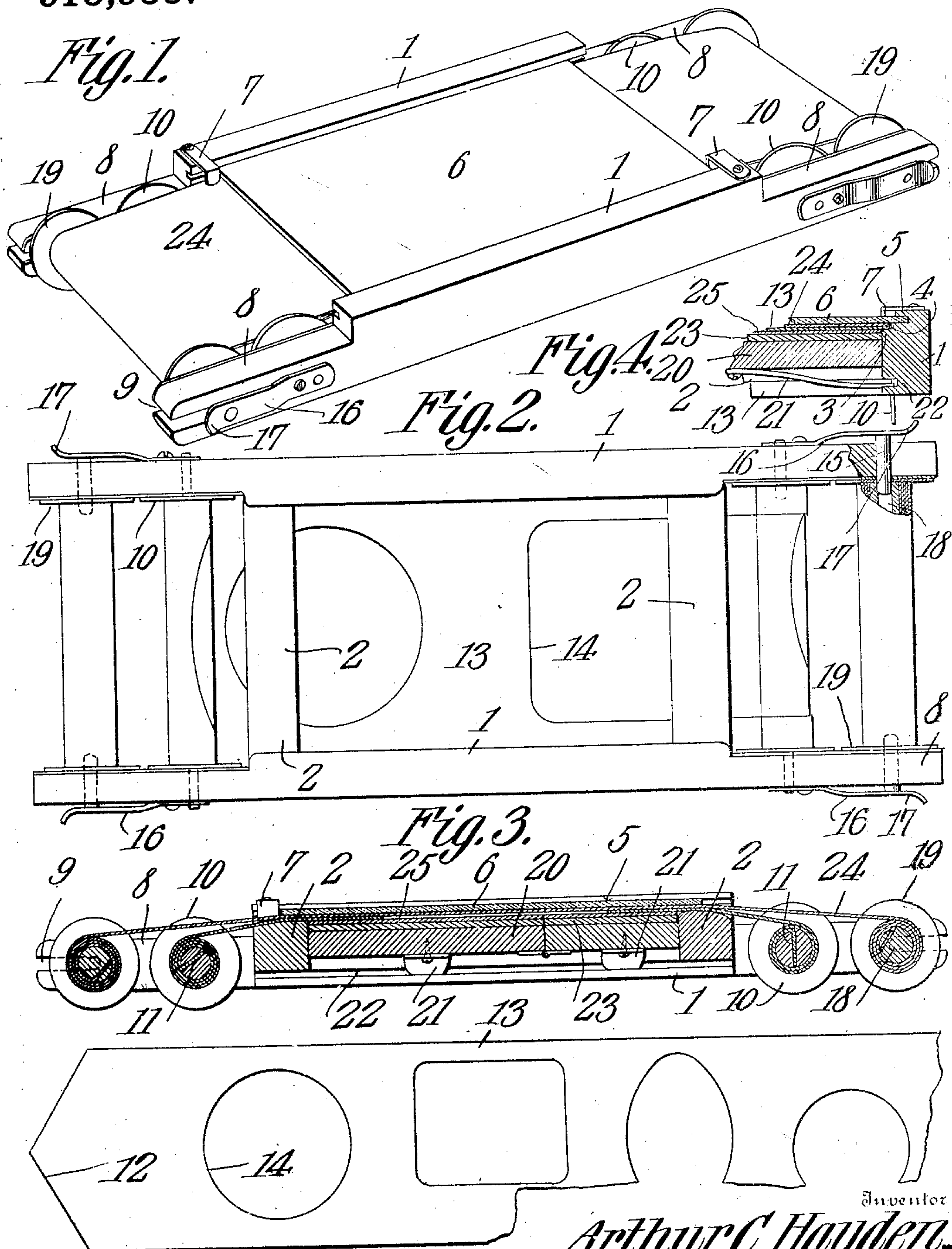


Patented Mar. 23, 1909.

915,955.



Witnesses

E. J. Stewart
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Fig. 5.

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PHOTOGRAPHIC-PRINTING FRAME.

No. 915,955.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed January 8, 1908. Serial No. 409,834.

To all whom it may concern:

Be it known that I, ARTHUR C. HAYDEN, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented a new and useful Photographic-Printing Frame, of which the following is a specification.

This invention relates to printing frames for use in photography, the same being designed for use in connection with either developed plates or developed rolls of films.

The object of the invention is to provide simple means whereby pictures can be printed with backgrounds of different outlines, there being a vignetting mat of novel form mounted within the frame for this purpose.

Another object is to provide means whereby the vignetting mat and the film strip can be separately adjusted so as to bring any portion of the film into position across any one of the openings in the mat.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a perspective view of a printing frame embodying the present improvements, the same showing a film in position therein. Fig. 2 is a plan view of the frame viewed from the opposite side and with the backing removed. Fig. 3 is a longitudinal section through the parts shown in Fig. 1. Fig. 4 is an enlarged section through one side of the frame. Fig. 5 is a detail view of a portion of the vignetting mat.

Referring to the figures by characters of reference, 1—1 designate the sides of the printing frame, the end portions of said sides being connected by cross strips 2. These side strips extend below the cross strips and have the inner faces of said projecting portions stepped longitudinally to form longitudinal shoulders 3 and 4, there being a longitudinal groove 5 formed in the inner face of each side strip adjacent shoulder 4 as indicated in Fig. 4. These grooves are designed to receive opposite edge portions of a supporting plate 6 of glass, said plate being insertible into the end portions of the groove and designed to be retained between the side strips by means of pivoted angular stop devices 7 or in any other preferred manner. The cross strips 2 have those faces, which are

adjacent the glass 6, rounded so as to constitute efficient guides for the purpose herein-after-set forth.

