(No Model.)

W. J. M. DOBSON.

PHOTOGRAPHER'S KIT.

No. 379,377. Patented Mar. 13, 1888.

Fig. 2.

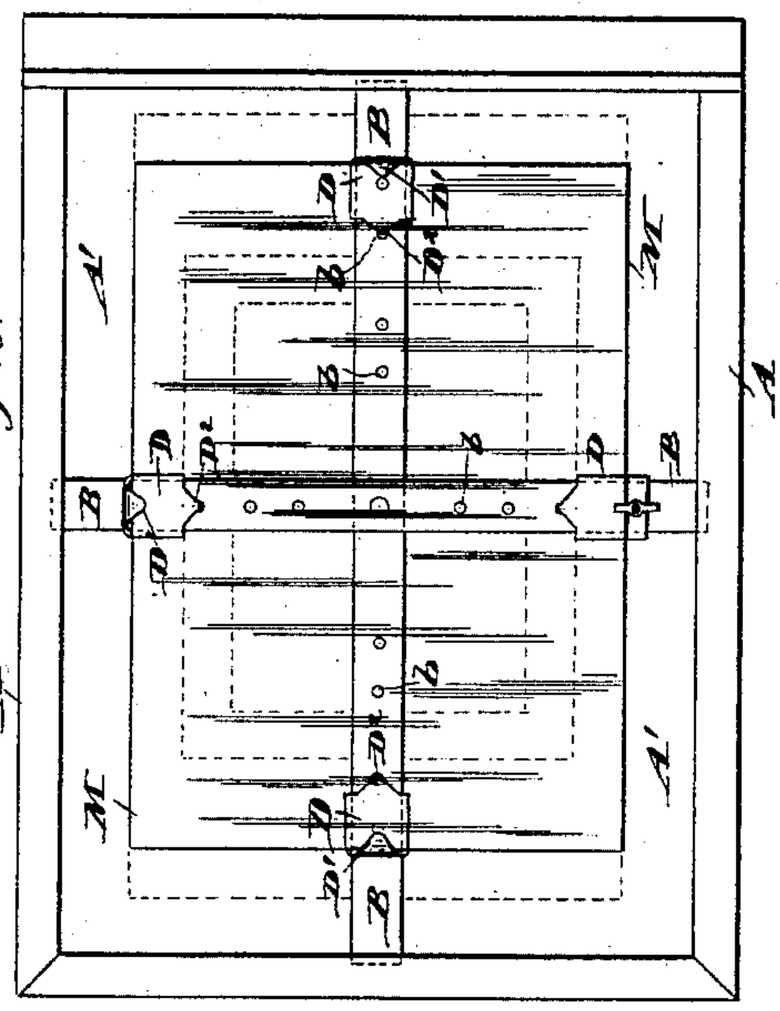


Fig. 3.

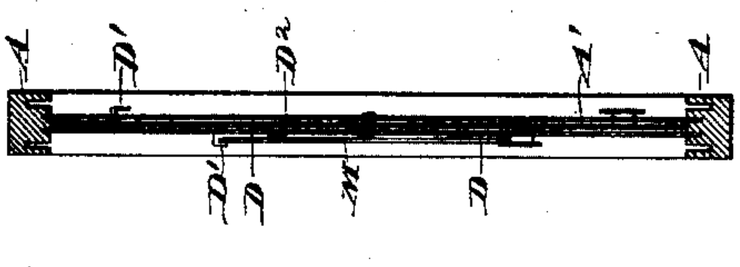


Fig. 1.

