Armor in the Book of Mormon

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When most Americans think of armor, the image that usually comes to mind is the late medieval Western European "knight in shining armor." The historical reality is, of course, much more complex. There have been thousands of different types of armor used throughout history, with the Western-European style of heavy plate armor a rare, if not unique, phenomenon. When we attempt to understand the nature and use of armor in the Book of Mormon, we must take care not to fall victim to anachronistic preconceptions based on the cultural prejudices of our Western-European historical heritage. ¹ Instead, we must begin with a proper understanding of the definition and wide range of types of armor that have been used throughout history. ²

Armor in History

Armor can be defined as "any equipment designed to protect the body in combat." Although armor varies widely throughout history and among cultures, it can be subclassified according to various technical characteristics (see fig. 1). Certain types of armor are designed to protect specific parts of the body. For example, a helmet is armor for the head, while armor for the chest and abdomen is called a cuirass or breastplate in English. Some armor is classified according to the material it is made from, such as chain mail (which is composed of small interlocking rings of metal) or scale armor (which is composed of small overlapping plates of leather, metal, or other material). The materials or methods of manufacture also frequently define the type of armor. Thus, leather armor is subdivided into many categories, such as *lorica*, a Roman armor composed of broad overlapping strips of leather, or *cuir-bouilli*, leather hardened by boiling in wax.

Men began wearing armor in Neolithic times. This early armor was made by simply tying a thick animal skin around the shoulders. The earliest artistic examples of armor among civilized people from both ancient Sumer and Egypt are simple animal skins forming cloaks or garments of some sort (see fig. 2). As time passed, a proliferation of specialized types, styles, and materials of armor swiftly developed in different regions of the world.

Nearly every conceivable material has been used for armor at various times and places. Although most people generally think of metal as the primary material used in making armor, animal hides and thick padded fabric have been by far the most widespread materials, due largely to the great expense of metal armor. Even in late medieval Europe, which probably witnessed the proliferation of full metal armor more than any other period and place in history, only the wealthy and elite soldiers could afford the elaborate full metal-plate armor. Many other materials were widely used to make armor, including animal skins and feathers, wood, horn, bone, stone, silk, leaves, and other parts of plants. Even paper was used to make armor in medieval China.

Armor is frequently designed to afford protection against one specific type of weapon. To obtain complete protection therefore, often a soldier had to wear two or three different types of armor in overlapping layers. Chain mail, for example, provides a good defense against some types of projectiles and cutting weapons but affords little protection against the blows of a mace or club. This meant that mail was usually worn over some type of thick padded garment. Islamic warriors in the late Middle Ages frequently wore padded coats covered with mail and had additional plates of metal to protect their chests. Thus, as warfare became increasingly complex, new types of armor and weapons tended to develop in cyclic relationship to each other in a type of arms race. Any change in the technology of either armor or weapons engendered a related change in many other aspects of military technology.

It is important to emphasize here that no single type of armor can be said to offer the best protection. The selection of the type of armor that a particular culture would use was based on numerous important factors. At the most basic level were the problems of technological skill, the availability of materials, and the time needed to make the armor. If metal were scarce, expensive, or difficult to smelt or fashion, other materials were substituted. Soldiers also had to consider the relative cost effectiveness of more expensive types of armor. The tactical functions and military practices of an army were also frequently a factor in the type of armor they would use. A major consideration was the need for free movement of the body. For example, medieval Islamic cavalry were expected to be able to twist their torso while mounted on a horse so they could shoot arrows backward in the famous Parthian Shot. This would be impossible in a Western-European style suit of full metal-plate armor, which was therefore never adopted among the Muslims. Climate was likewise an important consideration. As a general rule, the warmer the climate, the lighter the forms of armor.

Another important factor to bear in mind is that throughout history the efficacy of armor was often thought to be as much the product of religious or magical properties of the armor as of the physical characteristics. Thus the inclusion of various types of talismanic markings on armor to insure divine or magical protection is almost a universal phenomenon. The best-known example of this use of talismanic markings is the appearance of the cross on Christian armor, shields, and military clothing during the Crusades. Muslim warriors frequently went into battle with verses from the Qur'an sewn into their armor. In East Asia, the dragon motif was frequently used on armor as a symbol of power, good luck, and immortality.⁷

In summary, the type of armor a culture uses is thus dependent on numerous factors. The materials, structure, and style of armor are unique to each period, culture, and region of history. Indeed, armor can be used much like pottery to distinguish among cultures and periods of time. Thus, although Joseph Smith could not have been aware of this fact, when the Book of Mormon includes descriptions of armor, it is providing us with a type of "fingerprint" by which we can attempt to locate the time and place of origin of the text. We will next turn to an examination of what types of armor are described in the Book of Mormon.