Extending beyond the ends of each side strip 1 are parallel arms 8 the terminals of which are slotted longitudinally as indicated at 9 and journaled between the arms near each end of the frame is a spool 10 having a diametrical slot 11 between the ends thereof and into which extends the tapered end 12 of a flexible strip 13 constituting the vignetting mat. This strip may be of any desired length and material and is provided at desired intervals with a plurality of openings 14 of different sizes and shapes and at different distances from the edges of the strip. The width of the strip is such that the edge portions thereof lap the shoulders 3 heretofore referred to and are supported thereby. The cross strips 2 serve to properly direct the strip onto these shoulders. Obviously by turning either one of the spools 10 the vignetting mat can be adjusted so as to bring any one of the openings 14 into position within the frame and back of the glass 6.

The slots 9 are designed to receive centering pins 15 secured to spring strips 16 fastened upon the outer faces of arms 8. The free ends of these strips are out-turned as indicated at 17 so that the same can be conveniently engaged by a finger of the user for the purpose of swinging the pins 15 outwardly. These pins are designed to project into the end portions of the bores 18 formed within spools 19 such as ordinarily employed for holding rolls or films used in photography.

Backing strips 20 preferably hinged together in the usual manner and as shown in Fig. 3, are insertible between the cross strips 2 and sides 1 and carry the usual pivoted spring strips 21, the ends of which are designed to be seated within grooves 22 formed in the side strip 1. These backing strips may be provided with the usual covering of felt or other soft material.

It is to be understood that this device can be used in connection with either developed plates or films. Where films are utilized the glass 6 is removed by sliding it longitudinally from the grooves 5 after which one end of a developed film is placed in engagement with one of the spools 19 and wound thereon after which the other end of said film is secured to the other spool 19. The film will thus be extended between the side strips 1 and upon the vignetting mat or

strip 13, the shoulders 3 serving to support the longitudinal edges of both the strip 13 and the film. After the film has been positioned in the manner described plate 6 is re-inserted and secured within the grooves 5. In the drawings the film has been designated by the numeral 24. By turning one of the two spools 19 that portion of the film to be printed can be brought into position back of the glass 6 and by turning either of the spools 10 any one of the openings 14 can be brought into position over that portion of the film to be printed. The sensitized paper 25 is then placed within the frame and upon the mat 13 after which the backing strips 21 are secured within the frame in the usual manner. The frame can then be placed in the light in the ordinary manner.

Should it be desired to use developed plates in lieu of a film the glass 6 is removed and the film is wound upon one of the spools 19 or can be detached from both of said spools and wound upon a separate spool. The developed plate can then be inserted into the grooves 5 in lieu of plate 6, after which the operation hereinbefore described can be repeated.

What is claimed is:

1. The combination with a printing frame, and a flexible vignetting device connected to and adjustably mounted upon the frame; of a diaphanous plate removably mounted within the frame and constituting a support for said device.

2. The combination with a printing frame having longitudinal plate receiving grooves therein with open ends, and shiftable means for retaining a plate within the grooves and against longitudinal movement; of a vignetting device mounted within the frame and disposed to be supported by an inserted plate.

3. The combination with a printing frame having longitudinal supporting means; of a flexible longitudinally adjustable vignetting device connected to the frame and supported at its sedges by said supporting means.

4. The combination with a printing frame having longitudinal supporting means; of winding means connected to the frame adjacent opposite ends thereof, and a flexible vignetting device connected to the winding means and supported along its margins by said means, portions of the frame being rounded to guide said device onto the supporting means.

5. The combination with a printing frame; of film engaging spools detachably connected to opposite portions of the frame, a flexible vignetting strip, and spools interposed between the first mentioned spools and connected to opposite portions of the frame and constituting winding means for said strip.

6. The combination with a printing frame; of film engaging spools detachably connected to opposite portions of the frame, a flexible vignetting strip, spools interposed between the first mentioned spools and connected to opposite portions of the frame and constituting winding means for said strip, and a diaphanous plate mounted within the frame and removable longitudinally therefrom, said plate constituting a support for the film and vignetting strip.

7. A device of the character described comprising a relatively fixed holder for sensitized material, and separate relatively shiftable vignetting and negative strips carried by said holder.

8. The combination with a printing frame; of separately adjustable film and vignetting strips carried by the frame and extending in the same direction, said strips contacting throughout the length of the frame.

9. The combination with a printing frame; of film and vignetting strips extending in the same direction across the frame and contacting throughout the length of said frame, and separate means carried by the frame for adjusting said strips in the direction of their lengths.

10. The combination with a printing frame, and means for supporting sensitized material therein; of arms extending beyond the ends of said frame, spools journaled between the arms at opposite sides of the frame, a vignetting strip secured to the spools and disposed to be wound upon either of them, spools removably mounted between the arms and beyond the first mentioned spools, said removable spools constituting film holding means, all of said spools being parallel, and a diaphanous plate mounted within the printing frame; and constituting a support for the vignetting strip and a film strip.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ARTHUR C. HAYDEN.

Witnesses:

JAMES M. WALKER,
ADAH M. ROSE.