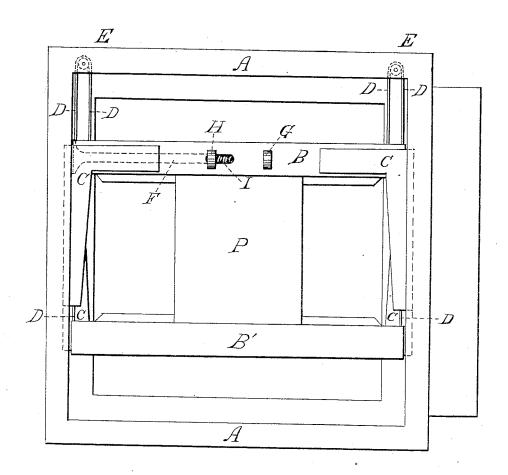
(No Model.)

M. E. HAWKS.

ADJUSTABLE PLATE HOLDER FOR PHOTOGRAPHIC CAMERAS.

No. 346,546. Patented Aug. 3, 1886.



Witnesses: Frank McClintock. Thenry Burneto

Inventor. Mark E. Hawke

UNITED STATES PATENT OFFICE.

MARK E. HAWKS, OF WEST UNION, IOWA.

ADJUSTABLE PLATE-HOLDER FOR PHOTOGRAPHIC CAMERAS.

SPECIFICATION forming part of Letters Patent No. 346,546, dated August 3, 1886.

Application filed June 10, 1885. Serial No. 168,231. (No model.)

To all whom it may concern:

Be it known that I, MARK E. HAWKS, a citizen of the United States, residing at West Union, in the county of Fayette and State of 5 Iowa, have invented a new and useful Improvement in Adjustable Plate-Holders for Photographic Cameras, of which the following is a specification.

The objects of my invention are to provide 10 means for rapidly adjusting the holder to any size plate within its capacity, the plate always being automatically centered, and to provide a means of securely locking it and holding it any position desired. I attain these ob-15 jects by means of the mechanism shown in the accompanying drawing, which represents the plate-holder with the door removed, as seen from the rear.

A is the frame of the holder. B and B' are 20 two movable pieces extending horizontally across the holder, and which are rabbeted to receive the plate P between them. Arms C, of brass or other suitable material, are attached to each end of the pieces B'and B', 25 and fit into grooves in the frame of the holder. The pieces B and B', which hold the plate, can then be moved to and from and parallel with each other. The arms C are attached, respectively, to the outer and inner sides of the 30 pieces B and B', so as to slide in separate grooves, and thus allow the pieces to be brought closely together.

The pieces B and B' are connected by means of cords, belts, or small chains D D, passing 35 over pulleys E in the upper part of the frame of the plate-holder, thus causing them to approach or recede from each other simultaneously, and keeping them at all times equidistant from the center.

For the purpose of securing the sliding pieces B and B' at any desired point, I use a

bolt, F, (shown by the dotted lines,) having a projecting knob or handle, H. The opposite end of the bolt may be enlarged and have rubber on the end, and this being forced 45 against the side of the frame A by the spring I serves, by means of friction, to hold the upper sliding piece, B, stationary, while the plate P and the cords D D prevent the lower sliding piece, B', from moving either up or 50 down.

In large plate-holders a ratchet may be fixed to the side of the frame A and the end of the bolt F be fitted to it; or, if necessary, bolts may be placed on each end of the piece B. 55 The projecting knob G is simply of assistance in drawing back the bolt F.

All that is required in adjusting the holder to any size of plate is to place the lower edge of the plate in the rabbet in the piece B' and 60 grasp the knobs G and H between the thumb and finger, when the bolt can be released and the piece B moved up or down until the plate fits, when the knobs may be released, locking it firmly.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is-

1. The combination, in a plate-holder with sliding pieces B and B', of the pulleys E and 70 the bands D, substantially as and for the purpose specified.

2. The combination, in a plate-holder with sliding pieces B and B', connected by bands D, passing over pulleys E, of the bolt F and 75 spring I, substantially as and for the purpose specified.

MARK E. HAWKS.

Witnesses:

FRANK McCLINTOCK, HENRY BURRETT.