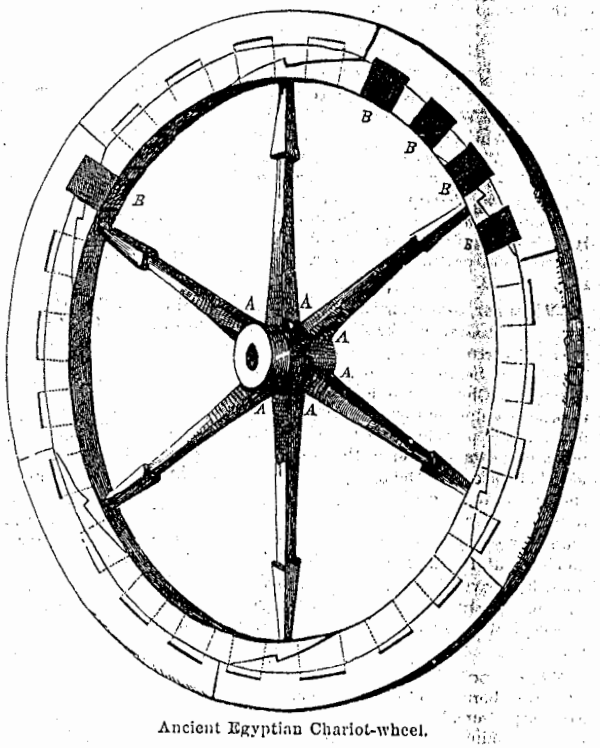
which it has been the object." The common *Triticum vulgare* will sometimes produce one hundred grains in the ear. Wheat is reaped towards the end of April, in May, and in June, according to the differences of soil and position. It was sown either broadcast, and then ploughed in or trampled in by cattle (Isa. xxxii, 20), or in rows, if we rightly understand Isa. xxviii, 25, which seems to imply that the seeds were *planted* apart in order to insure larger and fuller ears. The wheat was put into the ground in the winter, and some time after the barley. In the Egyptian plague of hail, consequently, the barley suffered, but the wheat had not appeared, and so escaped injury. Wheat was ground into flour. The finest qualities were expressed by the term "fat of kidneys of wheat" (חֵלֶב כִּלְיוֹת חִטָּה, Deut. xxxii, 14). Unripe ears are sometimes cut off from the stalks, roasted in an oven, mashed and boiled, and eaten by the modern Egyptians (Sonnini, *Travels*). Rosenmüller (*Botany of the Bible*, p. 80), with good reason, conjectures that this dish, which the Arabs call *ferik*, is the same as the *gères carmél* (גֶּרֶשׂ כַּרְמֶל) of Lev. ii, 14 and 2 Kings iv, 42. The Heb. word *kali* (קָלִי, Lev. ii, 14) denotes, it is probable, *roasted* ears of corn, still used as food in the East. An "ear of corn" was called *shibbôleth* (שִׁבֹּלֶת), the word which betrayed the Ephraimites (Judg. xii, 1, 6), who were unable to give the sound of *sh*. The curious expression in Prov. xxvii, 22, "Though thou shouldst bray a fool in a mortar among wheat with a pestle, yet will not his foolishness depart from him," appears to point to the custom of mixing the grains of inferior cereals with wheat; the meaning will then be, "Let a fool be ever so much in the company of wise men, yet he will continue a fool." Maurer (*Comment.* loc. cit.) simply explains the passage thus: "Quomodocunque tractaveris stultum non patietur se emendari." See CEREALS.

Wheat was known to the Israelites in Egypt (Exod. ix, 32), and on returning to Canaan they no doubt found it still cultivated as in the days of Reuben (Gen. xxx, 14). Most probably they were the same sorts which were used in both countries; but there were only a few districts of Palestine, such as the plain of Jezreel, which could compete with that magnificent "carse," the delta of Egypt, the finest corn country of the ancient world. At present the wheat crops of Palestine "are very poor and light, and would disgust an English farmer. One may ride and walk through the standing corn without the slightest objection made or harm done. No wonder it is thin, when white crops are raised from the same soil year after year, and no sort of manure put into the ground" (Tristram, *Travels*, p. 591). See AGRICULTURE.

