THE RACK.

In the rack, the legs of the animal are used in lateral pairs, instead of, as in the trot, diagonal pairs. The same uncertainty with regard to precedence of the fore or hind foot-impacts prevails in this gait, as in the trot; in contradistinction to the latter, priority is usually given in the rack to a hind-foot, this being so immediately followed by its lateral fore that, practically, they may be said to swing simultaneously.

This being an awkward, and, to the rider, an exceedingly disagreeable method of locomotion, horses are, happily, rarely trained to its use; when they are, it is for traction, in the expectation of gaining some slight advantage in point of time, over the trot.

A profile silhouette picture of any phase of the rack would be indistinguishable from a phase of the trot.

Series 4: is representative of an average stride during a moderately fast rate of speed. In 1 the horse has just alighted on \( \bigcirc \); \( \Delta \) is preparing to follow. 2 shows both legs nearly vertical; and 4, a transit without support, \( \bigtriangleup \) somewhat elevated, and \( \bullet \) skimming over the surface. In 5 the right laterals have assumed the functions of support, which on the evidence of the pasterns was commenced by \( \bullet \). Two steps, or one-half the stride, are now finished; the remaining phases lead to the discovery of the following two steps having been completed in practically the same manner. A diagram of this stride may be therefore shown as—

Taking into consideration that precedence is not invariably given to a hind-foot; a stride of the rack, for general purposes, may be represented as—
The rack is a gait natural to the camel, the giraffe, and some few other animals; it is said to have been occasionally observed in the dog.

If the horse was ever trained to rack for the use of a rider, it was probably for some one who wished to subject himself to a penance; the personal experience of those who have tried it, induces an imaginary comparison with the torture which, a few centuries ago, it was the custom to inflict on recalcitrants with an instrument from which the gait probably takes its name.

No references have been found descriptive of the sensations experienced by the rider of a racking horse; but as the gait is precisely similar to that of the camel, a few quotations may interest those who contemplate a ride over the desert on that animal. There is, however, a breed of camel in Africa called the "hygeen," whose motion is more pleasant than the ordinary riding or packing animal.

Series 42 is a moderately long stride of an Egyptian camel. As with other animals, long confinement had impaired its capability of speed. For artistic purposes the motion is well represented.

Morgan, in his "History of Algiers," says the camel "makes nothing of holding its rapid pace, which is a most violent hard trot, for four and twenty hours at a stretch."

Beckford, in "Vathek": "The rough trot of Alboufaki [a camel] awoke them in consternation."

G. W. Curtis, "The Howadji in Syria": "The trot of the usual travelling camel is very hard... but MacWhirter's [his own camel's] exertions in that kind shook my soul within me."

It will be observed that each of these travellers speaks of the camel's gait as a "trot." The author can find no evidence of a camel ever having been trained to trot; it certainly is not its natural gait.

In the sixteenth century, George Peele, in an Eclogue, says—

"His Rain-deer racking with proud and stately pace
Giveth to his flock a right beautiful grace."

The application of "racking" to the pace of the reindeer seems to require some explanation. That animal, like other deer, trots; and no trotting animal racks naturally.

This system of motion, under the illogical name of "pace," has, mysteriously, been confounded with its very antithesis of gaits—the amble. Why a name applicable, in its broad sense, to motion of any kind, should ever have been allotted to a special method of animal progress, is a question that defies elucidation. The absurdity of its use as a distinctive gait is self-evident.

Dante (Cary), in "Purgatory," xxiv., has—

"And as a man
Tired with the motion of a trotting steed
Slacka pace, and stays behind..."

Scott, in "Rob Roy," iii., remarks, "The trot is the true pace for the hackney."

"Guy Mannoning," xiii.: "Dumple... quickening his pace, trotted about a mile."
"Red Gauntlet," Letter VI.: "The rider... slackened his horse's pace from a slow trot to a walk."
And in the "Ingoldsby Legends" (the Execution) we find—

"Adown Piccadilly and Waterloo-place,
Went the high-trotting mare at a very quick pace."

The designs which seem to indicate the rack on Etruscan, Greek, and Roman vases are probably due to artistic indifference. It is an unnecessary and unnatural gait of the horse, and it is scarcely probable that the ancients trained the animal to its use.
THE RACK.

ONE STRIDE IN NINE PHASES, PHOTOGRAVED SYNCHRONOUSLY FROM TWO POINTS OF VIEW.

Horse "Ponio."

Length of stride: 146 inches (370 metres).

Time-intervals: 0.75 second.

Approximate time of stride: 0.64 second.

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A HALF-STRIDE IN FIFTEEN PHASES.

The Egyptian Camel.

Length of complete stride: 146 inches (370 metres).
Approximate time of complete stride: .65 second.

Time-intervals: .024 second.

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THE RACK.

The Egyptian Camel

SOME PHASES OF THE RACK.

Horse "Frinto."

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