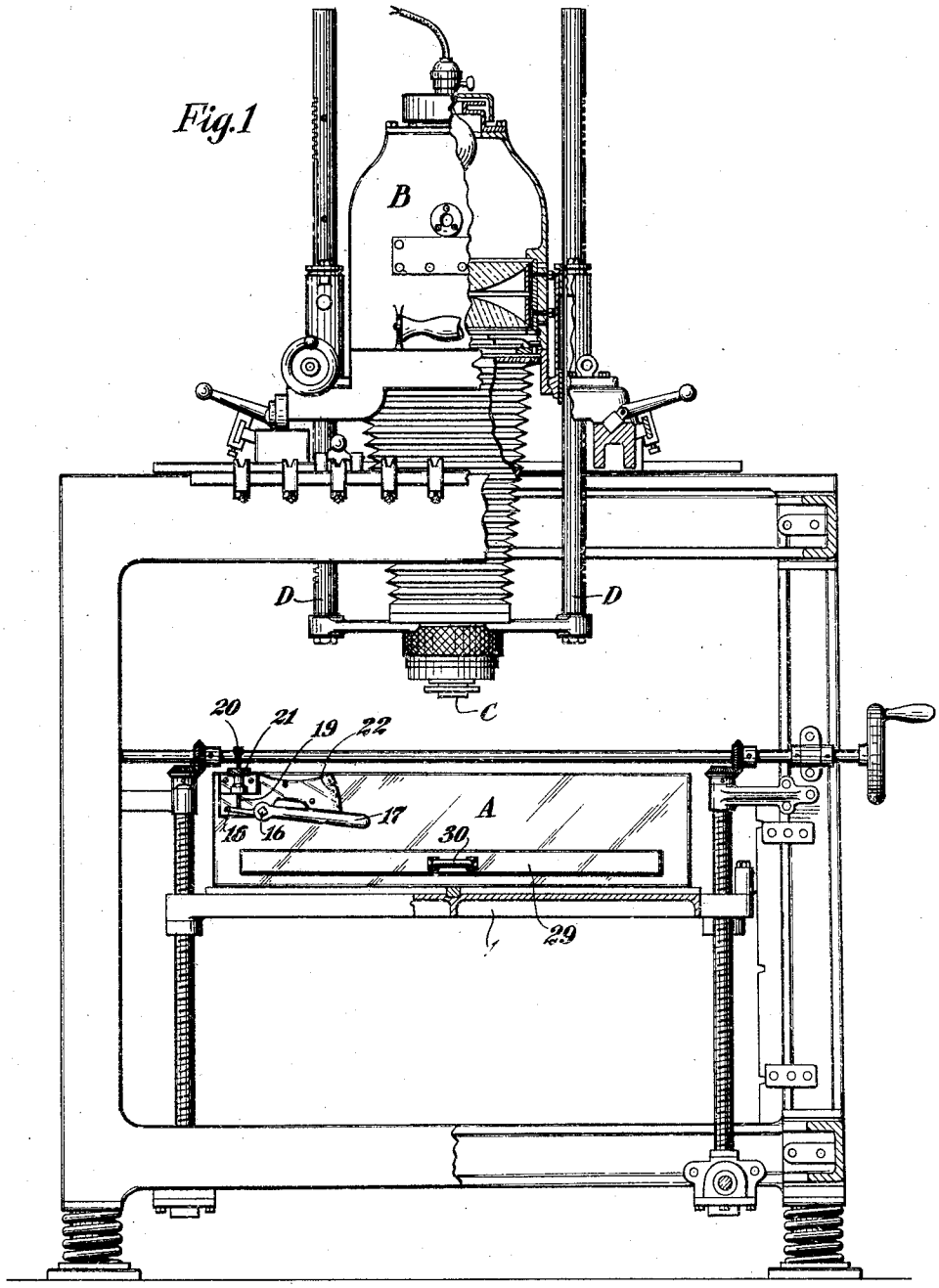
May 12, 1931. H. C. BOEDICKER 1,805,202

PHOTO COMPOSING SCREEN AND PLATE HOLDER

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Fig.1



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Fig. 2

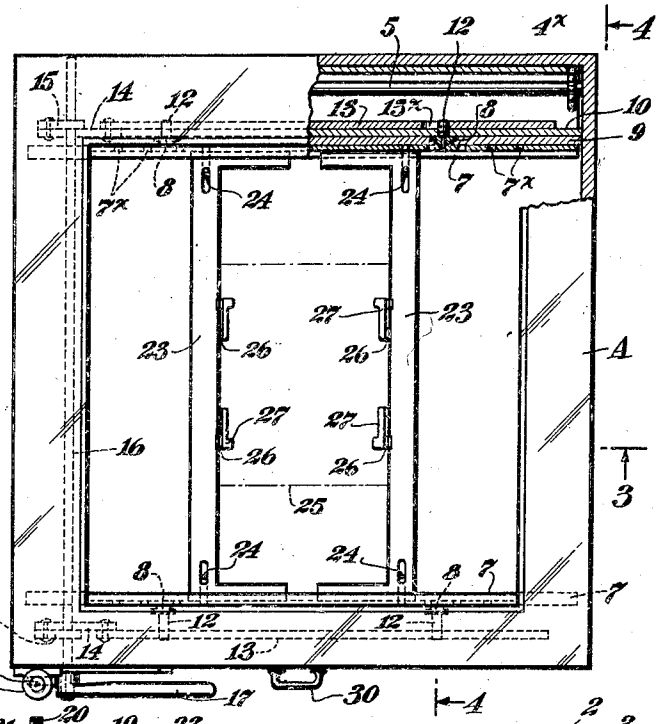


Fig. 3

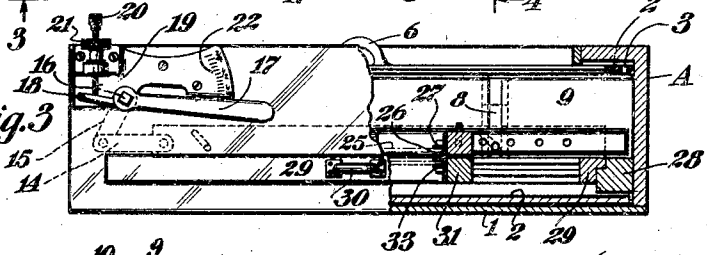


Fig. 4

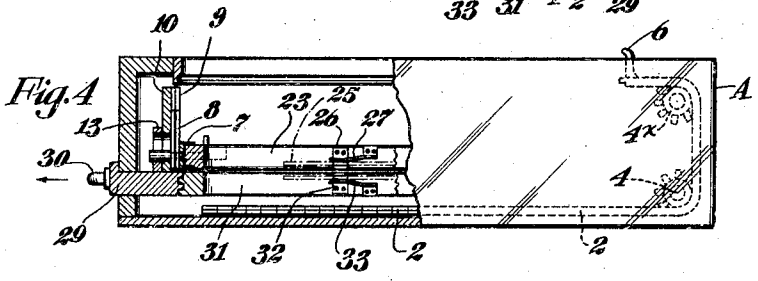
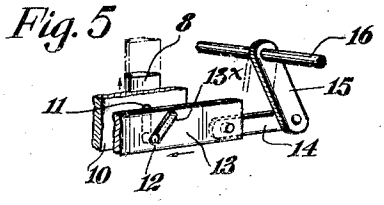


Fig. 5



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Patented May 12, 1931 1,805,202

UNITED STATES PATENT OFFICE

HERMAN C. BOEDICKER, OF NEW YORK, N. Y.

PHOTO COMPOSING SCREEN AND PLATE HOLDER

Application filed April 18, 1928. Serial No. 271,014.

The object of the present invention is to provide a sensitized plate holder for a photo composing machine of novel construction in that it comprises a frame having a vertically adjustable screen holder therein below an image opening which may be closed by a curtain or the like. Below the screen holder is a horizontally removable sensitized plate slide, one end wall of the same projecting through an aperture in the casing and provided with a handle for manipulation, the slide being provided with adjustable sensitized plate supporting bars.

The invention will be described with reference to the accompanying drawings in which—

Figure 1 is a plan elevation of a photo composing machine showing the improved sensitized plate holder in position;

Figure 2 is a plan view, partly in section, showing an embodiment of the invention;

Figure 3 is a front end elevation in section along the line 3—3, Figure 2;

Figure 4 is a side elevation of the holder, partly in section, along the line 4—4, Figure 2, and

Figure 5 is a perspective fragmentary view of the screen holder lifting means.

Referring to the drawings, Figure 1 illustrates the casing A of my improved plate holder mounted upon the adjustable supporting table 1 of a photo composing machine of the type subject of my application Serial No. 192,143 filed May 17, 1927. In the operation of the photo composing machine, an image carried on a plate supported by the projector B is projected through the lens C into a sensitized plate held within the casing A. The casing A is formed with side walls and a bottom wall 1, the top wall being apertured for the passage of the image. In order to close the casing aperture, a suitable curtain may be provided as for example the curtain 2, the latter comprising a plurality of slats mounted on a canvas or other flexible sheet, each slat at opposite sides thereof being formed with apertures 3 to receive the teeth of guiding pinions 4, 4^x, the pinions being carried by suitable shafts such as the shaft 5, Figure 2. The curtain may be provided with an operating handle 6 by means of which the curtain may be drawn forwardly to close the image opening or given a reverse movement as desired.

