I

Beginnings

The creature began as a fox-size and somewhat rabbit-looking entrant into the world departed by dinosaurs less than ten million years before. This was in what we call the Americas, fifty million years gone. Little *Eohippus*, the "dawn horse," lived in moist and spongy primeval forests and went about on spread-out toes. His head, fossils show, was recognizably horselike.

From climatic changes, tropical foliage was replaced by grass, the eating of which required large and strong teeth, the walking or running upon a foot with few and small toes. Limbs were long to provide greater speed to escape pursuers' fang and claw. About twenty million years passed, and by fifty million years ago there was a trimmer body, a longer head, longer hind legs, and teeth of greater grinding ability, and *Eohippus* morphed into *Orohippus*, who became, some twenty-five million years ago, *Mesohippus*. He was all over North America, two feet high at the shoulder, the toes shrinking, the teeth powerful. There followed *Miohippus* and divided branches whose toes were gone in favor of a hoof and whose size reached that of the pony of today, some to be ancestor of the zebra and the donkey, but all of whom vanished from the lands where their common progenitor, *Eohippus*, had arisen.

There is no definitive explanation for their disappearance. There might have been a deadly epidemic, perhaps climatic change, perhaps hunting to extinction by humans, whose appearance in the area coincided with the annihilation of many large mammals, including

what we call the horse. He was gone from the Western Hemisphere, the Pleistocene era seeing his finish. When he returned, epochs later, he conquered the land of his ancestors, the inhabitants of which, the Aztecs, beheld in fearful astonishment what appeared to be a new species of being. It went about at great speed on four long legs joined to a monstrous body, topped by a specter glittering with metal and wielding Toledo steel to cut people down in fearsome number and manner. Second only to God, Hernando Cortes wrote his king, "we owe our successes to our horses."

But all that was in the unimaginable future when the ancestors of Cortes's horses, of all horses, migrated from what today we call Alaska to what we now call Siberia. Who knows why some went while others remained behind to perish. Those who left traveled over what was then land and is now water, the Bering Strait, arriving in their new home to play an inglorious role there in the prairie grasslands that reached from Mongolia to Hungary: for millennia, Stone Age Asians saw horses as useful only for their meat and hide. In time, the value of animal power was recognized, and people took to riding donkeys and onagers—wild asses—or having them carry loads. But the horse was no good for that. The anatomy was all wrong. Little weight could be loaded on between the withers and the rear, as carrying capacity had not yet developed. For a rider to sit far back, almost on the croup, as was done with other beasts of burden, was impossible; the animal was uncontrollable and the hindquarters collapsed.

The yoked bullock—the ox—placid, slow, strong, was useful for the transport of heavy goods, and even more so when ingenuity produced rollers that eventually became wheels. Again the horse fell short. The ox could be made to plod along drawing a wagon by being led, or prodded with a stick or flicked with a tree branch, but the horse was unable to do much for being jumpy or flighty and by physical makeup. It was the matter of the collar of the times. It fitted the ox of broad shoulders, but could not be effectively utilized by the horse of slim ones. We can only with great imagination put ourselves in the place of these people so remote from our times, and therefore it seems to us truly incredible that for hundreds of years no one realized that a harness gripping the neck squeezed the windpipe

of the horse. It effectively half strangled him. The harder he pulled, the less he achieved.

Archeology does not deal in exact dates and moments, and so it cannot be said precisely when someone, or some ones, came to the realization that the horse was so constructed that in order to pull with any great effect he must push, and that the way to get him to do that was to outfit him with a breast band or a padded collar encircling the whole neck. Then he could get his body up against such and so gain traction. Horses were put to pulling carts.

The herdsmen of times now very long gone knew the merits of selective breeding for their goats, sheep, and cows; in time they applied themselves to improving their horses. It is believed that the domestication of the horse began something like six thousand years ago, perhaps as many as ten thousand, in the East. Some feel the inaugural location was on the Central Russian steppe near where the Dnieper and the Don flow into the Black Sea in what is now Ukraine; others say it was in China or Kazakhstan. It is the teeth of disinterred horse skeletons of prehistoric times that tell the story. Their teeth were worn down by primitive bits. The horse had become man's servant, or perhaps his ally.