Wheaton, NATHANIEL SHELDON, D.D., a clergyman of the Protestant Episcopal Church, was born at Washington, Conn., Aug. 20, 1792. His preparatory education was acquired at the Episcopal Academy of Cheshire, Conn.; he graduated at Yale College in 1814; was ordained deacon and priest in 1817; was pastor in Anne Arundel, Prince George, and Montgomery counties, Md.; in 1818 became rector of Christ Church, Hartford, Conn., remaining twelve years; in 1831 became president of Trinity (then Washington) College, which office he filled until 1837; in that year became rector of Christ Church, New Orleans, continuing in that position for seven years; in 1844 visited Europe, and on his return published his travels in two volumes. He was a scholar of varied learning. His benefactions to various scientific, philanthropic, and religious objects were large, and his bequests to Trinity College amounted to about twenty thousand dollars. He died at Marbledale, Conn., March 18, 1862. See *Amer. Quar. Church Review*, 1862, p. 734.

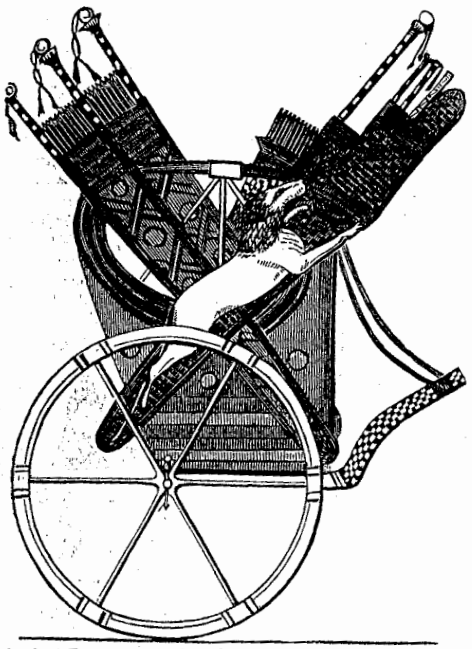
Wheel (usually and properly [of a carriage] אוֹפָן, *ophán*, which is invariably so rendered; sometimes [of any circular object] גַּלְגַּל, *galgál*, Psa. lxxxiii, 13; Eccles. xii, 6; Isa. xvii, 13; Jer. xlvii, 3; Ezek. x, 2, 6, 13; xxiii, 24; xxvi, 10; "heaven," Psa. lxxvii, 18; Dan. vii, 9; "rolling thing," Isa. xvii, 13; or גַּלְגַּל, *gilgál*, Isa. xxviii, 28; occasionally פַּעַם, *páam*, Judg. v, 28, a *step*, as often elsewhere; אַבְנַיִם, *obnáyim*, Jer. xviii, 3, of a potter's wheel). We find that the wheels under the brazen laver in Solomon's Temple were cast; they are thus described by the sacred historian: "And the work of the wheels was like the work of a chariot-wheel: their axletrees, and their naves, and their felloes, and their spokes were all molten" (1 Kings vii, 33). This is illustrated by the Egyptian chariots. A wheel has been found by Dr. Abbott of a curious construction, having a wooden tire to the felloe, and an inner circle, probably of metal, which passed through and connected its spokes a short distance from the nave (A, A). The diameter of the wheel was about three feet one inch. The felloe was in six pieces, the end of one overlapping the other. The tire was fastened to it by bands of raw hide passing through long, narrow holes (B, B) made to receive them (Wilkinson, *Anc. Egypt.* i, 382). Among the ancient Assyrians the wheels originally had six spokes, and the felloes consisted of four pieces. They appear to have been thicker and more solid than those of the Egyptians (Layard, *Nineveh*, ii, 270). Later the wheel had eight and not six spokes, and was apparently strengthened by four pieces of metal which bound the felloes (*ibid.* p. 271). See CHARIOT.



Ancient Egyptian Chariot-wheel.

Webster Felloe from NWUN Felly = rim of a spoked wheel TOTUM segment of rim (clove trail)

straightened sides, resting posteriorly on the axle-tree of a pair of wheels, and supporting a rail of wood or ivory attached to the frame by leathern thongs and one wooden upright in front. The floor of the car was made of rope net-work, intended to give a more springy footing to the occupants. The car was mounted from the back, which was open, and the sides were strengthened and ornamented with leather and metal binding.



