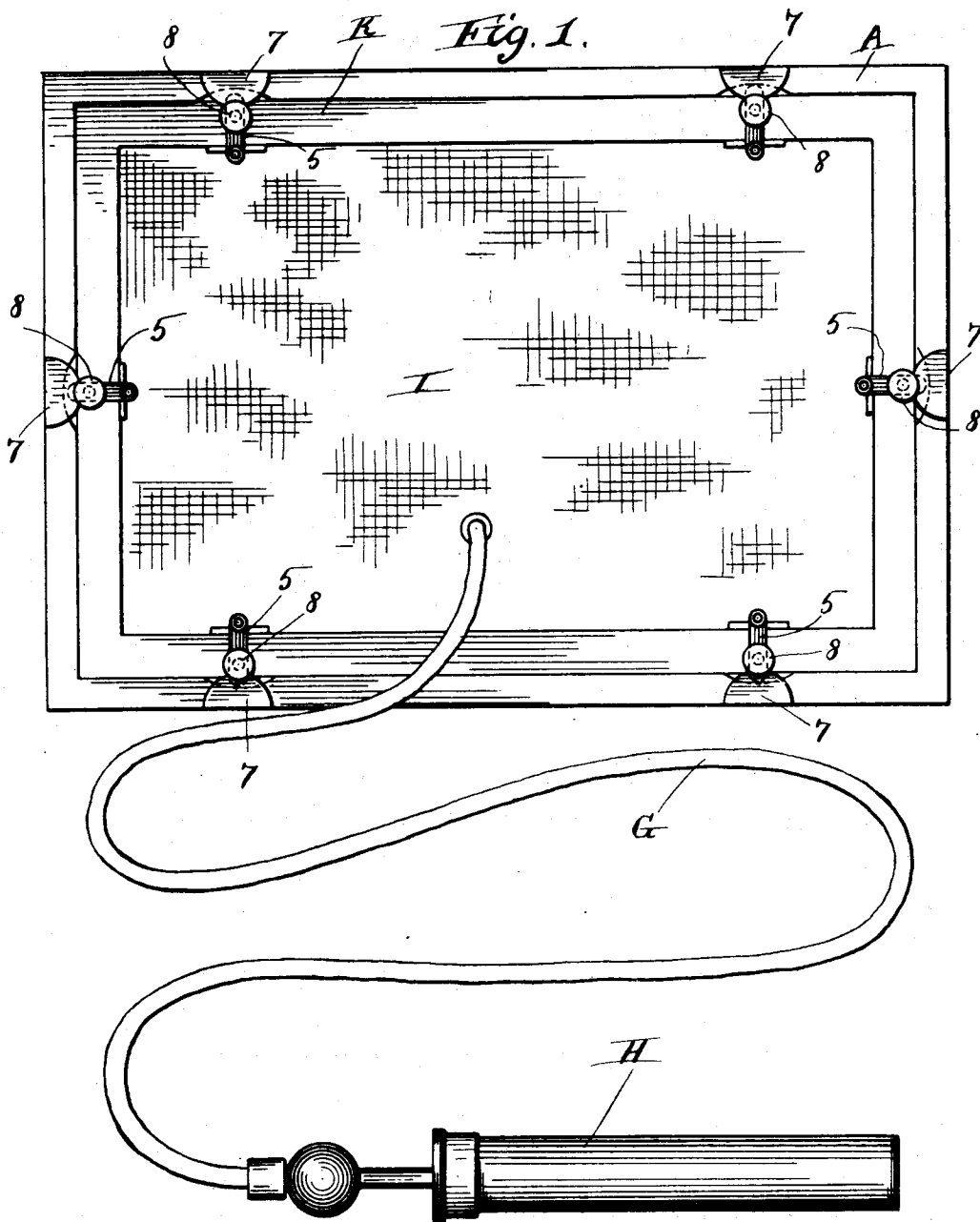


E. W. McCASLIN.  
PHOTOGRAPHIC PRINTING FRAME.

(Application filed May 15, 1901.)