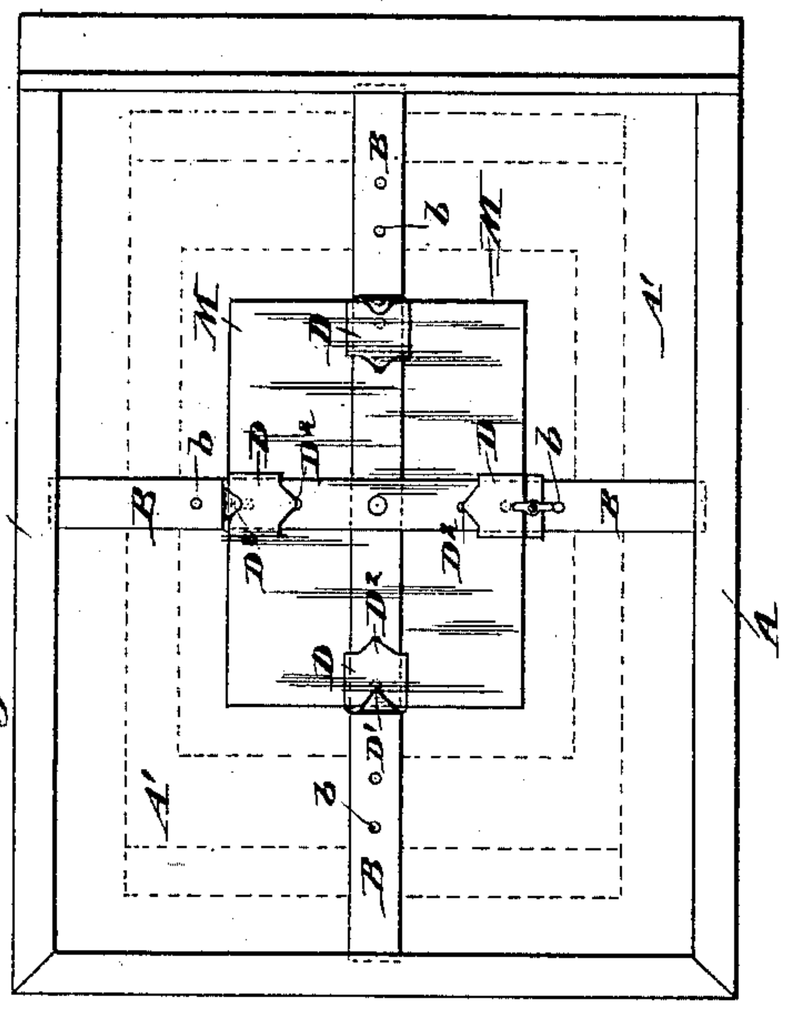
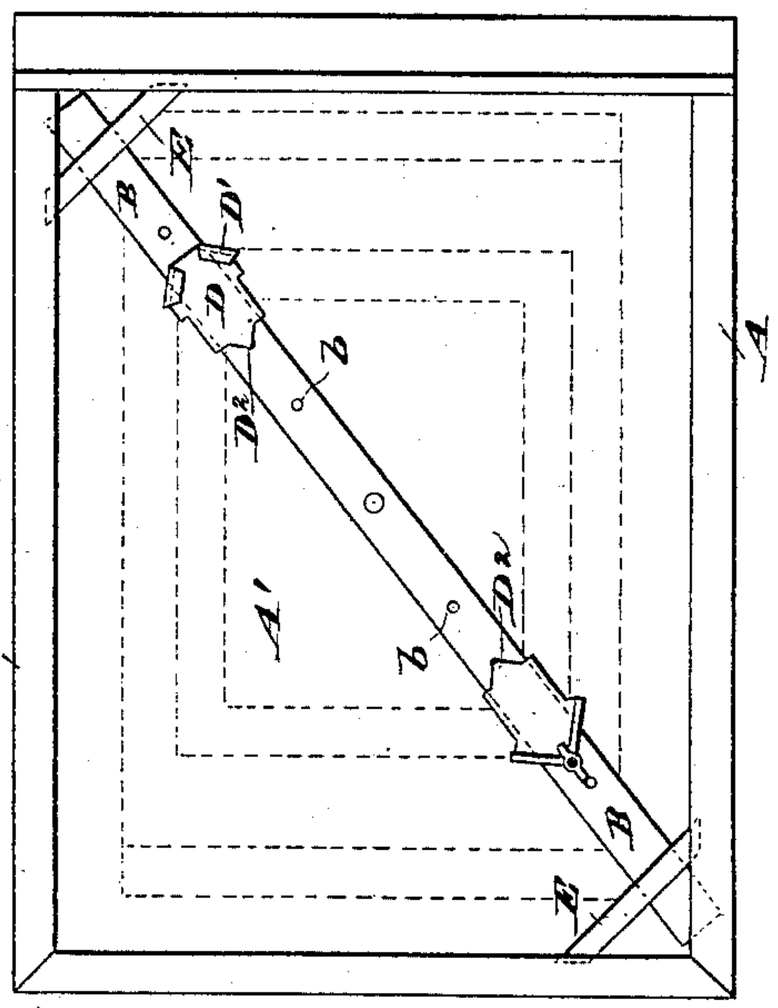


Fig. 4.



Witnesses:
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H. A. Johnstone.

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By his attorneys.
Thomas Drew Stetson.

UNITED STATES PATENT OFFICE.

WILLIAM J. M. DOBSON, OF BROOKLYN, NEW YORK.

PHOTOGRAPHER'S KIT.

SPECIFICATION forming part of Letters Patent No. 379,377, dated March 13, 1888.

Application filed February 15, 1887. Serial No. 227,652. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. M. DOBSON, of Brooklyn, Kings county, in the State of New York, have invented a certain new and useful Improvement in Photographers' Kits, of which the following is a specification.

The object of my invention is to avoid the necessity of the several devices of different sizes, usually denominated "kits," used to hold different sizes of plates. My invention allows one plate-holder to hold successfully either a dry-plate of the full size which the holder will receive, or a plate of any smaller size which may be required. It may be adjusted for various proportions of plates. There are in the trade standard sizes.

