WEAPONS AND IMPLEMENTS OF WARFARE.

What distinguishes a butcher knife from a soldier's dagger is the context in which the implement is used. Having been developed for very practical purposes, weapons cannot be understood apart from the context of warfare within which they are employed. The context of warfare, though, is virtually unrestricted because it encompasses military, civilian, domestic, political, religious, technological, economic and other realms of human existence, as well as factors such as geographical location, terrain, climate, and natural resources. Due to the overwhelming scope of this aspect of the discussion, treatment of the context of warfare is deferred to other more thorough technical works (e.g., Yadin 1963).

Taking the Bible as a point of reference, it is apparent that the weapons mentioned there are not unique to the political entities and religious communities which compiled the Bible. ANE civilizations developed weapons long before the nation of Israel was formed; these were utilized in battles with enemies, never in isolation from other people. Several works cover the development of, and archaeological evidence for, weapons from the dawn of human history through the 2d century C.E. (Maxwell-Hyslop 1946; Goetze 1963; Yadin 1963; Snodgrass 1964; Glock 1968; Gonen 1975; Bar-Kochva 1989; Davies 1989). This ongoing history supplies the background for the more narrowly focused survey developed herein, which is primarily concerned with enumerating and illustrating those weapons that the Bible mentions.

In the Bible, weapons are named or discussed in various literary contexts, and these names may refer to several technically distinct weapons (e.g., Heb hereb "sword" may signify several very different types of swords or daggers). General terms like "weapons," "weaponry," or "armor" translate various Hebrew (e.g., kělî; nešeq; šelaḥ) and Greek terms (e.g., hoplon; panoplia; skeuos polemikos); most characteristic of these terms is the use of the plural form, as in 1 Chr 12:34—Eng 12:33 "... equipped for battle with all the weapons of war ..." The Bible specifies by name individual weapons in such diverse literary contexts as narrative (1 Sam 17:5–7, 38–39), law (Deut 20:19–20), and poetry (Job 41:5–21—Eng 41:13–29).

Broadly defined, weapons and implements are tools or instruments utilized in armed conflict. To organize our treatment, a system based on the function of weapons is employed. More specifically, the functions and uses of weapons allow them to be classified into four groups: (1) projectile; (2) shock; (3) mobile; (4) protective.

David's use of a sling and stones to kill well-armed Goliath (1 Sam 17:40–50) illustrates both the employment and effectiveness of this primitive projectile in combat. Stones can be shock weapons (e.g., hitting an enemy on the head, rolling boulders down a hill), but when hurled from a sling (Heb qela; Gk $sphendon\bar{e}$) they become lethal. Similar to the sling stone, the javelin (Heb

kîdôn; sĕgôd; širyâ) and dart (Heb massāʿ; šēbet; Gk belos; kentron) are thrown. The javelin is hurled by hand, possibly aided by a cord with a loop on the end to increase distance and accuracy (Yadin 1955). The javelin, with its metal head attached to a shaft of reed or wood, was effective because it could penetrate protective armor, as opposed to sling stones. Likewise, metal-tipped darts could penetrate armor, but they were supposedly smaller and therefore could be thrown, blown through a hollow reed, or thrust at close range (2 Sam 18:14, though here Heb šēbet could mean "shaft" or "spear"). Eph 6:16 speaks figuratively of the "flaming darts" of the evil one, which might indicate another dimension of this weapon, but Gk belos is more frequently translated "arrow," and "flaming arrows" are widely attested as weapons for setting cities on fire.

The sharp metal or stone head of an arrow was designed to pierce armor from long range. Several Hebrew (ḥēṣ; ḥēṣî; ben qešet; nešeq) and Greek terms (belos; schiza; toxeuma) are translated "arrow." The designation ben qešet (lit. "son of the bow") identifies the arrow by its correlate; the other part of an archer's gear is the quiver (Heb 'ašpâ; tělî; Gk pharetra; see Gen 27:3). Aside from the natural wonder of the rainbow after the deluge (Gen 9:13–16), the bow placed in the sky is God's promise of no more war with humanity (Mendenhall 1973: 47–48). Simple "convex" as well as "composite" bows were used with stone- and metal-tipped arrows throughout the 2d millennium (Anclsr 1: 243). Armies included corps of expert archers (1 Chr 5:18; 2 Chr 35:23; Jdt 2:15) who might, like Jonathan (1 Sam 20:20–22), have taken target practice. Throughout the Bible, the bow and the arrow signify death and evoke fear.

Most prominent and diverse in the storehouse of weapons was the cache of shock weapons. Shock weapons are generally used in hand-to-hand combat. Though shock weapons can be theoretically divided into thrusting and striking implements, the exigencies of combat blur this distinction. In addition to the sword (Heb <code>hereb; měkērâ; šelaḥ; Gk machaira; hromphaia</code>), the spear (Heb <code>hanît; kîdôn; ṣilṣāl; qayin; rōmaḥ; Gk gaisos; dory; komax; logchē</code>), the lance (Heb <code>rōmaḥ</code>), the handpike (Heb <code>maqqēl yād</code>), and the peg (Heb <code>yātēd</code>) fall within the thrusting category.