At opposite points within the casing are placed the U-shaped bars 7, each bar having secured thereto spaced vertical slides 8 adapted to move vertically within suitable slideways formed in cross plates of the casing, of which one plate 9 is shown in section, Figure 2, and in elevation, Figure 3. Plate 9 is a second casing plate 10 which at the two points opposite vertical slides 8 is formed with vertical guide apertures 11 for studs 12, which studs are carried by the slides. Each stud enters a cam aperture 13^x formed in a cam bar 13. Each cam bar is connected by a link 14 with a lever arm 15 fixed to a rock shaft 16, the rock shaft having an operating handle 17 exterior to the casing. Operating handle 17 carries a finger 18 which may be engaged by an adjusting screw 19 having a knurled thumb head 20 and a lock nut 21. Adjacent the handle is a scale indicated at 22. When the adjusting screw is turned downwardly it acts upon finger 18 to raise the operating handle and thus simultaneously move the cam bars to elevate the screen a distance which is denoted by the scale, as will be understood without further explanation. By lifting the handle, the screen may be quickly raised to its maximum degree so as to enable an adequate space intermediate the screen holder and members lying below the same.

Each U-shaped bar 7 is formed with a plurality of holes 7^x and the bars support opposed screen holding frame members 23 having slide pins 24 at their ends for engagement in the holes 7^x so that the bars may be held in the various positions to which they are adjusted for different sizes of screens, the position of the screen being indicated by the dotted lines 25. Each frame member 23 is provided with a plurality of supporting lugs 26 for the screen and above each lug is a spring latching member 27 to engage the upper surface of the screen.

Below the screen holder within the casing are parallel shouldered supporting bars (one being shown in Figure 3 at 28) to receive a

sensitized plate slide 29, the latter projecting through an aperture in the front wall of the casing and carrying a handle 30.

Each plate slide carries opposed plate holding bars 31, one bar being shown in section, Figure 3, the bars being grooved to correspond with tongues on the slide to permit the bars being adjusted toward and from each other for different sizes of sensitized plates. The sensitized plate holding bars are provided with lugs 32 and springs 33 for supporting a plate.

In the operation of the device, focus may be determined by placing in the sensitized plate slide a glass plate having a white coating on it, and thus capable of receiving and enabling definition of the image. The focus and size of the projected image may be then fixed by appropriate adjustments of the table 1 and/or the lens C, the latter being carried by vertical adjusting rods D, adjustable as described in my aforesaid application. The said focusing glass is then removed by pulling handle 30 outwardly and carrying the slide forward. Screen separation handle 17 having been swung upwardly, the focusing glass may be removed from the plate slide by an upward and outward movement without contact with the screen holder. The sensitized plate may then be placed in position and the slide then pushed back into operative position. When the exposing of the sensitized plate is completed, plate slide 29 may be moved outwardly, like the movement of a drawer in the desk, and the exposed plate may be lifted out. It is unnecessary for the operator to withdraw the entire slide but merely move the same outwardly far enough to enable the raising and edgewise movement of the sensitized plate, carrying it out of the casing. The plate may then be taken to the dark room and developed as customary.

For the reproduction of line drawings and other images not requiring a screen, the screen holder may, of course, be eliminated. In such form the device would merely include the casing with its image aperture and slide ways with the slide and its cooperative elements.

By casing I do not restrict myself to a member with continuous walls since the casing need not be of itself light-proof, and where the member A is of "skeleton" construction, that is to say is not formed with continuous walls, it may be covered with velvet or other light-proof cloth should shielding of a sensitized plate in the casing be necessary at any time.

Having described my invention what I claim and desire to secure by Letters Patent is as follows:—

1. In screen and plate holders for photographic composing machines, a casing having an image aperture, and an aperture for receiving a plate holding slide, a screen holder within the casing and in register with said image aperture, means operable from a point exterior the casing to advance and retract the screen holder, slide ways provided by the casing, a plate holder slide in said slide ways and projected through a said second aperture formed in the casing, and means carried by said slide for supporting a plate.

2. In screen and plate holders for photographic composing machines, a substantially rectangular casing having an image aperture and a second aperture at right angles thereto, slide ways contiguous to said second aperture, a rectangular plate slide in said slide ways and adapted to pass through said second aperture, adjustable holding means carried by said slide for supporting sensitized plates of various sizes, a screen holder carried by the casing above the plate slide and means for adjusting the screen holder toward and from the plate slide.

3. In screen and plate holders for photographic composing machines, a casing having an image aperture, and an aperture for receiving a plate holding slide, a screen holder within the casing and in register with said image aperture, means operable from a point exterior of the casing to advance and retract the screen holder, a plate holding slide within the casing and adapted to movement through said second aperture in a wall of the casing, and plate holding members carried by the slide and movable toward and from each other.

4. In screen and plate holders for photographic composing machines, a casing having an image aperture and at right angles therewith a second aperture, means within the casing and contiguous to said second aperture to afford a slide way, a drawer-like plate slide within the casing and supported by said slide way and adjustable plate holding means carried by said slide.

5. In screen and plate holders for photographic composing machines, a box-like casing having one major wall formed with an image aperture and having a wall at right angles therewith formed with a second aperture, means within the casing and contiguous to said second aperture to afford a slide way, a drawer-like plate slide within the casing and supported by said slide way and plate holding means carried by said slide and movable toward and from each other.

In testimony whereof, I have signed my name to this specification.

HERMAN C. BOEDICKER.