

145

THE MUSEUM OF MODERN ART
NEW YORK

11 WEST 53rd STREET
TELEPHONE: CIRCLE 5-8900
CABLES: MODERNART, NEW-YORK

SARAH NEWMAYER, PUBLICITY DIRECTOR

August 13, 1943.

TO City Editors
Art Editors
Photography Editors

Dear Sirs:

You are invited to come or send a representative to

Press Preview of

ACTION PHOTOGRAPHY

Tuesday, August 17
2 to 6 P. M.

at the Museum of Modern Art
11 West 53 Street.

The exhibition will open to the public Wednesday, August 18,
and will remain on view through September 19.

For further information please telephone me at Circle 5-8900,

Sincerely yours,



Sarah Newmeyer
Publicity Director

P.S. This is just by way of a reminder. We sent you an
invitation (combined with the BALI invitation) two weeks ago.

THE MUSEUM OF MODERN ART

11 WEST 53RD STREET, NEW YORK 19, N. Y.

TELEPHONE: CIRCLE 5-8900

FOR IMMEDIATE RELEASE

EXHIBITION OF ACTION PHOTOGRAPHY OPENS AT MUSEUM OF MODERN ART

Nearly all types of the photographic recording of action, with the exception of motion pictures, will be shown in the exhibition Action Photography, which will open at the Museum of Modern Art Wednesday, August 18, and remain on view through Sunday, September 19, after which it will be sent on a tour of the country. The chronological range of the exhibition starts with an 1837 daguerreotype of a Paris street showing a man having his boots shined and continues through the multiple-camera pictures made by Muybridge in 1877 and the multiple-exposure experiments by Marey in 1888, both of which were forerunners of the movies; the hand camera; the miniature camera; news and war photography; astronomical photography; the silhouette method where the shadow is recorded directly on the sensitized plate or film by electric spark without use of lens; and on to the most advanced stroboscopic photography of today. Nancy Newhall, Acting Curator of the Museum's Department of Photography, has directed and installed the exhibition.

Prefaced by a brief historical introduction, the exhibition is divided into three parts:

Hightspeed Photography. Action so rapid as to be invisible is caught by flashes of light one millionth of a second in duration. Uses of hightspeed photography in science, war, and industry.

Normal Exposure. Action photography as a means of expression, presented through the esthetic movements it has inspired and through special uses such as Dance, Press, War, Movies.

Prolonged Exposure. The ability of the photographic emulsion to store light makes possible the study of such action as lightning and invisible stars.

The exhibition shows a series of photographs by Eadweard Muybridge, a photographer hired in 1872 by Leland Stanford of California to enable him to win a \$25,000 bet that a galloping horse lifts all four feet off the ground at once. The task in that day of slow wet plates was enormous but in 1877 Muybridge and a railroad engineer lined up a battery of cameras on one side of a race-track. Along the track at intervals they laid wires by which the passage of the horse electrically tripped the shutters of the cameras. Muybridge succeeded in getting sequences of clear silhouettes.

published in various scientific journals in 1878, they brought him in contact with scientists and artists everywhere, notably Thomas Eakins, the Philadelphia painter, and Etienne-Jules Marey, French physicist long interested in the recording of movement.

Marey, observing certain flaws in Muybridge's system, continued his own experiments in recording motion. By prolonged exposure--allowing light to enter the camera continuously--Marey found he could record the path of a luminous object through space. By multiple exposure--interrupting the light at brief intervals--he could obtain successive images on the same plane.

Muybridge demonstrated the possibility of highspeed photography; Marey established it as a means of scientific analysis. Meanwhile, other workers were carrying on the experiment of photographing by the light of an electric spark motion too fast for the human eye to see clearly--an experiment first made in 1851 by Dr. William Henry Fox Talbot, inventor of the negative-positive principle of photography. In 1885 Ernst Mach of Vienna, by timing an electric spark, succeeded in photographing without a lens the shadow of a bullet in flight with the sound and heat waves it engendered. This method is still in use.

In 1930 Harold E. Edgerton, an electrical engineer, began the task of perfecting speed-flash photography. His chief contribution is a gas-filled stroboscopic lamp of great brilliance whose flashes can be controlled with absolute accuracy. When set for a single exposure, this lamp produces a flash of even greater intensity and brevity. By the dramatic clarity of his work, whether in motion pictures, multiple or single exposure, Edgerton has brought stroboscopic photography out of the laboratory and made it available to the world.

A small device in the exhibition demonstrates the stroboscopic principle of analyzing action. In the label for this device Mrs. Newhall writes:

"Our eyes are too slow to follow rapid action accurately. What we actually see is a blur of superimposed images because our eyes retain each image a fraction of a second after the stimulus has ceased. This defect, known as 'persistence of vision,' kept motions like the flight of birds, the gallop of a horse, and the changing shape of a falling raindrop mysterious for thousands of years.

"In 1832 appeared one of the earliest devices for analyzing motion: a whirling slotted disk known either as the Phenakistiscope or the Stroboscope. This disk, by interrupting light at brief intervals, produces two strange effects:

1. It isolates action and holds it motionless. By

allowing us to glimpse the same image briefly and continuously it eliminates blur.

2. It synthesizes or recreates action. The image, continuously replaced before it has faded by a slightly different image, appears to move. This is the basic principle of the movies.

"By substituting photography for our eyes and memories, speed has been tamed and the invisible made visible. A single flash of light from a camera shutter or a flashbulb suffices for most photographic uses. The stroboscope today is no longer a disk but a rapidly flashing light of great intensity, used chiefly in laboratories. The extraordinary revelations of physical and emotional action made possible by action photography have influenced the arts, the sciences, the industries, and even the amusements of our time."

Other Photographers whose work is shown in the exhibition include Thomas Bouchard, Margaret Bourke-White, Henri Cartier-Bresson, Thomas Eakins, Alfred Eisenstaedt, Eliot Elisofon, Morris Engel, Andreas Feininger, Dr. Arnold Genthe, H. J. Hagenguth, Helen Levitt, Remie Lohse, Paul Martin, Herbert Matter, Gjon Mili, Lisette Model, Barbara Morgan, Arthur Palme, Dr. Erich Salomon, Adrian Seigel, Peter Stackpole, Alfred Stieglitz, Paul Strand, William Vandivert, Weegee, and Cedric Wright.