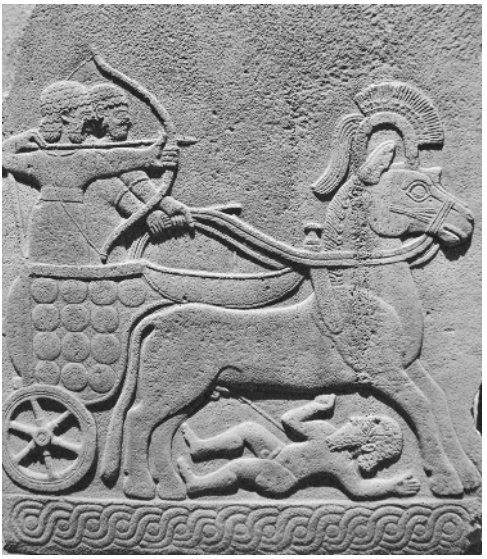
There followed what the military historian Sir John Keegan has called "one of the most extraordinary episodes in world history": the amazingly swift exploitation of the horse's drawing capacity in the creation and use of the war chariot.

It is of course no less lamentable than accurate to say that man has always made war. The methodology remained unchanged for thousands of years. Opponents used close-range weapons, the caveman's club, the Iron Age's crude slashing or stabbing device, or at-range missiles—the slung stone, the flung spear, the arrow shot from the bow. The horse-drawn war chariot added entirely new dimensions to armed disputes: mobility and maneuverability of a speed previously undreamed of, and for those facing it a terror hitherto unapproached. Within the space of three hundred years, warfare was revolutionized. Of a sudden there coursed about men battling on foot a vehicle moving at great speed. It carried a driver and an archer, the latter filling the air with arrows fired

from his platform. The perfected chariot weighed some seventy-five pounds and sat atop spoked wheels far lighter than the solid ones of transport wagons. When the archer exhausted his stock of arrows, he could be taken back to a resupply point at a speed better than twenty miles an hour. Sometimes a twirling sharp scythe extended from the chariot axle, to devastating effect upon the legs of enemy footmen.

Against this machine no infantry could stand. A line of charging chariots, most drawn by two horses, some by four, the rumble of wheels mixing with the pounding of hooves, the skies darkened with showers of arrows—for more than a thousand years, from around 1700 B.C., chariotry ruled the battlefield. Charioteers were warrior-aristocrats, the foot soldiers they slaughtered almost an incidental by-product of battle. As it is in the nature of war that no weapon remains uncopied for long, all the suzerainties along the eastern shores of the Mediterranean soon maintained fleets of chariots; and soon they competed in improving the product. But there was a limit to how much could be done. The addition of armor for men and vehicle meant a reduction in speed, as did adding another passenger carrying a shield to protect the driver and the archer, whose bow reached a level of development beyond which it could not advance. (The simple bow formed of a single sapling had given way to the composite one utilizing several layers of wood, bone, sinew, and leather to offer far greater hitting power to the arrow it sent on its way.)

There remained room only for the improvement of another chariot component—the horse. War and battle being endemic and constant, dynasties, and the fate of their nations and peoples, depended upon him. The most ancient document we have for his use and care comes from the master to the horses of the king of Mitanni, a vanished domain that existed in present-day Iraq and Syria. The trainer, Kikkuli, wrote his exacting and precise treatise in 1400 B.C., in Hittite, and it was translated into several other languages of the time. He prescribed a seven-month period of training before one of his charges could be put into service. Several types of grasses were named for feed to build up young animals; on the seventy-first day of training a harness was put on for a brief stint of



Armed conflict was terrifyingly revolutionized when horses were taught to draw chariots. *Hittite frieze, circa fourteenth century* B.C.

chariot work, after which, back at the stables, horses were watered and fed. Following the evening distribution of grain, they were again harnessed and galloped over "ten fields." After a time, training was extended to the hours of darkness when the blazing sun was down: "When midnight comes the charioteer harnesses them for a gallop exceeding seven fields." After this they were rubbed dry in the stables and fed two handfuls of hay, one of wheat, and four of barley. They ate hay all night. At dawn the gallop was repeated, and the feeding. If warm after work, they were given salt dissolved in a fire and added to a bucket of wholemeal barley.

