

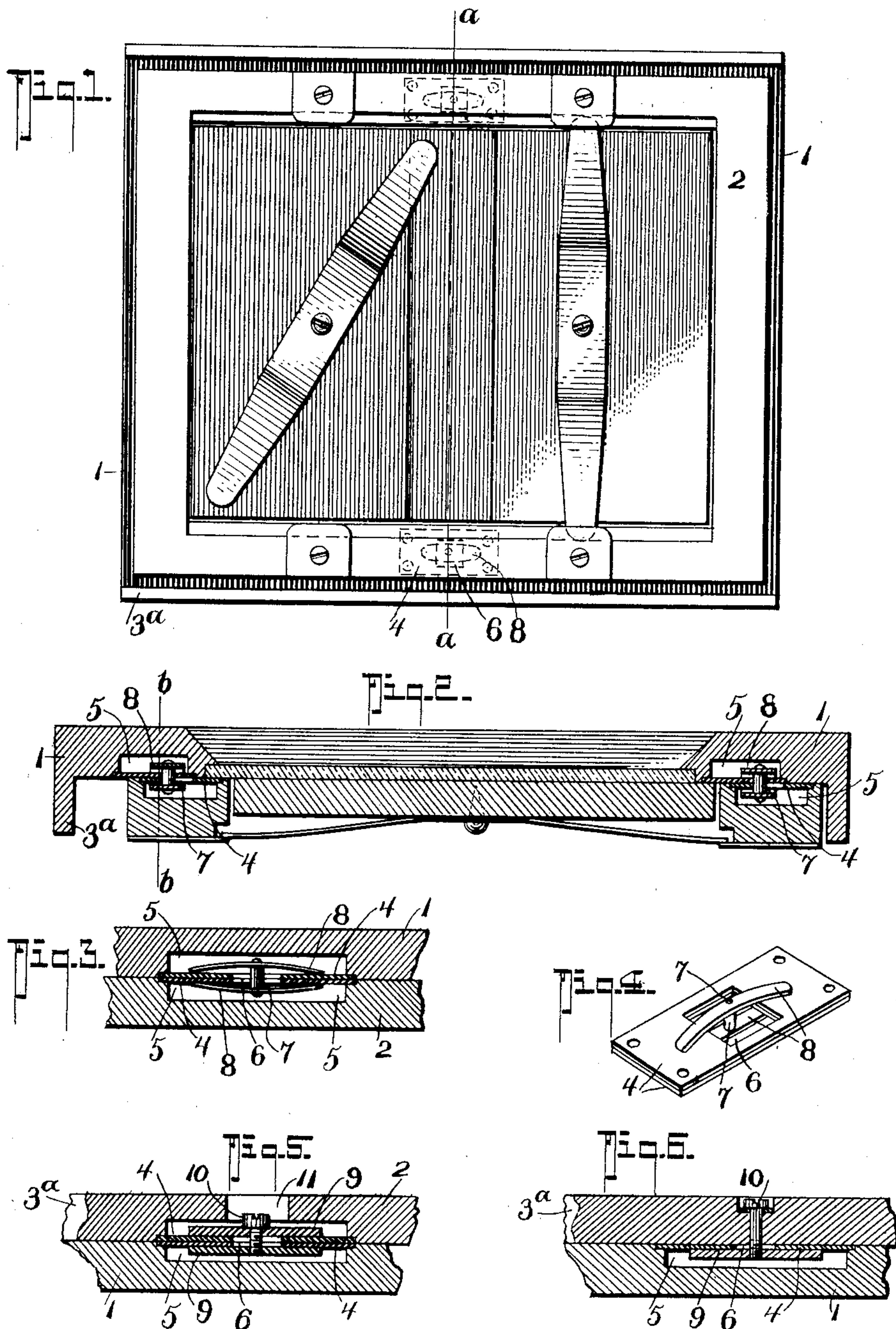
No. 688,274.

Patented Dec. 3, 1901.

C. WETHAM.
PHOTOGRAPHIC PRINTING FRAME.

(Application filed Mar. 13, 1901.)

(No Model.)



WITNESSES:

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CHARLES WHETHAM, OF RUSKIN, CANADA.

PHOTOGRAPHIC-PRINTING FRAME.

SPECIFICATION forming part of Letters Patent No. 688,274, dated December 3, 1901.

Application filed March 13, 1901. Serial No. 50,988. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WHETHAM, a citizen of the Dominion of Canada, residing at Ruskin, in the Province of British Columbia, Canada, have invented a new and useful Photographic-Printing Frame, of which the following is a specification.

