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MORSE'S Gallery, 417 Montgomery St., San Francisco

THE HORSE IN MOTION.

Illustrated by
MUYBRIDGE.

AUTOMATIC ELECTRO-PHOTOGRAPH.

"MAHOMET," owned by LELAND STANFORD; ridden by G. DOMM, cantering at an 8 minute gait over the Palo Alto track, 17th June, 1878.

The negatives of these photographs were made at intervals of twenty-one inches of distance, ; they illustrate consecutive positions assumed during a single stride of the horse. The vertical lines were twenty-one inches apart; the horizontal lines represent elevations of four inches each. The negatives were each exposed during the two-thousandth part of a second, and are absolutely "untouched."

"MAHOMET," owned by LELAND STANFORD; ridden by G. DOMM, cantering over the Palo Alto track, 17th June 1878.

The present series illustrates the stride of a horse selected by his owner on account of his easy seat and graceful motion, for the especial use of ladies unaccustomed to riding. In

FIG. 1. The right fore foot is lifted nearly 3 inches above the ground, upon which the other 3 feet are firmly placed.

FIG. 2. The right fore foot has struck the ground 16 inches in advance of its former position, the left hind foot has been lifted 4 inches, and advanced about the same distance. The other 2 feet remain where they were.

FIG. 3. The right fore foot remains upon the ground, the left fore foot has been lifted 8 inches and advanced 22 inches. The left hind foot has been advanced 46 inches, and the right lifted 6 inches with a trifling advance.

FIG. 4. The right fore foot has been lifted 8 inches, and advanced 10 inches. The left fore foot and both hind feet have been advanced 48 inches, at about the same elevation as in the last figure; the horse is now entirely clear of the ground.

FIG. 5. The left hind foot has struck the ground, the others continue raised.

FIG. 6. An advance by the horse of 5 inches, would bring the feet into the same relative position as in Fig. 1.

An examination of these figures will show the nose of the horse in Fig. 1, touching the line 6-7 and in Fig. 6, lacking 4 inches of touching the line 11-12, as an advance of 5 inches was required to place the feet in the same exact position they occupied in Fig. 1. The equivalent of a stride would measure a trifle over 5 spaces, or 8 feet 10 inches.

While the horse was accomplishing this distance the feet were rested and moved approximately as follows:

The right fore rested during 37 inches of progress and was raised during 70 inches.

The left fore rested during 24 inches and raised during 83 inches.

The right hind rested during 45 and raised during 62.

The left hind rested during 48 and raised during 59 inches.

These alternations of movement divide the stride into 5 nearly equal consecutive parts as follows:

FIRST. With both hind feet, and the left fore foot on the ground.

SECOND. With both fore feet and the right hind foot on the ground.

THIRD. With the right fore foot alone on the ground.

FOURTH. The feet entirely clear of the ground.

FIFTH. The left hind foot alone on the ground.

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GRAND PRIZE MEDALIST, VIENNA, 1873.

INVENTOR AND PATENTEE IN THE UNITED STATES, ENGLAND, FRANCE, ETC.

OF THE

Automatic Electro-Photographic Apparatus.

The following photographs are now published: "Occident" trotting at a 2:24 gait, 12 positions. "Edginton" trotting at an 8 minute gait, 8 positions. "Edginton" walking at a 15 minute gait, 6 positions. "Mahomet" cantering, 6 positions. "Sallie Gardner" running at a 1:40 gait, 11 positions. Each series is mounted on a card, and illustrates a single stride. They will be sent to any part of the world in registered letter, free of postage, upon receipt of \$2.50 for each series.

Arrangements made for Photographing and Recording the action of Horses in motion, in any part of the World.

Geo. Scott Darwin