Ancient Egyptian Chariot of War, with Bow-cases and complete Furniture, except the Yoke.

Attached to the off or right-hand side, and crossing each other diagonally, were the bow-case, and inclining backwards, the quiver and spear-case. If two persons were in the chariot a second bow-case was added. The wheels, of which there were 2, had 6 spokes: those of peace chariots had sometimes 4, fastened to the axle by a linch-pin secured by a thong. There were no traces; but the horses, which were often of different colors, wore only a breast-band and girths, which were attached to the saddle, together with head furniture, consisting of cheek-pieces, throat-lash, head-stall, and straps across the forehead and nose. A bearing-rein was fastened to a ring or hook in front of the saddle, and the driving-reins passed through other rings on each side of both horses. From the central point of the saddle rose a short stem of metal, ending in a knob, whether for use or mere ornament is not certain. The driver stood on the off side, and in discharging his arrow hung his whip from the wrist. In some instances the king is represented alone in his chariot, with the reins fastened round his body, thus using his weapons with his hands at liberty. Most commonly two persons, and sometimes three, rode in the chariot, of whom the third was employed to carry the state umbrella (2 Kings ix, 20, 24; 1 Kings xxii, 34; Acts viii, 38). A second chariot usually accompanied the king to battle, to be used in case of necessity (2 Chron. xxxv, 34).

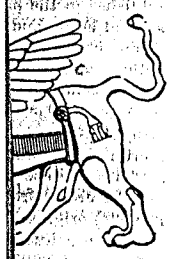
On peaceable occasions the Egyptian gentleman sometimes drove alone in his chariot, attended by servants on foot. The horses wore housings to protect them from heat and insects. For royal personages and women of rank, an umbrella was carried by a bearer or fixed upright in the chariot. Sometimes mules were driven instead of horses, and in travelling sometimes oxen; but for travelling purposes the sides of the chariot appear to have been closed. One instance occurs of a 4-wheeled car, which (like the τετράκυκλος ἅμαξα of Herod. ii, 63) was used for religious purposes. See CART. The processes of manufacture of chariots and harness are fully illustrated by existing sculptures, in which also are represented the chariots used by neighboring nations (Wilkinson, *Anc. Egypt.* i, 368, 386; ii, 75, 76, 2d ed.).

Ancient Egyptian Chariot-makers.

Fig. 1, Sawing out the Axle; 2, Preparing the bent pieces of Wood, *a*, *b*; 3, 4, Shaping the Pole, *d*; *c*, *e*, Wheels.

The earliest Egyptian chariot noticed in Scripture (Gen. xli, 43) was doubtless a state-chariot; but, among the Egyptians, it does not appear to have been different from the war-chariot, the splendid military appointments of which rendered it fit for purposes of royal pomp. Hence, although the same word (מֶרְכָּבָה, *merkabah*) is again used for chariots of state in Gen. xlvi, 29; 1 Sam. viii, 11; 2 Sam. xv, 1, it undoubtedly denotes a war-chariot in Exod. xv, 4; Joel ii, 5. In Isa. ii, 7, the same word appears to comprehend chariots of every kind which were found in cities. In fact, chariots anciently in the East were used almost entirely for purposes of state or of war, being very rarely employed by private persons. We also observe that where private carriages were known, as in Egypt, they were of the same shape as those used in war, only having less complete military accoutrements, although retaining the case for arrows. One of the most interesting of the Egyptian paintings represents a person of quality arriving late at an entertainment in his curricle, drawn (like all the Egyptian chariots) by two horses (one hidden by the other in profile). He is attended by a number of running footmen, one of whom hastens forward to knock at the door of the house, another advances to take the reins, a third bears a stool to assist his master in alighting, and most of them carry their sandals in their hands, that they may run with the more ease. This conveys a lively illustration of such passages as 1 Sam. viii, 11; 2 Sam. xv, 1. The principal distinction between these private chariots and those actually used in war was, as appears from the monuments, that in the former the party drove himself, whereas in war the chariot, as among the Greeks, often contained a second person to drive it, that the warrior might be at liberty to employ his weapons with the more effect. But this was not always the case; for in the Egyptian monuments we often see even royal personages alone in their chariots, warring furiously, with the reins lashed round their waist. So it appears that Jehu (who certainly rode in a war-chariot) drove himself, for his peculiar style of driving was recognised at a considerable distance (2 Kings ix, 20). The Egyptians used horses in the equipment of an armed force before Jacob and his sons had settled in Goshen; they had chariots of war, and mounted asses and mules, and

Ancient Egyptian Curricle.