The horses must gradually be worked up to gallops of ten, twenty, ninety fields, Kikkuli decreed, and sometimes for a period their feed was drastically curtailed, for they must be accustomed to restricted rations when on campaign. During training they were washed with warm water five times daily, with the routine sometimes replaced by four river baths followed by feed of a scoop of flour preceding the grain offering.

In time Mitanni vanished from history, smashed and then integrated into other states, with little left to tell of its existence and with the location of its buried-under-the-shifting-sands capital,

Washukanni, now unknown. But the words of the master to the king's horses lasted, to be taken to heart by the pharaohs of a succeeding dynasty, and it was a daring use of chariotry trained to Kikkuli's dictates that won for Thutmose II the first battle in history for which there is a detailed record. Some fifteen centuries before Christ's birth, the Egyptian monarch marched ten days through Gaza seeking a combination of enemies, Palestinian and Syrian, concentrated near modern-day Haifa, Israel. He had three possible routes and chose the most dangerous. It is an undying military truism that no move is more hazardous than to snake a force through a thin defile, a pass. Only a small number of men, or in this case chariots, can come through to debouch upon the spot where they will mass for combat, and their issuing forth in dribs and drabs presents an enemy the opportunity to pick them off at his leisure.

But the pharaoh chanced all on getting unexpected and undetected through the Aruna Pass, a mountain notch so slim as to allow but two chariots at a time to go forward side by side. Records say the pharaoh had one thousand. His was bedecked in silver and gold. The move was never anticipated by the enemy. Thutmose swooped down upon them, his chariot in the center of a great line, the assemblage so terrifying a surprise that the Palestinians and the Syrians instantly fled, allowing Egypt to dispatch of but a tiny number of them—eighty-three. The remainder took refuge in a nearby fortress, from which they shortly emerged for complete surrender. The battle—really an utter rout—took its name from the fortress town near where it was fought: Megiddo. "A place called in the Hebrew tongue," says the book of Revelations 16:16, "Ar-ma-ged'don." We shall, much later in this book, again visit the Aruna Pass and Megiddo to take note of, three thousand and more years on, what was if not the final battle of Biblical depiction, then the world's last great use of horses in war, a victorious cavalry general in a time of the internal combustion engine and airplane using Thutmose as a guide to what he should do and did.

Our culture bequeaths to us a concept of what it is to sit a horse, and of those who through history have done so. "There is the indefinable superiority of the man on horseback," wrote the last U.S.

Army chief of cavalry, Major General John Herr, and we know what he meant. The European plaza with bronzed hero-king atop rearing charger, the American square, roundabout, or boulevard adorned with mounted general—we've all seen it. Even Adolf Hitler, who loved machinery and hated horses to the extent that he was enraged when the Berlin crowds at a Third Reich march-past before the war reserved their most fervent applause not for the clanking tanks and half-tracks and tractor-towed artillery pieces but for the two leftover horsed regiments dating back to the Great King, Prussia's Frederick II—even he, Hitler, authorized and permitted the dissemination through postcard and poster a representation of himself in gleaming white armor holding a lance and seated on a charger.

So it is perhaps a matter of some surprise that there was a time, the time of chariots set upon fleeing foes, and before, and after, when to sit upon a horse was the last thing from a mark of distinction. "My lord should honor his position as a king, and not ride," recommends a letter written around 1789 B.C. and sent by a protocol chief to King Zimrilim of the city-state of Mari on the Euphrates River. Only barbarians from uncivilized tribes went about mounted on horses; people of advanced cultures did not. Militarily, the ridden horse was of secondary or even lesser importance, transporting a messenger to the real warriors, the charioteers, or used for a scouting trip seeking water sources. There were no saddles and no stirrups—they would not be seen for two thousand years. Ancient Fertile Crescent monument and temple pictorial and incised-stone representations show riders sitting on a pad placed far back over the horse's haunches, legs dangling. Sporadic attempts to use mounted riders in a more meaningful manner included two men riding side by side, one to hold the reins of both mounts, the other to fire arrows. It was a clumsy business, a duplicate of chariot warfare minus the chariot, and minus the relatively stable platform the vehicle offered as opposed to the jolting of a moving steed.