Types of Armor in the Book of Mormon

There are eight distinct terms for armor mentioned in the Book of Mormon: breastplate (11 times), shields (10 times), armor (9 times), 8 head-plates (7 times), arm-shields (2 times), animal skins (2 times), thick clothing (2 times), and bucklers (1 time) (see appendix for an index of passages). Most of these references mention armor only in passing, providing no details as to the nature of the items mentioned. Occasionally, however, enough incidental detail is provided to allow us to reconstruct a basic picture of Nephite armor.

Materials Used for Armor

The Book of Mormon mentions several different materials used in the construction of armor. The most common material for armor is animal skins, which, according to the text, only the Lamanites used.⁹

The Nephites, on the other hand, are described as using special "thick clothing" as part of their armor (Alma 43:19). Generally speaking, however, we are left with little evidence as to the other materials used to make Nephite armor. The frequent use of the word "plate" in head-plates and breastplates implies some type of rigid armor, such as wood, horn, treated leather, stone, or metal. Indeed, the head-plates are said to have been "smit[ten] in two" by Lamanite blows (Alma 43:44). Archaeological evidence from Mesoamerica suggests that

metals were not extensively used for armor, and it is therefore likely that most Nephite head-plates and breastplates were for the most part nonmetallic. ¹⁰

The single Book of Mormon reference to the use of metal armor comes from a very ambiguous passage in Mosiah 8:10. King Limhi had sent an expedition to search for the city of Zarahemla. Instead, they discovered the ruins of the destroyed Jaredite civilization, returning to Limhi with several artifacts from these ruins. Their discoveries included "breastplates, which are large, and they are of brass and of copper, and are perfectly sound" (Mosiah 8:10). The meaning of this passage warrants close examination. First, it refers to Jaredite rather than Nephite armor and therefore gives us no information about the materials used among the Nephites and Lamanites. Nonetheless, the breastplates in question are clearly made of metal. But this does not necessarily imply that most Jaredite armor was made of metal.

First, it is by no means certain that the Limhi expedition correctly identified the things they found. They may have believed that the objects they discovered were indeed pieces of decaying breastplates and swords, but this is by no means certain. Correctly identifying the original purpose of a partially ruined artifact is frequently a difficult and uncertain process for which archaeologists are trained for years. Why are we to assume that the Limhi expedition had the expertise to accurately determine the original purposes of the objects they discovered?

Second, the Limhi expedition discovered an area of bones and ruins (see Mosiah 8:8). Most of the artifacts were probably in a state of decay. It would therefore probably not have been worth collecting decayed nonmetallic armor. Furthermore, from all the things they discovered, Limhi's expedition chose to return with only three items: the twenty-four gold plates of Ether, brass and copper breastplates, and some rusted pieces of swords, implying that they were scavenging for metal and that metal was therefore something unusual and rare — even a piece of rusting metal was worth recovering.

Thus, the expedition claimed the breastplates were "large." Large is, of course, a relative term. To a society where metal is rare, a large piece of metal might be only a few inches wide.

Third, we might ask what these Jaredite breastplates looked like. We have no explicit evidence from the text, but I will suggest below that the Nephite breastplate can be equated with Maya pectoral breastplates, which were hung around the neck and covered the middle chest. If this is true, then a Jaredite breastplate of metal could be thought of as a medallion or disk hung around the neck either entirely or partially composed of metal. Indeed, we have archaeological evidence of precisely such breastplates from the Olmec civilization, which is generally equated with the Jaredites. Note also that metal was used for armor among the elites of pre-Columbian Mesoamerica. Plates, and Shields of Wood or Tortoise-Shell, adorned with Plates of such Metal as they could get," which was usually gold or silver.

Finally, the very fact that the expedition mentioned metal can be interpreted as an implication that metal was unusual. As a modern analogy: if we see a car somewhere, we generally don't describe it as being made of metal. We simply say we saw a car. On the other hand, if the car were made of wood, we would be sure to mention it, since wooden cars are rare. Thus the fact that those in Limhi's expedition were intent on describing the breastplates as being "large" and "of metal" implies to me that most breastplates were neither large nor of metal. A metal breastplate was something worth writing home about. The material of Nephite and Lamanite breastplates is never mentioned precisely because Nephites universally knew what a breastplate was made of.