My invention relates to improvements in photographic-printing frames; and its object is to provide means for adjusting the photographic negative so that the picture may be printed fairly in the center of or in any other desired position on the sensitive paper or other material printed upon, no matter what may be the position of the picture on the negative film or glass.

I attain my object by dividing the frame into two sections on the plane of the upper or film side of the glass or negative and by making them movable or adjustable on each other in that plane, the sections being held together by resilient clamping-plates, so that in the event of the picture not being photographed to the desired position on the negative the frames may be moved until the picture is properly adjusted in respect to the opening in which the sensitive sheet is to be placed.

In the mechanical apparatus illustrated in the accompanying drawings, Figure 1 is a rear view of my improved frame, showing in dotted lines the plates and fixtures for holding the frames together. Fig. 2 is a cross-section on the line *a a* in Fig. 1. Fig. 3 is a longitudinal section of one of the holding devices on the line *b b* in Fig. 2. Fig. 4 is a perspective of the holding and adjusting plates detached from the frames. Fig. 5 shows a modification of the means for holding the frames together in an adjustable fashion, taken in a longitudinal section through the plates, similar to Fig. 3; and Fig. 6 is a further modified form of holding the sections of the frame together.

Similar numerals refer to similar parts throughout the several views.

Arranged on the facing sides and at the center of each of the side bars of the sections 1 and 2 are plates 4, which are let in and secured with their outer faces flush with the plane of the side bars of said sections, so that when the plates 4 are held together the sec-

tions 1 and 2 of the frame will be held together in a like manner. On the under sides of these plates 4, cut into the sections 1 and 2, are recesses 5, and in the center of the plates are openings 6, through which are passed rivets or connecting-pins 7, on the ends of which are fixed flat or resilient plates 8. These resilient plates 8 are coupled together by the rivets 7 with the plates 4 between them before such plates are secured to the sections 1 and 2. This holds the plates pressing face to face, and consequently the sections 1 and 2 in a like manner; but by reason of the apertures 6 in the plates 4 and the recesses 5 in the sections of the frame said sections are capable of being moved and adjusted in any direction over a reasonable space.

In the modification, Fig. 5, plates 9 are employed in a similar manner to the resilient plates 8, which are coupled together by short screws 10, the heads of which are accessible for a screw-driver by the apertures 11 in the section 2, which correspond with the apertures 6 in the plates 4, so that the head of the screw may move about in the operation of adjusting the sections of the frame, and in the further modification, Fig. 6, instead of employing the resilient plates 8 for clamping the plates 4 together I use single plates 9, which are clamped against the under sides of said plates 4 in the section 1 by screws 10 passing therethrough and through the section 2, which may be slackened or tightened by a screw-driver. This latter means of clamping will be more effectual in some classes of work. For instance, when the frame is large and heavy the resilient plates may not always be depended upon, whereas the screws may be set up to any degree of tightness and the plates clamped on so that the sections will be retained in their proper positions.

It is manifest that my frame is in two sections, the one movable upon the other, and by reason of the joint being on a plane with the upper or film side of the glass or negative the rear frame 2 may be moved until the picture in such negative is fairly centered in the opening of same or brought to any position. For example, the picture in the negative may be to one side or not straight with the same, and therefore would not come in the center

of the sensitive paper; but by moving one section of the frame upon the other this difficulty is rectified and the picture is brought directly in the center of or on any point on the print, thus insuring accurate work with a minimum of trouble.

My improved photographic frame may be constructed of any convenient material, either metal or wood. If made of the former, however, the parts would be required to be so modified as to conform to lightness as well as strength without departing from the principle here brought out.

As better shown in Fig. 2, the outer sides of the section 1 are widened out rearwardly, as 3^a, preferably to a width to correspond with the thickness of both members of the frame. This provides suitable flat supports, so that the frame will stand upright while being exposed to the light.

Having now described my invention, what I claim, and desire to be protected in by Letters Patent of the United States, is—

1. A frame composed of sections 1 and 2 for the purposes specified; means for holding said sections together in an adjustable manner consisting of plates 4, secured to the face sides

of the central portions of the rails of said sections; resilient plates 8 of concaved form lying in recesses of the sections 1 and 2 on the inner sides of said plates 4, and pins 7 passing through openings in such plates and securely connecting the resilient members together.

2. In a photographic-printing frame of the character described, the combination with the opposing sections 1 and 2, longitudinally and laterally slidable on each other, of clamping devices for frictionally holding the two sections in contact, and to their lateral or longitudinal adjustments.

3. A frame of the character described, comprising two opposing contacting sections, each having slotted plates 4, facing each other and means for each pair of opposing plates for holding them in frictional contact, for the purposes set forth.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

CHARLES WHETHAM.

Witnesses:

ROWLAND BRITAIN,
W. G. TRETHEWEY.