The great chariot battle of the epoch, of all epochs, took place some two hundred years after Thutmose went through the Aruna Pass, in about 1275 B.C., when Egypt's New Kingdom's Ramses II, with two thousand chariots, met the Hittites' king, Muwatalli, who had thirty-five hundred. It was at Kedesh along the Orontes River, in western

Syria. The Hittite vehicles were heavier than those of the Egyptians, and transported besides driver and archer a man carrying a shield for protection of the other two. The fighting swirled across a battlefield some eight by four miles. We can almost see the clouds of dust and hear the rumbling wheels and the sounds of wounded men and horses, the latter emitting when mortally stricken a scream very much like that of a woman in agony before falling with lips drawn back in ghastly parody of a grin. Some thirty-five thousand men on foot supported the chariots, swinging and thrusting bronze axes and swords.

The affair was considered something of a draw, although perhaps the Egyptians had a bit the better of it, and afterward the contestants agreed on what is seen as the world's first peace treaty, a signal novelty when battles were fought to merciless annihilation by one side or the other. ("The commander-in-chief of the king of Elam, together with his nobles, I cut their throats like sheep," a warrior-monarch of the day had his court historiographer record. "My prancing steeds, trained to harness, plunged into their welling blood as into a river; the wheels of my chariots were besplattered with blood and filth. As for the sheiks of the Chaldaeans, panic from my onslaught overwhelmed them like a demon. They passed scalding urine and voided their excrement in their chariots.") For miles along the lines of retreat, bodies turned rotten and then skeletal, the few of the defeated who survived taken for lifetime slavery, the irrigation systems of their lands destroyed, fruit trees cut down, granaries burned. The times knew no idealistic rationalization for the making of war, nor ideological cant; fighting was for new acquisitions: water sources, provinces with subjects for the king, and glorious depictions of his exploits on monuments and temples (Ramses II was portrayed as personally cutting down thousands from his chariot). For the underlings, a measure of acclaim, gold, jewels, spices, silks, exotic foods, slaves, land, position, was a reason to participate.

And to expand its area and destroy its foes in such manner and for such reasons there arose the first realm to use the horse in war in a way that we find familiar. (The story of the Trojan Horse holding concealed soldiers is of most doubtful historical accuracy; it is fanciful myth, really, as is Homer's allegation that the chariot was used solely to transport men and not as a firing platform. But then,

Homer wrote four hundred years after the siege of Troy—Hissarlik in modern Turkey—and was, after all, a poet, not a war correspondent.) That realm was Assyria, and its business was war. Its army was "an instrument of terror, using torture, massacre and mass deportation." Its King Sennacherib's description of his chariot-borne destruction of Elam and the Chaldaeans struck the right tone when telling of the 691 B.C. doings. The Assyrian Empire, eventually encompassing parts of what are today Arabia, Iran, Iraq, Turkey, Syria, and Israel, and reaching its peak around 1000 B.C., had the first army to possess the serious logistic arrangements of supply depot, transport force, and water-bridging equipment. It had battering rams and siege engines. Its professional soldiers were paid regularly and issued mass-produced and standardized weapons.

The Assyrians were the first peoples to realize that a horse could be ridden in organized battle, not simply used to draw a chariot. By the eighth century B.C., selective breeding had developed a horse smallish by modern standards, never reaching more than fourteen hands, but of sufficient carrying capacity to bear a man in a forward seat position, weight over the animal's shoulders. It was for the Assyrians to grasp that a group of mounted men would be able to operate in mountain terrain or over uneven ground impossible for chariots. Cavalry was born. The men were archers, for to spear an enemy while holding on to the weapon in a world that did not yet know of the saddle or stirrups meant a danger of being propelled backward over the horse's haunches, landing on the ground and effectively at footmen's mercy. (One could safely fling a spear, but then one was disarmed.) Striking with a sword raised the possibility of falling sideways off the horse when the target was hit. But as to reach into their quivers for an arrow, fit it into the bow, and send it on its way meant giving up the use of their hands for controlling the horse, the Assyrian archers had to perfect a degree of horsemanship unapproached by organized forces in succeeding eons. In their era, it is true, archers of tribal steppe peoples in the East did in individual cases equal Assyrian performance, but not in formed, disciplined, trained units—what we would call the troop, squadron, regiment. It is said that only the Plains Indians of the American West exactly duplicated the equestrian bow-and-arrow capabilities shown in

Assyrian bas-relief and clay tablet portrayal; but the Indians, brilliant as their riding was, did not, as we shall see much later, perform in military order under a hierarchy of what we would call officers.