Breastplates

Breastplates are the most common type of armor mentioned in the Book of Mormon. ¹⁴ Most passages simply mention the use of breastplates and therefore offer no details as to their structure or material. Breastplates were said to protect the wearers from enemy weapons—"shielded from the strokes of the Lamanites by their breastplates" (Alma 43:38; 49:24)—but they could nonetheless be penetrated—"they did pierce many of their breastplates" (Alma 43:44). Breastplates were known to the Jaredites, at least in the last phases of their civilization (see Ether 15:15). The earliest mention of Nephite armor comes in the late second century B.C. (see Mosiah 21:7). By the time of the great wars of the first century B.C., the Nephites under Moroni had developed what was to become the standard armament for their civilization: the breastplate, head-plate, and shield (see Alma 43:19, 21, 38).

Up until the early first century B.C., the Lamanites do not seem to have used armor extensively, for the Book of Mormon frequently refers to their nakedness and lack of armor (see Alma 3:5; 43:20, 21, 37). Zerahemnah specifically blamed his defeat at the hands of Moroni's army around 74 B.C. on the superiority of Nephite armor, especially their breastplates and shields (see Alma 44:9). Within a few years of this defeat, the Lamanites had copied Nephite technology and equipped themselves with similar armor (see Alma 49:6). Thereafter all sides in warfare seem to have had essentially the same defensive equipment (see Helaman 1:14; 3 Nephi 3:26; 4:7).

Shields, Arm-Shields, and Bucklers

Shields are the second most commonly mentioned form of armor in the Book of Mormon: ¹⁵ Obtaining any precise information about the nature of shields from the text is impossible, although a few characteristics seem to be implied. The text mentions "all manner of shields of every kind" (Helaman 1:14), implying that the Book of Mormon peoples used a wide variety of shields. Indeed, the text mentions several types.

"Shields to defend [the] head" (Alma 43:19) may refer to head-plates or some other type of special defense, but more likely they refer to the fact that an ordinary shield can be raised over the head for protection. The Book of Mormon mentions an interesting form of defense called the arm-shield (see Alma 43:19, 38). Finally, there is one passing reference to a buckler (see 3 Nephi 3:26), which was used in conjunction with the armor of the Gadianton robbers. Technically, a buckler is a small shield designed specifically for defense against the sword, but in general it can refer to any type of small shield that is strapped to the forearm. ¹⁶ There are no specific details about either of these two types of shields in the text, but some possible examples from Mesoamerica will be discussed later.

Head-Plates

The only technical term used in the Book of Mormon to describe armor for the head is head-plates. ¹⁷ How should we distinguish between an ordinary helmet and the Nephite head-plate? First, a helmet is generally composed of a single piece of material that protects most if not all of the head. Nephite head-plates should probably be thought of as either a single plate or a combination of several plates somehow mounted or tied together. The main technical distinction is that head-plates probably do not provide all-around protection for the wearer's head. Furthermore, rather than resting on the skull like a normal helmet, Nephite head-plates are described as being "fastened on" the head (Alma 46:13). Head-plates were also capable of being broken in two by forceful blows from enemy weapons (see Alma 43:44).

Nephite System of Armor

How were all of these pieces of armor combined into a unified system of personal defense? There are several descriptions of what could be called the fully armored Nephite warrior. Most passages mention troops armed with a combination of special clothing, shields, breastplates, and head-plates (see Alma 43:19, 38, 44; 44:9; 49:6, 24; Helaman 1:14; Ether 15:15). The two most complete descriptions are found in Alma. In Alma 43:19, "Moroni had prepared his people with breastplates and with arm-shields, yea, and also shields to defend their heads, and also they were dressed with thick clothing." On another occasion, Moroni "fastened on his head-plate, and his breastplate, and his shields, and girded on his armor about his loins" (Alma 46:13). Both of these passages mention four types of armor: a basic body armor of thick cloth, a breastplate, a head-plate, and shields. As will be described later, these are precisely the same four parts that appear in Maya armor.