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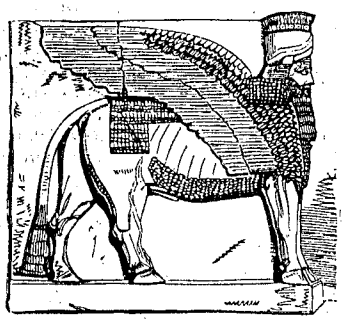

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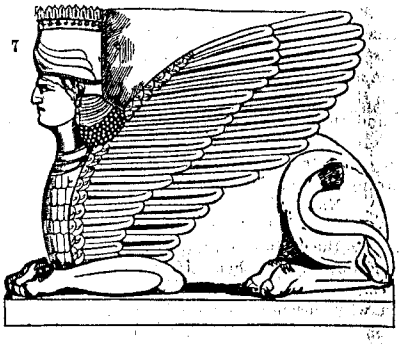

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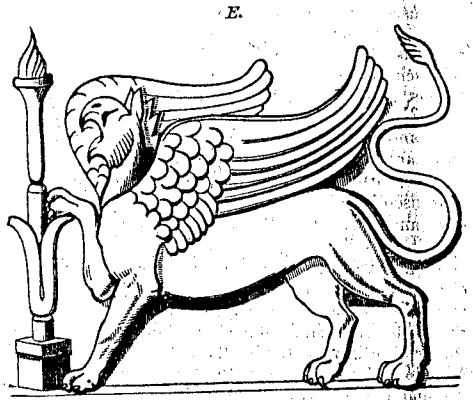

Ancient Winged Symbols.

A. Egyptian.—1, Angelic; 2, Eagle; 3, Asp; 4, Abstract="eternity;" 5, Sphinx; 6, Griffin.
B. Persian.—1, Cyrus; 2, Royal or Divine.
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D. Assyrian.—1, Royal, female; 2, Royal, male; 3, Griffin; 4, Horse; 5, Lion; 6, Bull; 7, Sphinx.
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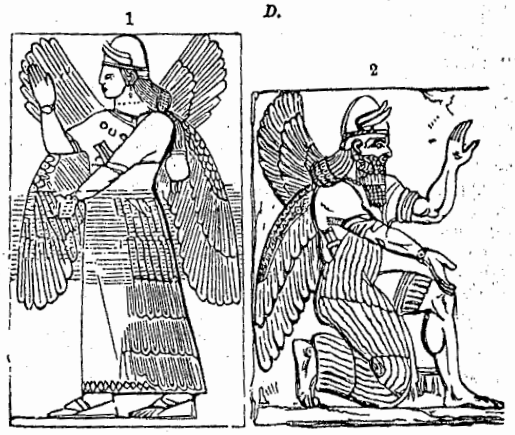
which, composed the symbolical figures. Each cherub had four distinct faces on one neck—that of a man in front, that of a lion on the right side, and of an ox on the left, while behind was the face of an eagle. Each had four wings, the two under ones covering the lower extremities, or rather the centre of the person (Heb. the feet), in token of decency and humility, while the upper ones, spread out on a level with the head and shoulders, were so joined together, to the edge of his neighbors', as to form a canopy; and in this manner they soared rather than flew, without any vibratory motion with their wings, through the air. Each had straight feet (Heb. "their feet [were] a straight foot," Ezek. i, 7), and the probability is that the legs were destitute of any flexible joint at the knee, and so joined together that its locomotions must have been performed in some other way than by the ordinary process of walking, or lifting one foot after another. Bähr (whose entire remarks on this subject are valuable and often profound) inclines to think that the precise form varied within certain limits; c. g. the cherubic figure might have one, two, or four faces, two or four feet, one or two pair of wings, and might have the bovine or leonine type as its basis, the imagery being modified to suit the prominently intended attribute, and the highest forms of creature-being expressing best the highest attributes of the Creator (*Symbolik*, i, 313 sq.). Thus, he thinks, the human form might indicate spirituality (p. 340). (Comp. Grotius on Exod. xxv, 18, and Heb. ix, 5.) Some useful hints as to the connection of cherubic with other mythological forms may be found in Creuzer (*Symbol.* i, 441, 540).

