(No Model.) 2 Sheets—Sheet 1.

G. S. STREET.

FRAME FOR PRINTING PHOTOGRAPHS.

No. 263,242. Patented Aug. 22, 1882.

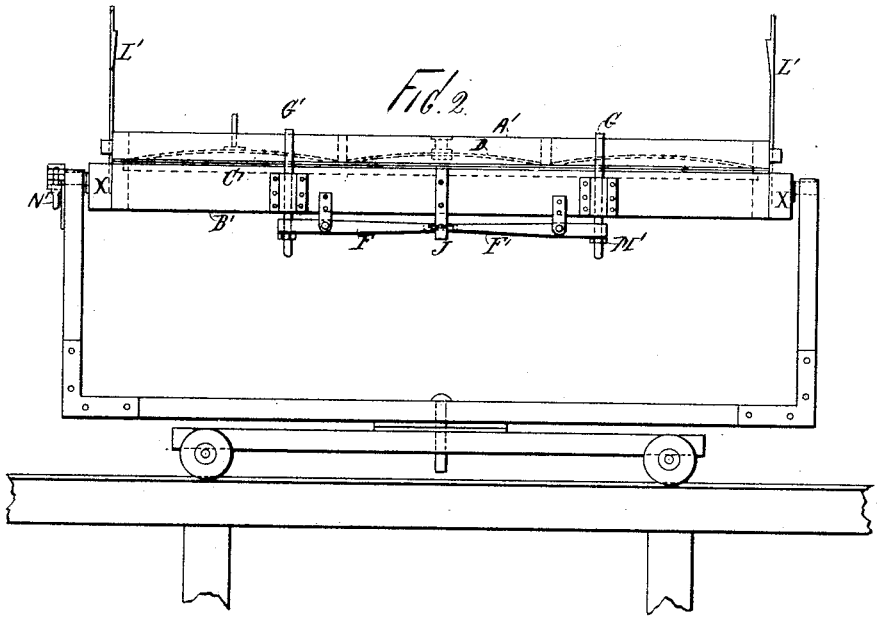

Fig. 2.

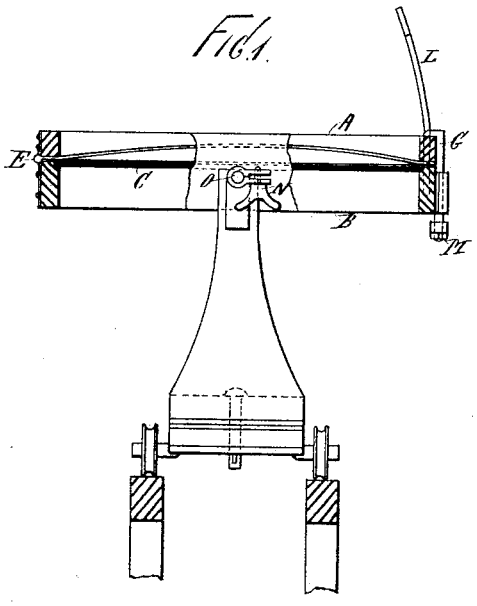

Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

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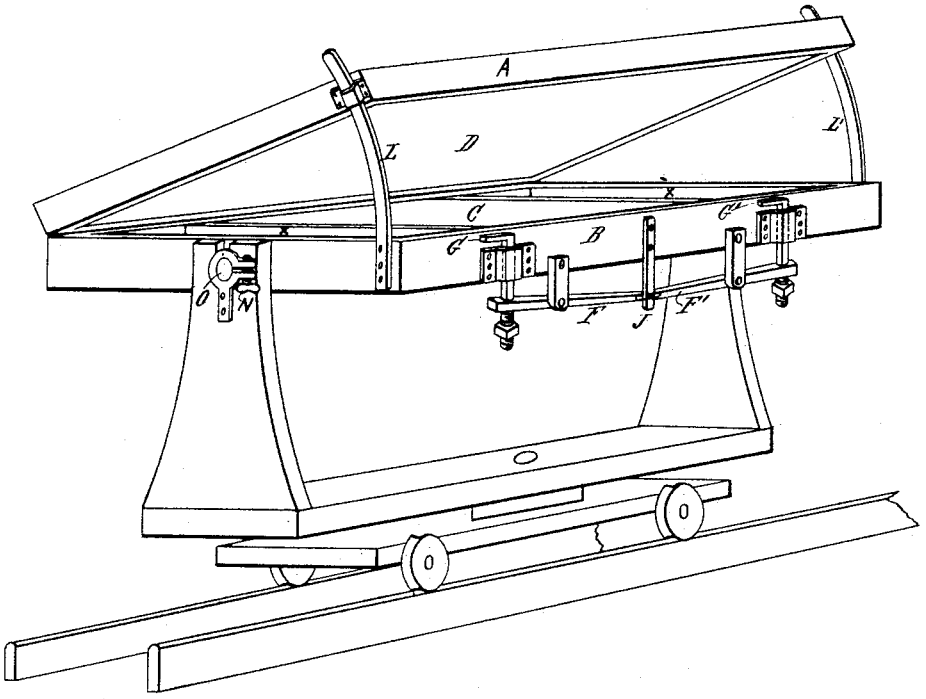
FIG. 3.