The Assyrian bridle connected to a loose rope with a tassel that lay atop the horse's neck where it met the withers. A rider could use it in an emergency for turning or halting. But the primary riding aids were knees and legs pressing movement directions upon highly trained horses, each of whose value was listed as equal to that of thirty slaves or five hundred sheep. The savage and brutal state whose interests rider and mount served—the Assyrian empire has been compared to Nazi Germany—was able to project power hundreds of miles from base and move at speeds of advance not equaled until the arrival of the motor age.

But empires fall, particularly empires whose borders have been extended too far, whose ruling class contends too much for personal treasure and too little for the country, and whose subject peoples hate their overlords. A conglomeration of enemies pressed upon Assyria, and its great city of Nineveh was taken; and in 605 B.C. its last king was defeated and its power passed to Babylon, and then in time to Persia. The leadership of Persia was secured to who later was referred to as Darius the Great by: his horse. We have it from Herodotus, acclaimed through the ages as the Father of History. With five other men, Darius was in contention to be named king of Persia. It was 521 B.C The group agreed that they would ride in darkness to a particular place, there to await the dawn. "He whose horse neighed first after the sun was up should have the kingdom," Herodotus related.

This high gamble involving horses is perhaps to our manner of thinking a curious fashion of selecting a leader. We also cannot but be aware that not every horse race, of any type, is uniformly contested with complete purity. Darius went to his groom. "Oebares, if then you have any cleverness," Herodotus tells us the aspirant to the throne said, "contrive a plan whereby the prize may fall to us."

"Truly, master, if it depends on this whether thou shalt be king or no, set thy heart at ease and fear nothing: I have a charm which is sure not to fail."

"Hasten to get it ready."

That night Oebares took a mare in heat to the place where the six riders would convene to await the sunrise. He tethered her there and returned with his master's stallion to lead him round and round the mare, eventually letting them couple.

The next day, as the sky began to lighten, the six riders came to the appointed spot, where unknown to the others, Darius's horse had mounted the mare and where now he sprang forward and neighed. "Just at the same time there was a flash of lightning, followed by a thunder-clap. It seemed as if the heavens conspired with Darius, and hereby inaugurated the king; so the five other nobles leaped with one accord from their steeds, and bowed down before him and owned him for their king." This is the account that some of the Persians gave of the contrivance of Oebares; but there are others who relate the matter differently.

"They say"—this of Oebares—"that in the morning he stroked the mare with his hand, which he then hid in his trousers until the sun rose, when he suddenly drew his hand forth and put it in the nostrils of his master's horse, which immediately snorted and neighed."

There was never any equivocation about the manner in which Darius gained his throne, for after making advantageous marriages, Herodotus says four in number "according to the notions of the Persians," with two of his brides sisters, and "with his power established firmly throughout the kingdom, the first thing he did was to set up a carving in stone, which showed a man mounted upon a horse, with an inscription in these words following: 'Darius, son of Hystaspes, by aid of his good horse and his good groom Oebares, got himself the kingdom of the Persians.'" Proving an enterprising and dominant ruler, he was nevertheless, said Herodotus, regarded by some as a huckster. From his population he soon extracted a donation of 360 horses along with 500 talents of silver, a talent in roughest estimation about the value of one or two thousand dollars today. "Of this sum one hundred and forty talents went to pay the cavalry which guarded the country, while the remaining three hundred and sixty were received by Darius." We can infer from this the position that cavalry, as opposed to the more favored chariotry, occupied in his mind, for 140 was a pretty paltry amount when compared with other incomes and donations amounting to 9,540 talents in addition

to 100 boys and as many maidens, 500 eunuchs, and 1,000 talents' worth of frankincense, ebony logs, elephant tusks, corn, and fish.

The Persian Empire came to dominate the heartland of civilization and beyond, its forces deploying war elephants and ships in addition to infantry and cavalry and the dominant chariotry. It fell afoul of, and was destroyed by, one whose destined road was, as with Darius, pointed to by: a horse.