It has been sometimes disputed whether the colossal cherubim of olive wood, overlaid with gold, with outspread wings, touching in the centre of the oracle and reaching to either wall, placed by Solomon in the Holy of Holies, were substitutes for or additions to the original golden pair. The latter is probably the truth, for had the Mosaic cherubim been lost we should have been informed of the fact. All that we learn about these figures is that they each had *a body* ten cubits high (1 Kings v, 23), and stood on *their feet* (2 Chron. iii, 13), so that the monstrous conception of winged child-faces is an error which should long ago have been banished from Christian iconography (De Saulcy, *Hist. de l'Art Judaique*, p. 25). The expression "cherubims of *image work*," in 2 Chron, iii, 10 (מַעֲשֵׂה צַצְעִים, Sept. ἔργον ἐκ ξύλων, Vulg. *opere statuario*, Marg., of *movable work*), is very obscure, but would probably give us no farther insight into the subject (Dorjen, *De opere Zaazyim* in Ugolini *Thes.* viii, No. 6); but in 1 Chron. xxviii, 18, 19, we learn that David had given to Solomon a model for these figures, which are there called "the *chariot of* the cherubim" (Vulg. *quadriga* cherubim). We are not to suppose from this that any wheels supported the figures, but we must take "cherubim" in apposition to "chariots" (Bertheau, ad loc.). The same phrase is found in Ecclus. xlix, 8, and is in both cases an allusion to the poetical expression, "He rode upon a cherub, and did fly" (2 Sam. xxii, 11; Psa. xviii, 10), an image magnificently expanded in the subsequent vision of Ezekiel, which for that reason has received from the Rabbis the title of מרכבה, "the chariot." Although the mere word "cherub" is used in these passages, yet the simple human figure is so totally unadapted to perform the function of a chariot, that we are almost driven to the conclusion arrived at by De Saulcy on this ground alone, that the normal type of the cherub involved *the body of an ox*, as well

A.

C.

D.



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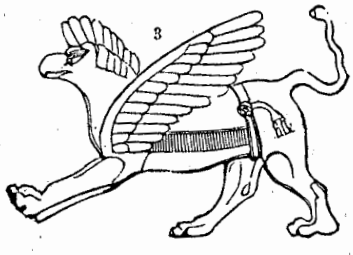

CHERUBIM

D (continued).

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B. Persian.—1, Cyrus; 2, Ro
C. Babylonian.—1, Male Sph
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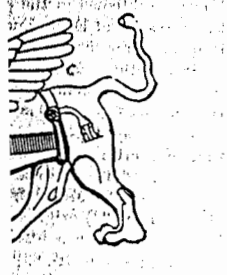


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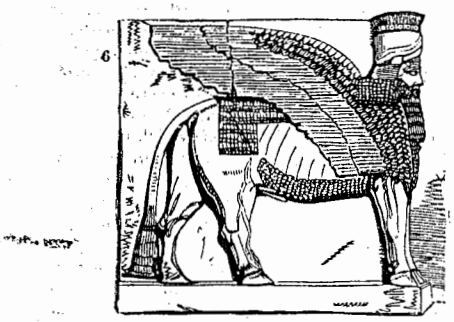

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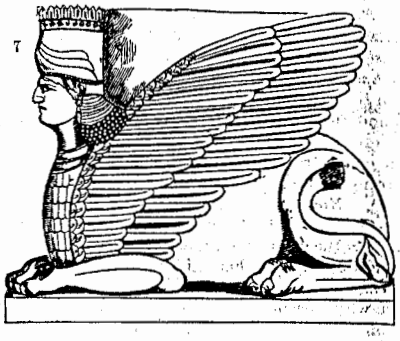

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