As I interpret this evidence, the base layer of protection was a garment composed of thick fabric or skins (see Alma 43:19; 49:6). This armor covered only the main torso or, as the Book of Mormon describes it, the "more vital parts of the body" (Alma 43:38). The text also frequently refers to girding armor or skins about the loins (see Alma 43:20; 46:13, 21; 3 Nephi 4:7), which I interpret to mean wrapping some type of fabric or skin about the waist or torso. The legs were clearly not completely covered by armor, as they were susceptible to injury when the upper body was not. According to Alma 49:24, "there were about fifty [Nephites] who were wounded, … but they were shielded by their shields, and their breastplates, and their head-plates, insomuch that their wounds were upon their legs, many of which were very severe."

Over this base layer of thick clothing or skins, the warrior attached several types of "plates" to protect specific areas: the breastplate, head-plate, and perhaps arm-shields. Finally, various types of shields were used, including at least the arm-shields and bucklers. How does this system of Nephite armor compare with the armor used in Pre-Classic Mesoamerica?

Armor of Mesoamerica

Since we lack detailed narrative texts from Pre-Classic Mesoamerica, we must rely primarily on artistic representations, which become numerous only in the Classic period, and on written sources from the period of the Spanish conquests and colonization, which occurred over a thousand years after the end of the Book of Mormon. Nonetheless, there is good evidence that many elements of the basic patterns of Maya, Toltec, and Aztec kingship and warfare remained unchanged from late Book of Mormon times until the end of the Classic period. For example, the Leiden Plaque, from Tikal in A.D. 320, shows many of the basic iconographic features of Maya kingship and armor seen in later Classic Maya art (see fig. 3). ¹⁸

Cautiously examining Classic Maya art of a few centuries after the Book of Mormon can thus be useful in order to obtain some ideas about armor several centuries earlier. Also bear in mind that most Maya art depicts royalty and that the clothing, armor, and headdresses of the average Maya would have been much simpler. Finally, despite the basic similarities, it is important to emphasize that the Nephites were not the Maya, and, although the basic pattern of armor may have been similar, there were undoubtedly numerous important differences. With these caveats in mind, I will examine some of the Mesoamerican evidence for each of the four classes of Nephite armor mentioned above.

Materials Used in Making Armor

Just as in the Book of Mormon, the most common material used for armor among the Maya and Aztecs was thick fabric or animal skins. The most basic form of armor was a thick sleeveless shirt made of cotton or other woven

material.²⁰ Schele and Miller describe this as a "shawl-like wrap of cotton armor over a *xicolli*, or jerkin, with a woven mat design."²¹ De Landa describes the Maya's "protective jackets of cotton (known as *ichca-huipilli* among the Aztecs), quilted in double thicknesses, which were very strong."²² There are numerous examples of this thick fabric jacket in Maya art (see fig. 4).²³ Animal skins would frequently be used in place of, or in addition to, the thick fabric jacket, a phenomenon that is again well represented in Maya art and other Mesoamerican art. De Landa wrote, "[The Maya wore] skins of tigers and lions, when they possessed them."²⁴ Some Aztecs also wore leather armor over their quilted cotton *ichcahuipilli*.²⁵

Breastplates

One of the most significant elements of an elite Maya's dress was the breastplate or pectoral. It is difficult to examine any Maya sculpture or painting without finding examples of these breastplates (see figs. 4-5).²⁶ These breastplates were generally made of wood, bone, shells, jade, and other stones, as well as various pieces of metal.²⁷ They were frequently elaborately carved with decorations of gods, hieroglyphs, animals, and human skulls. Most depictions of Maya warriors show them wearing such breastplates. Probably the breastplates of the Nephites and Lamanites were basically similar to those found in the Maya artifacts.

Head-Plates

Headgear among the Maya was used to demonstrate status and could therefore be extremely elaborate. When examining Maya headgear as depicted in art, one ought to bear in mind that nearly all figures in Maya art represent royalty and the elites. The ordinary defensive armor for heads of commoners would have been much simpler. Nonetheless, we can clearly see the basic pattern. At the simplest level, "both men and women used headbands to hold their long hair away from their faces. Made of leather or cloth, these bands were often mounted with ornate carved jade plaques," which could also be called plates (see fig. 5).