I will describe the invention as applied to what is sometimes called a "half plate-holder," receiving a plate six and a half ($6\frac{1}{2}$) by eight and a half ($8\frac{1}{2}$) inches, adapted to hold all the standard sizes smaller than that. I attain this end by the aid of movable pieces, which I term "clamps," adapted to take hold of the edges of the plates, and to be readily adjusted farther inward or outward, according to the size of dry-plate to be held. The clamps may be manufactured and sold separately and inserted with little difficulty in any of the ordinary plate-holders.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a face view of my kit applied to one face of an ordinary double plate-holder. It is adjusted to hold the smallest size of dry-plate. Fig. 2 is a view of the opposite face, showing my kit as there applied, adjusted to hold a large size of plate. Fig. 3 is a vertical section. The remaining figures show modifications. Fig. 4 shows a form of my kit adapted for holding a plate by two opposite corners.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

Referring to Fig. 1, and to the letters of reference marked thereon, A is the edge or frame of a plate-holder, and A′ the septum of opaque material which extends across. These may be of hard wood and of any ordinary or suitable construction.

B B are two strips of rolled brass crossing each other at the center of the plate-holder and secured by a rivet. Their ends engage in recesses formed for the purpose in the interior of the frame A. Each strip B is provided with a number of holes, *b*.

D D are clamps in the form of slides, made of the same or a thinner brass, certain portions of which will be designated, when necessary, by additional marks, as D′ D². Two edges of each slide D are folded under so as to tightly embrace a strip B. Each slide is adapted to be moved outward or inward on its proper slide D on applying a sufficient force by the fingers. D′ is a curl or hook at the outer edge of each slide, adapted to be easily engaged by the thumb or finger in moving, and also to conveniently and surely engage the edge of a plate of glass of the ordinary thickness employed for negatives when it is brought in the proper relations thereto in holding the plate.

D² is a point turned downward at the inner edge of each slide D, and adapted to engage in any of the holes *b* in the strip B, and to aid in maintaining the position of the slide D in holding firmly the latter in any position in which it may be adjusted to properly hold any size of plate.

M is a small dry-plate being held by my device. In case a larger one shall be substituted, the slides D require to be adjusted to the proper positions correspondingly farther from the center.

I propose to manufacture the strips B properly secured together or separately, and carrying the slides D, and to furnish them to photographers who have already supplied themselves with plate-holders A A′.

My invention avoids the necessity of the series of devices of graduated sizes ordinarily employed for holding the different-sized plates.

Further modifications may be made by any good mechanic without departing from the principle or sacrificing the advantages of the invention. What I have termed the two strips B B may be cut in the required cross form from a single plate of metal of proper size; or two strips may be used without being secured together. I propose in some cases to employ separate strips reduced in thickness at the point of junction by any suitable means, and

soldered together with soft or hard solder, so as to make a plane and nearly homogeneous junction of the two strips.

Other metal than hard brass may be used successfully. I can use buttons instead of the hooks D′. Such will give facilities for introducing and removing the plates without shifting the slides after they have been correctly adjusted. I can use springs on the slides D to allow more perfect adjustment to the edges of slightly-differing sizes of plates, or to allow the plates to be introduced and removed without shifting the slides. By omitting the holes *b* the several slides may be shifted to any position desired, so as to hold all sorts of irregular sizes. This can be done to some extent even with the holes. I attach importance to the holes as increasing the firmness of the locking of the several slides when they are adjusted in positions for standard sizes.

Fig. 4 shows a modification in which only one such strip B is employed. The two slides carried thereon carry each two hooks, D′, adapted to engage corners of a dry-plate. In this form the strip B should extend across the holder in the diagonal position; but there should be a little room to swivel, in order to accommodate certain differences in the proportions of the plates of different sizes. The ends of the plate B are not in this form of the invention engaged firmly in the wood. On the contrary, they do not quite reach to the frame A, and are capable of swiveling a little by moving laterally under transverse plates E E, which latter have their ends engaged in the wood of the frame A, which will be understood.

My plate-holder serves with only two cross-bars, which may each remain in place, the slides D, with their hooks D′ and points D^2, being the only parts to be moved to adjust for the various sizes of plates.

I claim as my invention—

1. In a kit for photographers' use, the pair of central cross-bars, B, and a set of clamps, D D′, adapted to serve in an ordinary plate-holder substantially as herein specified.

2. In a kit for use in the photographic dry-plate holder, a set of two or more adjustable clamps, as D D, each having a clutching arm or hook, as D′, and adjusting-point, as D^2, in combination with cross-strips B, engaged with the plate-holder A, all arranged for joint operation substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand, at New York city, this 14th day of February, 1887, in the presence of two subscribing witnesses.

W. J. M. DOBSON.

Witnesses:
M. F. BOYLE,
H. A. JOHNSTONE.