

FIG. 1.—EARLY TYPE OF CAR USED IN CHILI.

two side bearers, and these would be connected together by cross framings and diagonal braces. This would then form the car or cart, the simplest form of a wheel carriage. It would be soon discovered, however, that a cart thus constructed would run best in a straight line and that to turn it in a circle, unless the circle was a very large one, an immense deal of friction would be

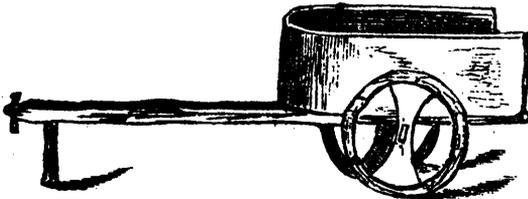


FIG. 2.—TYPE OF CAR USED BY THE EARLY PORTUGUESE.

caused. The reason of this is very simple. In the act of turning one wheel has a tendency to revolve faster than the other, because the outer track is longer than the inner one. To overcome this difficulty the cart maker would soon contrive that each wheel should revolve upon its own centre. Instead of fixing the cross-beam or axle in a square hole he would so arrange it as to allow it to play easily in a round one, of conical shape, that being the easiest form of adjustment.

So much for the theory of the development of wheeled vehicles from the primeval sledge. The resulting form, as we have traced it, would correspond in all respects with the earliest historical specimens of carts which have come down to us, two of which

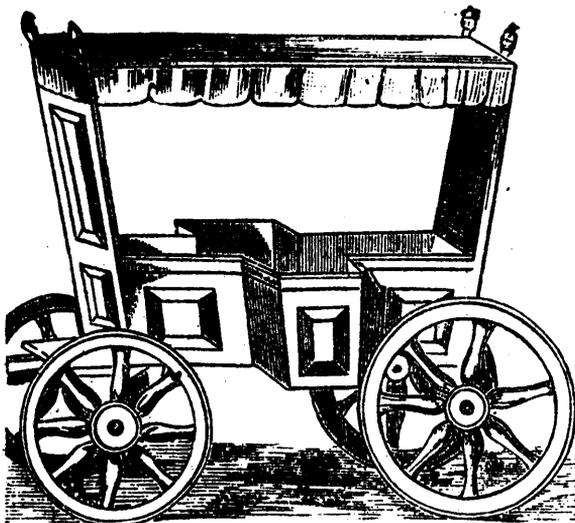


FIG. 3.—COACH OF QUEEN ELIZABETH, ABOUT THE YEAR 1564.

appear in Figs. 1 and 2. The cars used by the Greeks and Romans for the purpose of war and festivity, as well as in their agricultural operations, were of this general type, and differed between themselves only in the finish and amount of ornamentation about them. Figs. 5 and 6 of the accompanying illustrations present forms of the war cars or chariots of these two

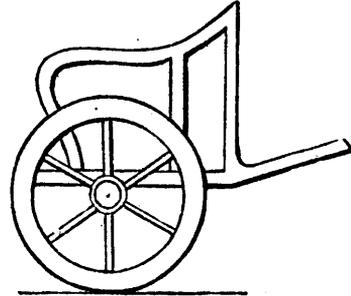


FIG. 4.—AN EGYPTIAN CAR.

nations. The agricultural carts of the same period as we have just indicated were of poorer quality and finish. They were more nearly of the kind shown in Figs. 1 and 2, which, although belonging to other nations are still representative types of their class. Fig. 4 represents an Egyptian car, which in all essential particulars corresponds to those of other nations shown beside it, and yet has enough of individual characteristics about it to render it easily distinguishable among a number.

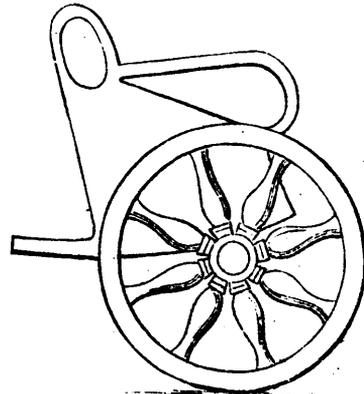


FIG. 5.—A GRECIAN CAR.

We have already referred to the State coach of Queen Elizabeth, a cut of which appears on the other side of this page. We have no doubt, many of our readers will examine with motives of interest and curiosity the "wagon" in which royalty was once content to ride. Our engraving is from an authentic source, and affords a fair idea of the remarkable historical vehicle. A detailed description of it is unnecessary even if it were possible. Although the rage for "old things" is now at its height, and this is a very old form with its historical correctness unquestioned we have no expectation of our engraving being used as a fashion plate, or of seeing modern copies of this coach on Broadway and Fifth Avenue. *From the Blacksmith and Wheelwright.*

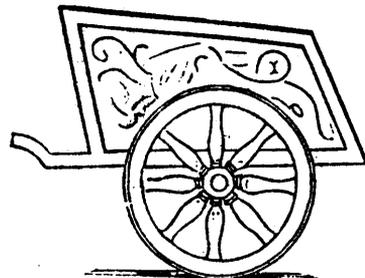


FIG. 6.—A ROMAN CAR.