The next level of complexity in headgear was to create a wooden or cloth hat upon which were mounted small plates of jade, shell, or metal. "Ornate headdresses were constructed on wooden frames and tied under the chin with straps.... The headdresses of kins and warriors ... [were] made of jade or shell plaques mounted on a wooden or mat armature" (see figs. 3-4).²⁹ Finally, elite Maya would add numerous types of decoration, including carvings, glyphs, feathers, and cloth. Though Maya defensive and ritual headgear was complex, it centered around defensive "plates" of stone, wood, or metal that were either mounted on pieces of cloth tied to the head or mounted on frames of wood. Such headgear could certainly be accurately described as a system of defensive "head-plates" and could be contrasted with ancient Near Eastern headgear that I will describe later.

Shields, Arm-Shields, and Bucklers

There are numerous types of shields depicted in Maya art. One was a large, square fabric shield, probably used mainly as a defense against missiles. The second was a smaller round shield that was made of woven reeds or that was a wooden frame covered with animal skin and often profusely decorated with paint and feathers. De Landa describes them like this: "For defense they had shields made of split and woven reeds and covered with deer hide." The Aztecs also used the same basic types of shields. The smaller round shield may correspond to the Book of Mormon "buckler." The small round shield strapped to the forearm (see fig. 6) corresponds nicely with the "arm-shield" mentioned in the Book of Mormon. The Aztecs also had special types of armor for their arms

(*matemecatl*) and wrists (*matzopetztli*).³³ At any rate, whatever specific correlations may be possible, there were clearly several types of Maya shields that played an important part in personal defense.

The Maya System of Armor

The basic armament of the Maya is remarkably consistent with that described in the Book of Mormon. Both systems have a basic layer of fabric or animal skins. Plates of various types and materials are used to protect the chest and head, along with a large variety of shields. Indeed, Follett, in his detailed discussion of Maya armor, mentions only these same categories of armor: the thick garment, the mosaic helmet composed of numerous small plates, shields, and breastplates.³⁴

Our final task is to compare the armor of the Book of Mormon and Maya with that of the ancient Near East. If Joseph Smith used the Bible as a major source for plagiarism when inventing the Book of Mormon, as many critics claim, we would expect the major terms for armor in the King James Bible to appear also in the Book of Mormon. In fact, this is not the case. Rather, Book of Mormon armor terminology differs from that of the King James Bible in precisely the terms for which Mesoamerican armor has no counterpart.

Armor of the Ancient Near East as Described in the Bible

Unless someone in Lehi's expedition were a professional soldier (for which there is no evidence), the group would have had great difficulty transferring any but the most basic armor-making skills and technology from the ancient Near East to Mesoamerica. Once in the New World, the Nephites would be forced to adapt their armor industries to the local resources, technology level, and military system. Thus we should expect to find the Nephites developing or adopting a system of armor that would become more and more compatible with the technology level, resources, and system of warfare in Mesoamerica. As time progressed, Nephite armor should show more in common with Mesoamerican than with Near Eastern armor. This is precisely what we find.

It is not necessary here to go into a detailed description of armor in the Near East in the seventh century B.C., which has been well documented both textually and archaeologically.³⁵ Instead, I would like to focus on the semantic question of comparing the King James translations of technical armor terminology with the armor terminology of the Book of Mormon:

Table 1. Comparison of Biblical and Book of

Mormon Armor Terminology

KJV Bible	Book of Mormon
armor	armor
_	arm-shield
breastplate	breastplate
buckler	buckler
coat of mail	_
greave	_
_	head-plate
helmet/helm	_
_	thick garments/clothing

We find that three biblical armor terms are not used in the Book of Mormon: coat of mail, greave, and helmet/helm. Likewise, three Book of Mormon armor terms are not found in the Bible: arm-shield, head-plate, and thick

clothing. The Book of Mormon terms have been discussed above, but the biblical terms require some additional attention.

The KJV coat of mail is a mistranslation of the Hebrew *siryôn*, which should properly be rendered as coat of scales: a leather jacket on which are sewn numerous small plates of metal. Such armor was in widespread use in the Near East in the seventh century B.C. but was unknown in ancient Mesoamerica. Coat of mail is the King James Version term used to describe the armor of Goliath in what is undoubtedly the best-known combat story of the Bible (see 1 Samuel 17:5). As such, the term would have been quite familiar to Joseph Smith, yet it never appears in the Book of Mormon.

The greave (Heb. *mitzhah*), translated only once as *greave* in the KJV Old Testament (see 1 Samuel 17:6), was a special type of leg armor used to defend the shins of the lower legs. Although the Maya did wear a type of anklet that could be considered a greave, most Maya artwork clearly shows the legs as essentially unarmored. The lack of leg armor among the Maya accords with the Book of Mormon description but is, contrary to the practice in the ancient Near East as described in the Bible.

