on the sides, that is the inside surface and the outside surface of the ark. In actuality, the pitch process would have been internal as well as external. Since atonement must take place not only in the outward actions of a person but also in the heart, the analogy would be complete with gopherwood having an internal coating of pitch.

The Use of Pitch as Glue by the Ancients

The word pitch refers not only to natural bitumen, which is often found seeping from the ground, but also to manufactured pitch. There are many examples of how pitch was used by the ancients. In the ancient Roman Empire boiling birch bark and extracting the resins yielded a glue-like tar. This resin was used to glue together broken ceramic pots. Birch bark tar chewing gum was also used thousands of years ago in the Neolithic times as a cleaner for teeth (10, 11). A recent article, among many others, shows how this glue was manufactured. This ancient "superglue" was detected on remnants of two tools that were unearthed in Germany. The site called Koenigsau, in the foothill of the Harz Mountains revealed the technical abilities of the people that produced the glue. The glue had been used to secure flint implements to wooden handles. One of the finds showed an impression of a fingerprint on the surface of the pitch, which was prepared by heating birch bark to between 340-400 °C. Lower temperatures would not allow the resin in the wood to melt and be extracted. If the temperatures were too high this would burn the tar that had been extracted from the birch and render it unusable. This required a large amount of intellectual and technical knowledge.

The very fact that birch bark pitch was identified (in the artifacts) already proclaims the intellectual and technical abilities of the Neanderthals (12).

In the Middle East natural bitumen was used to haft spears heads and flint knives on wooden handles, to set jewelry, as a coating for boats, as a glue to repair damage to statues, as a sealant for pipes and plumbing and as a glue in the manufacture of compound bows. It was also used as a medicine in varying concentrations. It had extensive uses as documented by much scientific literature (13). It was used by Neanderthal man anciently, long before the flood of Noah, and still is being used to this day. This pitch or resin like glue would undoubtedly be used in the constructions of beams and wooden structures as a preservative and a strengthening agent.

Laminated or Layered Wood

Interestingly older dictionaries (14) will provide insight into the word gopher. The word wafer, gauffer, goffer, and gopher, all deal with related concepts. Definitions include; layers in a wafer, layers glued together, an adhesive to glue together layers of paper, and layers of lace in women's clothing. The concept of layering and lamination is implied in all of these words. The term goffering, comes from an old French word which is the process whereby irons are used to flute and press together various layers of lace. The early French settlers in the United States named rodents that burrowed in the earth and created layers of honeycombs—gophers.

The Bible reveals that Noah's Ark was covered inside and outside by pitch this would serve as a waterproofing agent. This pitch covering was probably natural bitumen that was commonly found in seepages in the Middle East. But what many people do not realize is that the ark's design would also include laminated or layered wood that was glued together with a resinous tar-like coating. This manufactured glue was expressly produced for the lamination of wood and was well know throughout the ancient world. This lamination would provide strength for the large beams required for the construction of the ark. As shown gopherwood was actually a process in which the ark's wood was laminated and glued together with pitch and resin, a type of ancient plywood.

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