Various types of sword were developed in the ANE for different purposes: (1) the sickle sword whose convex edge was sharp and intended for striking (Josh 10:28–39); (2) the long, straight-blade two-edged sword which could stab as well as strike the enemy (Ps 149:6); and (3) the short two-edged sword or dagger (Judg 3:16; see Yadin 1963, 1: 10, 44, 60, 78; Anclsr 1: 241). To carry the sword a soldier wore a sheath or scabbard (Heb nādān; taʿar; see 1 Sam 17:51; 2 Sam 20:8; Ezek 21:3–5). During the late 2d millennium the swords used by most soldiers would have been made of iron (1 Sam 13:19, 22), while other less economical metals were also used (e.g., bronze).

Spears and lances are distinct from javelins in that javelins are thrown, but spears (John 19:34) and lances (1 Kgs 18:28) are thrust at the enemy. Individual footsoldiers carried spears (usually with shields) and a unit or phalanx was outfitted with lances that had longer shafts. Similar, but much shorter, weapons were the handpike (Ezek 39:9) and peg (Judg 4:21). Each of these thrusting weapons, except the peg, had a sharp metal head attached to a shaft of variable length. Depending on the length of the weapon, the soldier would use it to stab or slash the enemy.

Equally common in the arsenal were the striking weapons, the axe (Heb *garzen*; $qard\bar{o}m$) and the club (Heb $m\bar{e}p\hat{i}s$; $t\hat{o}tah$; Gk xylon; hrabdos). Axes were standard military equipment in the ANE (Yadin 1963), but there are only two biblical occurrences of "axe" in battle contexts, neither of which is narrative: Jer 46:22 speaks of axes cutting down Egypt's forest, Ezek 26:9 refers to Babylonian axes destroying Jerusalem's towers. Like sickle swords, axes slashed and cut the enemy. The club, on the other hand, smashed the helmet and knocked out the enemy. A technically unsophisticated weapon, the club was available to warrior and civilian alike (Matt 26:47, 55 = Mark 14:43, 48). Shock weapons as discussed above are wielded by individual soldiers, but there are other types of shock weapons.

Two pieces of weaponry that might be considered support equipment are the battering-ram (Heb *kar; qĕbōl;* Gk *krios*) and the siege work (Heb *dāyēk; derek; māsôr; mĕsûrâ; sōllâ*). These weapons were intended to overcome fortifications, either by breaking them down (e.g., city gates, walls), or by scaling and mounting them, and because of their magnitude these weapons required teamwork. During a siege the army surrounds a city, builds up siegeworks (2 Kgs 25:1 = Jer 52:4) and uses battering-rams to destroy the fortifications (Ezek 4:1–8). Although the armies of Israel and Judah besieged various cities during their history, the Bible never records their use of battering-rams or siegeworks, only of Israel's and Judah's enemies using these weapons against them (cf. 2 Macc 12:15–16).

Projectile and shock weapons combine with mobile weapons to constitute the full compliment of military firepower. Horses (Heb sûs; pārās), or cavalry (Gk hippeus; hippikos; hippos), and chariots (Heb merkāb; merkābâ; 'ăgālâ; rekeb; rěkûb; Gk harma) are the most versatile weapons. They serve as mobile attack platforms for archers and javelin throwers, and play a major role in battle tactics and strategy (Yadin 1963). Solomon's army had companies of horsemen and chariots (1 Kgs 5:6; 9:19, 22; 10:26), as did the armies of his successors in Israel and Judah. But it was the horses and chariots of Assyria and Babylon that intimidated the entire ANE in their day, and the fear of which gripped Israel and Judah before they were taken into captivity. Nonetheless, horses and chariots play an important part in Israel's early history (Exod 15:1, 19, 21; Judg 5:22) and continue as an important image in later, NT writings (Rev 6:2–8).

Aside from the weapons carried to attack the enemy, soldiers were outfitted with protective gear. A soldier's gear could consist of: (1) a coat of mail (Heb siryōn; širyôn; Gk halysidōtos; thōrax); (2) a breastplate (Heb širyôn; Gk endyō; thōrax); (3) scale armor (Heb debek); (4) greaves (Heb miṣḥâ); and (5) a helmet (Heb kôba'; mā'ôz rō'š; qôba'; Gk korys; perikephalaia), all of which is referred to as armor (Heb hăgôrâ; kělî; mad). This armor protects the soldier from the impact of some projectiles and shock weapons, but a shield (Heb māgēn; ṣinnâ; šeleţ; Gk aspis; hyperaspizō; thyreos; kalymma; hoplon) or buckler (Heb māgēn; sōḥērâ; ṣinnâ) provides the primary defense against projectiles and shock weapons. Long shields, half-shields, and the smaller circular buckler were mostly constructed of a wooden, wicker, or metal frame covered with leather. The equipment issued by Uzziah to his army included "shields, spears, helmets, coats of mail, bows, and stones for slinging" (2 Chr 26:14); the shield probably being a lighter half-shield which allowed for mobility.

The development of projectiles, shock weapons, mobile weapons, and protective gear resulted from successful and unsuccessful military engagements. ANE weapons of warfare were diverse and numerous, the weapons named in the Bible simply bringing to light one segment of the ANE arsenal. Further insight into the design, development, function, and war contexts of these weapons depends on the fortunes of future archaeological excavation.