Helmets (Heb. *qoba^c*) are armor for the head and were widespread in the ancient Near East, dating at least from the early third millennium B.C. Maya head armor could, of course, be called a helmet, as is done by most archaeologists. On the other hand, the structural differences between a Near Eastern helmet, which was a single piece of metal formed to rest on the head, and the Maya headgear, which consisted of many small plates mounted on cloth or wood, should be enough to justify the difference in terminology.

Thus one could argue that the armor terminology of the Book of Mormon accurately reflects many of the technical differences between armor in the ancient Near East and that in Mesoamerica. The Book of Mormon uses biblical terms when the armor from the ancient Near East and Mesoamerica are similar, but gives different terms when the armor differs and does not use biblical terms for types of Near Eastern armor that are not found in Mesoamerica.

The study of armor in the Book of Mormon points to the following conclusions. First, the Book of Mormon text presents an internally consistent description of armor that is also consistent with the general patterns of the use of armor in Pre-Modern times. Second, the description of armor in the Book of Mormon closely matches the patterns of armor used among Pre-Classic and Classic Mesoamericans. Finally, the armor terminology in the Book of Mormon differs from that of the KJV Bible in precisely those features where Mesoamerican armor differs most from ancient Near Eastern armor.

Appendix:

Critical Index to References

1. Book of Mormon Statements about Armor

Mosiah 8:10. [Mosiah's expedition into Zarahemla has] brought breastplates, which are large, and they are of brass and of copper, and are perfectly sound.

Mosiah 21:7. [The Nephites] gathered themselves together again, and put on their armor.

Alma 3:5. [The Lamanites] were naked, save it were skin which was girded about their loins, and also their armor, which was girded about them.

Alma 43:19. Moroni had prepared his people with breastplates and with arm-shields, yea, and also shields to defend their heads, and also they were dressed with thick clothing — [20.] Now the army of Zerahemnah was not prepared with any such thing; ... they were naked, save it were a skin which was girded about their loins; yea, all were naked, save it were the Zoramites and the Amalekites; [21.] but they were not armed with breastplates, nor shields — therefore, they were exceedingly afraid of the armies of the Nephites because of their armor.... [37.] [The Lamanites'] nakedness was exposed to the heavy blows of the Nephites.... [38.] There was now and then a man fell among the Nephites, by their swords and the loss of blood, ... the more vital parts of the body being shielded from the strokes of the Lamanites, by their breastplates, and their armshields, and their head-plates.... [44.] [The Lamanites] did smite in two many of their [the Nephite] head-plates, and they did pierce many of their breastplates, and they did smite off many of their arms.

Alma 44:9. [Zerahemnah said,] it is your breastplates and your shields that have preserved you.

Alma 46:13. [Moroni] fastened on his head-plate, and his breastplate, and his shields, and girded on his armor about his loins.... [21.] [The Nephites] came running together with their armor girded about their loins.

Alma 49:6. [The Lamanites] prepared themselves with shields, and with breastplates; and they had also prepared themselves with garments of skins, yea, very thick garments to cover their nakedness.... [24.] There were about fifty [Nephites] who were wounded, ... but they were shielded by their shields, and their breastplates, and their head-plates, insomuch that their wounds were upon their legs, many of which were very severe.

Helaman 1:14. [The Lamanites were armed] with head-plates, and with breastplates, and with all manner of shields of every kind.

3 Nephi 3:26. [The Gadiantons of Gidgiddoni were] strong with armor, and with shields, and with bucklers, after the manner of his instruction.

3 Nephi 4:7. They were girded about after the manner of robbers; and they had a lamb-skin about their loins, and they were dyed in blood, and their heads were shorn, and they had headplates upon them; and great and terrible was the appearance of the armies of Giddianhi, because of their armor, and because of their being dyed in blood.

Ether 15:15. [At their final battle, the Jaredites were] armed with weapons of war, having shields, and breastplates, and head-plates, and being clothed after the manner of war.... [24.] They contended in their might with their swords and with their shields, all that day.