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UNITED STATES PATENT OFFICE.

GEORGE S. STREET, OF MONCTON, NEW BRUNSWICK, CANADA, ASSIGNOR OF ONE-THIRD TO F. W. RICHARDSON, OF TROY, NEW YORK.

FRAME FOR PRINTING PHOTOGRAPHS.

SPECIFICATION forming part of Letters Patent No. 263,242, dated August 22, 1882.

Application filed May 11, 1882. (No model.) Patented in Canada March 13, 1882, No. 14,355.

To all whom it may concern:

Be it known that I, GEORGE STOCKTON STREET, of the town of Moncton, county of Westmoreland, Province of New Brunswick, Canada, have invented certain new and useful Improvements in Frames for Printing Photographs, and more particularly for direct photography or blue printing; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings and this specification.

My invention relates to the means whereby the tracing cloth or paper is brought in contact with the glass. I effect this end by the application of an air-cushion in the place of cross-bars and set-screws as ordinarily used.

The advantages gained by the use of my invention are, first, the pressure applied is uniform and lessens the liability to break the glass; second, the pressure can be applied instantaneously; third, the apparatus is entirely self-contained, there being no parts which it is necessary to remove to accomplish the work in hand.

Figure 1 in the annexed drawings is a cross-section of the frame or press and carriage. Fig. 2 is a longitudinal elevation of the carriage and frame, the latter being turned edgewise with the glass downward; and Fig. 3 is a perspective view of the apparatus opened and ready to receive the drawing and printing paper.

In all these figures like letters of reference, wherever they occur, indicate corresponding parts.

There are two frames, A A′ and B B′, exactly the same size. One contains the glass, and to the other is secured the air-cushion. In Fig. 1 the glass is indicated by a heavy black line marked C, in Fig. 2 by the dotted lines marked C′, and is secured to the frame B B′ by pieces of tin let into the frame and bent over the glass. The frame B B′ is rabbeted to receive the glass, as shown.

The air-cushion D is formed of two sheets of rubber the same size as the frame A A′, and is nailed thereto. The joint between the sheets can be made in various ways.

The two frames A A′ and B B′ are hinged at the point E, Fig. 1, either with strap or butt hinges, but preferably with strap-hinges at intervals, the number depending on the size of the frame. On the opposite side of the frame I place a system of levers, as shown, and in such a manner that it is only necessary to fill the cushion once, after which the required pressure can always be obtained by the use of the levers F and F′.

The hook G is made in such a way that it will turn round and thus disengage with the frame A A′, and also drop down below the level of the glass, and thus allow of tracings and paper being easily put into and removed from the frame.

When the cushion is filled it is obvious that it will not come together at the front, and consequently, when drawn together by the hooks and levers, the pressure is greatly augmented. Figs. 1 and 2 show the frames drawn together and the pressure on, the levers F F′ being held in position by the spring J, which has a shoulder that catches on the under side of the levers. Now, if the levers F F′ are released, the cushion will rise as far as the hooks G G′ will permit, and to disengage them entirely it is necessary to give them a quarter-turn. The cushion-frame is then free to rise to such a height as to enable the operator to easily remove or place his subject to be printed. The frames are held apart by the quadrant L L′, which has a spring thumb-catch. The adjustment of the levers is effected by the nuts M M′. The frames are prevented from swinging on the stand by the clamp-screw N N′ in connection with the pivot O.

The cushion may be filled by a pair of small bellows, an air-pump, or a small blower, the pressure required being very small. The cushion can be easily filled by simply blowing with the mouth through a suitable pipe. I sometimes apply a safety-valve to the cushion to prevent the application of too great a pressure.

At either end of the frame containing the glass I place a box marked X X, Fig. 2, for the purpose of holding tracings, which are more than the length of the printing-frame, and have to be printed in sections. On each box there is a lid or cover.

For the smaller sizes of printing-frames I do

not use the combination of levers and quadrant, but simply press the two frames together by hand and secure them with a catch-spring.

I claim as my invention—

1. The combination of the upper and lower sections, hinged together as explained, one section carrying the glass plate or panel and the other carrying an elastic air-cushion, and levers for forcing and locking the two parts together, substantially as shown and described.

2. In a printing-frame mounted upon trunnions and adapted to revolve, substantially as explained, the combination, with the section carrying the glass plate or panel, of the second section, hinged thereto and having the attached air-cushion, substantially as shown and described.

3. The combination of the two sections A and B, the levers F F′, the hooks G G′, and the spring J, substantially as shown and described.

4. In a printing-frame having the two sections or parts hinged together and mounted upon trunnions and adapted to revolve, substantially as explained, the combination, with the section carrying the glass plate or panel, of the boxes at each end of said section for holding the projecting portions of the material being printed from or on, substantially as and for the purposes explained.

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