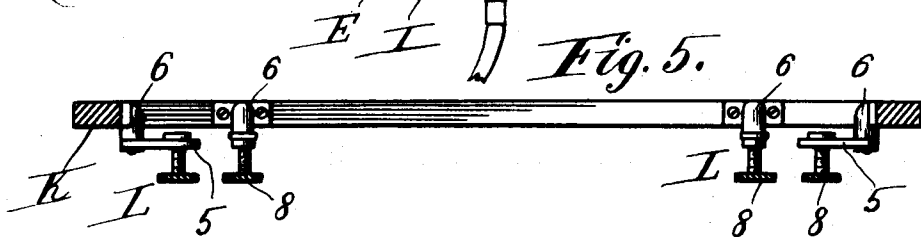
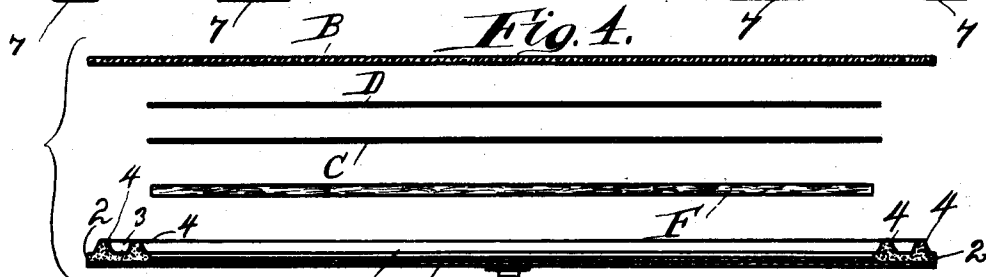
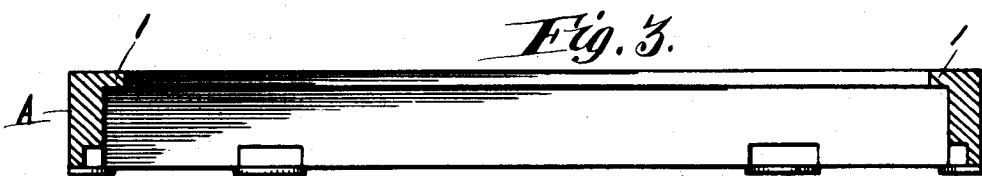
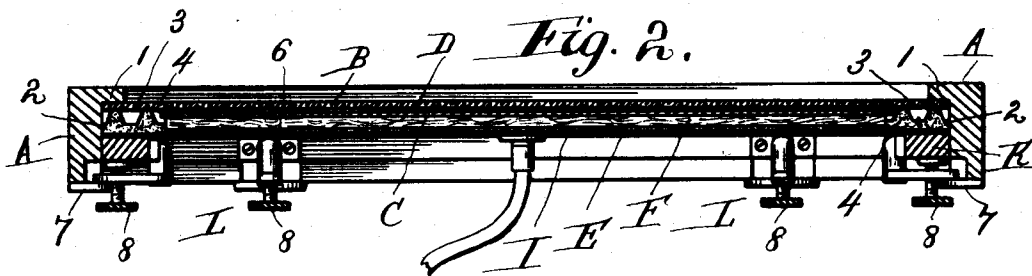
(No Model.)

3 Sheets—Sheet 1.



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*Ottile C. Trubey*

*Inventor:*  
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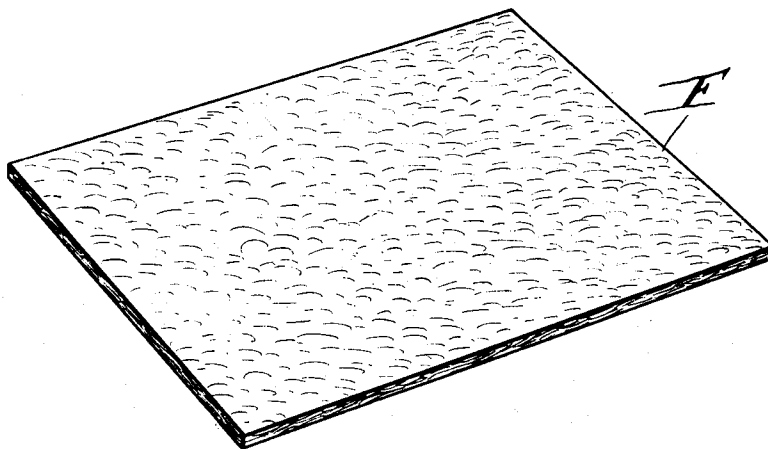
E. W. McCASLIN.  
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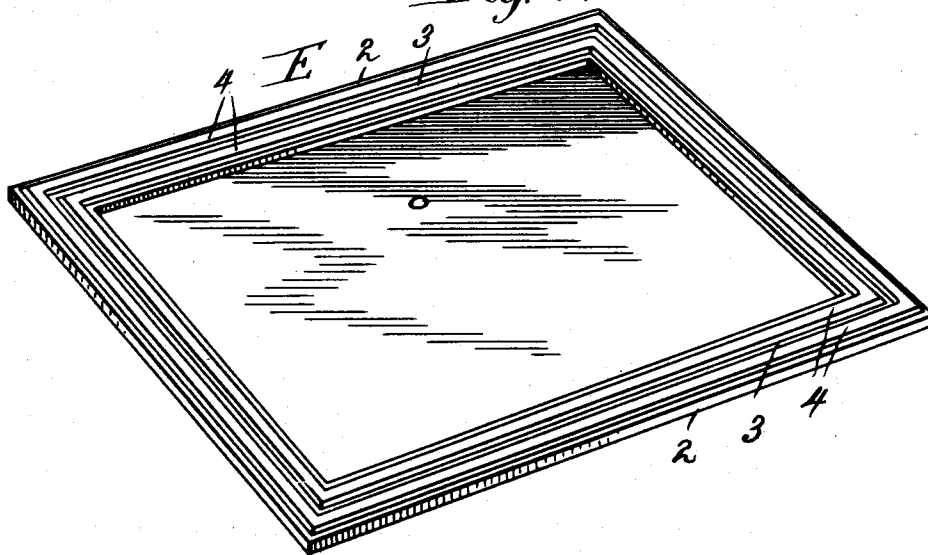
(No Model.)