2. References by Type of Armor

Shields. Alma 43:19, 21; 44:9; 46:13; 49:6, 24; Helaman 1:14; 3 Nephi 3:26; Ether 15:15, 24

Breastplates. Mosiah 8:10; Alma 43:19, 21, 38, 44; 44:9; 46:13; 49:6, 24; Helaman 1:14; Ether 15:15

Armor. 1 Nephi 4:19; 2 Nephi 1:23; Mosiah 21:7; Alma 3:5; 43:21; 46:13, 21; 3 Nephi 3:26; 4:7

Head-Plates. Alma 43:38, 44; 46:13; 49:24; Helaman 1:14; 3 Nephi 4:7; Ether 15:15

Arm-Shields. Alma 43:19, 38

Skins. Alma 49:6; 3 Nephi 4:7

Thick Clothing. Alma 43:19; 49:6

Bucklers. 3 Nephi 3:26

3. References to Armor according to Major Cultural Groups

Nephites. Mosiah 21:7; Alma 43:19, 38; 44:9; 46:13, 21; 49:24

Lamanites. Alma 3:5; 43:20, 21, 37, 44; 49:6; Helaman 1:14

Gadianton Robbers. 3 Nephi 3:26; 4:7

Jaredites. Mosiah 8:10; Ether 15:15, 24

Notes

- 1. One must take care to ignore the appallingly inaccurate renditions of arms and armor in the Arnold Friberg paintings found in many editions of the Book of Mormon (see paintings #3, facing p. 158; #5, facing p. 396; and # 8, facing p. 483).
- 2. For studies of arms and armor in various ancient and medieval civilizations, see Robert Elgood, *Islamic Arms and Armour* (London: Scholar Press, 1979); A. V. B. Norman and Don Pottinger, *English Weapons and Warfare*: 449-1660 (Englewood Cliffs, New Jersey: Prentice-Hall, 1979, reprint of 1966 ed.); H. Russell Robinson, *Oriental Armour*, Arms and Armour Series (London: Jenkins, 1967); H. Russell Robinson, *Japanese Arms and Armor* (New York: Crown Publishers, 1969); Anthony M. Snodgrass, *Arms and Armour of the Greeks* (Ithaca, New York: Cornell University Press, 1967); JwingMing Yang, *Introduction to Ancient Chinese Weapons* (Burbank, California: Unique Publications, 1985).
- 3. Leonid Tarassuk and Claude Blair, eds., *The Complete Encyclopedia of Arms and Weapons* (New York: Bonanza Books, 1986), 22.
- 4. Compare ibid., 254-60 (helmet); 148-51 (cuirass); 102-4 (breastplate).
- 5. Compare ibid., 341-42 (mail); 416 (scale).
- 6. Norman and Pottinger, English Weapons and Warfare, 45, 6566, 121-22.
- 7. On the dragon motif in East Asia, see Edward H. Schafer, *The Divine Woman: Dragon Ladies and Rain Maidens in T'ang Literature* (San Francisco: North Point Press, 1980, reprint of 1973 ed.), 15-37.
- 8. Of the nine references 1 Nephi 4:19 (Laban's armor in Israel); 2 Nephi 1:23 (metaphorical use); Mosiah 21:7; Alma 3:5; 43:21; 46:13; 46:21; 3 Nephi 3:26; 4:7 two are clearly generic references to specific types of armor mentioned in previous phrases (see Alma 43:21; 3 Nephi 4:7).

- 9. Skins are mentioned in Alma 3:5; 43:20; 49:6; and 3 Nephi 4:7. It is sometimes unclear if the skins were just the normal clothing or if they were considered some form of protection. Quite probably they served both functions the normal clothing was also the standard armor. Note that Gadianton robbers are described as having "a lamb-skin about their loins, and they were dyed in blood" (3 Nephi 4:7), which may be related to the blood sacrifices and the staining of an animal skin in blood mentioned in the *Popol Vuh (Popul Vuh: The Sacred Book of the Ancient Quiché Maya*, tr. Delia Goetz and Sylvanus G. Morley [Norman, Oklahoma: University of Oklahoma Press, 1950], 194).
- 10. On the question of metal in pre-Columbian America, see John L. Sorenson, *An Ancient American Setting for the Book of Mormon* (Salt Lake City: Deseret Book and F.A.R.M.S., 1985), 278-88, and the references in his notes.
- 11. For an illustration of an Olmec metal mediallion hung on the chest, see Michael D. Coe et al., *The Olmec and Their Neighbors* (Washington, D.C.: Dumbarton Oaks, 1981), 141, fig. 25.
- 12. Ross Hassig, *Aztec Warfare: Imperial Expansion and Political Control* (Norman, Oklahoma: University of Oklahoma Press, 1988), 90.
- 13. Cited in ibid., 15. Similar descriptions of the occasional use of metal as armor among the Aztecs can be found in ibid., 123.
- 14. Mentioned eleven times: Mosiah 8:10 (describing Jaredite armor); Alma 43:19, 21, 38, 44; 44:9; 46:13; 49:6, 24; Helaman 1:14; Ether 15:15.
- 15. Mentioned ten times: Alma 43:19, 21; 44:9; 46:13; 49:6, 24; Helaman 1:14; 3 Nephi 3:26; Ether 15:15, 24.
- 16. Tarassuk and Blair, Complete Encyclopedia of Arms and Weapons, 105-6.
- 17. Mentioned seven times: Alma 43:38, 44; 46:13; 49:24; Helaman 1:14; 3 Nephi 4:7; Ether 15:15.
- 18. Linda Schele and Mary Ellen Miller, *The Blood of Kings: Dynasty and Ritual in Maya Art* (New York: George Braziller, 1986), 109-11, 118 n. 8, 120-21, 129, 319-20.
- 19. Prescott H. F. Follett, "War and Weapons of the Maya," *Middle American Papers*, *Middle American Research Series*, Publication no. 4 (New Orleans: Tulane University of Louisiana, 1932), 395-97.
- 20. Ibid., 394-96. *The Annals of the Cakchiquels*, tr. Adrian Recinos and Delia Goetz (Norman, Oklahoma: University of Oklahoma Press, 1953), 52 n. 41, has an important discussion of these jackets. Compare also ibid., 57, 108. Hassig, *Aztec Warfare*, 88, gives an excellent discussion with references to Aztec and Spanish sources.
- 21. Schele and Miller, The Blood of Kings, 211.
- 22. Diego de Landa, Yucatan before and after the Conquest, tr. William Gates (New York: Dover, 1978; reprint of 1937 ed.), 50. De Landa's manuscript was written in 1566.
- 23. For Aztec examples, see Hassig, Aztec Warfare, figs. 31-33.
- 24. De Landa, Yucatan before and after the Conquest, 50.

- 25. Hassig, Aztec Warfare, 88.
- 26. Schele and Miller, *The Blood of Kings*, 70, and index. Follett, "War and Weapons of the Maya," 397, fig. 43, provides an excellent example of a Maya warrior with a large breastplate. Follett describes this type of armor as a "breast-plate," 395 and 401, and also as a "front-shield," 397. Breastplates are mentioned in *The Annals of the Cakchiquels*, 62.
- 27. Schele and Miller, The Blood of Kings, 74 n. 6, report several excavations of pectorals with metal.
- 28. Ibid., 68.
- 29. Ibid., 68-69. Follett, "War and Weapons of the Maya," 397, discusses metal mounted on wooden helmets. Headgear made at least partially of metal is described in *The Annals of the Cakchiquels*, 102, 108; and *Popul Vuh*, 201. For Aztec headgear, see Hassig, *Aztec Warfare*, 123.
- 30. De Landa, Yucatan before and after the Conquest, 50; see Follett, "War and Weapons of the Maya," 399-401.
- 31. Hassig, Aztec Warfare, 85-88.
- 32. Recinos and Goetz, in their translation of *The Annals of the Cakchiquels*, use the term "buckler" to describe Maya military equipment, 50, 53.
- 33. Hassig, Aztec Warfare, 90.
- 34. Follett, "War and Weapons of the Maya," 394-95 (thick garment); 397-98 (mosaic helmet); 399-400 (shields); 395, 401 (breastplates).
- 35. For an excellent general overview, see the profusely illustrated work Yigel Yadin, *The Art of Warfare in Biblical Lands*, 2 vols. (paginated sequentially) (New York: McGraw Hill, 1963), with full bibliography up to the time of publication. For detailed word studies on biblical terminology for armor, see J. W. Wevers, "Weapons and Implements of War," in George A. Buttrick, ed., *The Interpreter's Dictionary of the Bible*, 4 vols. plus supplement (Nashville, Tennessee: Abingdon, 1962), 4:820-825, and the references mentioned therein.
- 36. Hassig, *Aztec Warfare*, 88-90. On the other hand, the Aztecs, over a thousand years after the Book of Mormon, did have a type of greave and leg defense.