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*Fig. 6.*



*Fig. 7.*



*Witnesses:*

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*by Chas. E. Page Atty.*

# UNITED STATES PATENT OFFICE.

ELTON W. McCASLIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO MORGAN & WRIGHT, OF SAME PLACE.

## PHOTOGRAPHIC-PRINTING FRAME.

SPECIFICATION forming part of Letters Patent No. 683,059, dated September 24, 1901.

Application filed May 15, 1901. Serial No. 60,381. (No model.)

*To all whom it may concern:*

Be it known that I, ELTON W. McCASLIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Photographic-Printing Frames, of which the following is a specification.

My invention relates to photographic-printing frames particularly adapted for the production of blue-prints and involving means for exhausting air between a mat and a glass plate, so as to cause the mat to smoothly and evenly clamp the drawing and printing-paper between the mat and the glass.

The object of my invention is to provide an improved construction of mat and to prevent leakage between the mat and the glass plate.

In the accompanying drawings, Figure 1 is a bottom view of a pneumatic-printing frame involving my invention, means for exhausting the air being also illustrated. Fig. 2 is a section taken transversely through Fig. 1. Fig. 3 is a like view of the main frame. Fig. 4 illustrates the glass plate, printing-paper, a drawing, a pad, and the mat in section. Fig. 5 is a section through the clamping-frame. Fig. 6 shows the pad in perspective, and Fig. 7 is a like view of the mat.

The main frame A is provided with an inner ledge 1, against which the glass plate B is arranged to fit. For the purpose of making blue-prints the printing-paper C and the drawing D are arranged between the glass plate and a mat E. The mat E is made of rubber or equivalent rubber composition and is molded or otherwise formed with a marginal head or molding 2, having one or more continuous longitudinal channels 3, which provide it with elastic ribs 4, adapted and arranged to bear against the under side of the glass plate, and thereby hermetically seal the space between the glass plate and the portion of the mat which is bounded by its marginal

head or molding. The arrangement of this head or molding provides the mat with a shallow space which is filled with some suitably porous pad F, such as felt or the like, which said pad provides a backing for the drawing and printing-paper. A flexible tube G connects with an aperture through the mat and is also connected with a suitable exhaust-pump H, whereby air can be exhausted from between the mat and the glass plate. The mat can be backed with a layer I of fabric, if desired, and the marginal portion of the mat is clamped against the glass plate by a clamp-frame K, which is forced against the mat by clamping devices L, consisting, for example, of swinging arms 5, pivoted to brackets 6 on the clamp-frame and arranged to be swung under the edge portions of plates 7 on the main frame, the said swinging arms being provided with set-screws 8, which can be tightened down upon the clamp-frame when the arms are under and in engagement with the plates 7 on the main frame. By thus tightening the set-screws against the clamp-frame the latter can be forced against the mat, and since the ribs of the molding or raised marginal portion of the mat engage the glass plate with a yielding spring resistance the space occupied by the pad, the drawing or copy, and the printing-paper will be hermetically sealed.

What I claim as my invention is—

A pneumatic-printing frame comprising a glass plate; a main frame; a rubber mat having its marginal portion provided with raised elastic ribs adapted to engage the glass plate; a pad arranged within the space which is surrounded by the raised ribs of the mat, and means for clamping such marginal portion of the mat against the glass plate.

ELTON W. McCASLIN.

Witnesses:

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