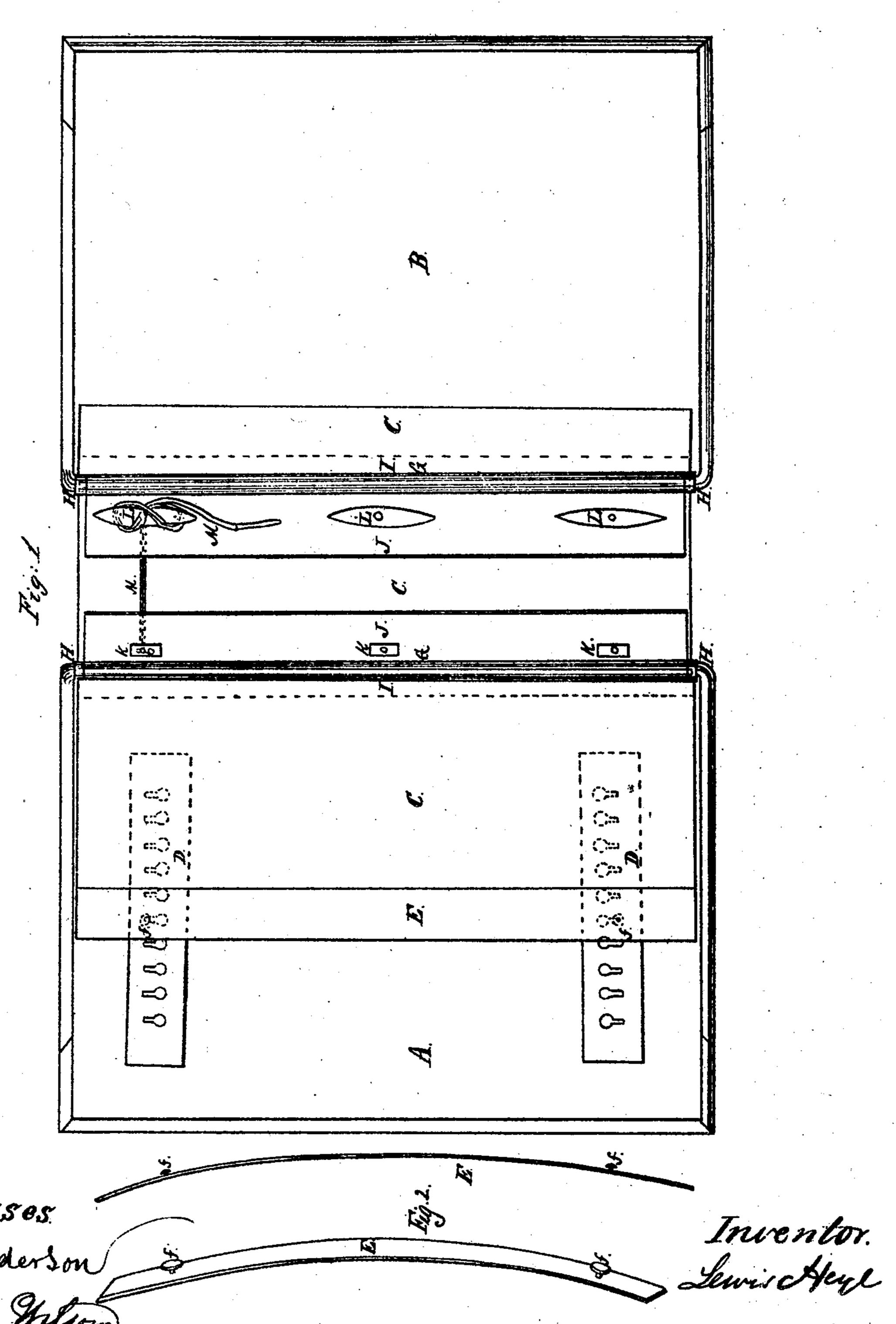
No. 53,299.

PATENTED MAR. 20, 1866.

L. HEYL. PORTFOLIO.



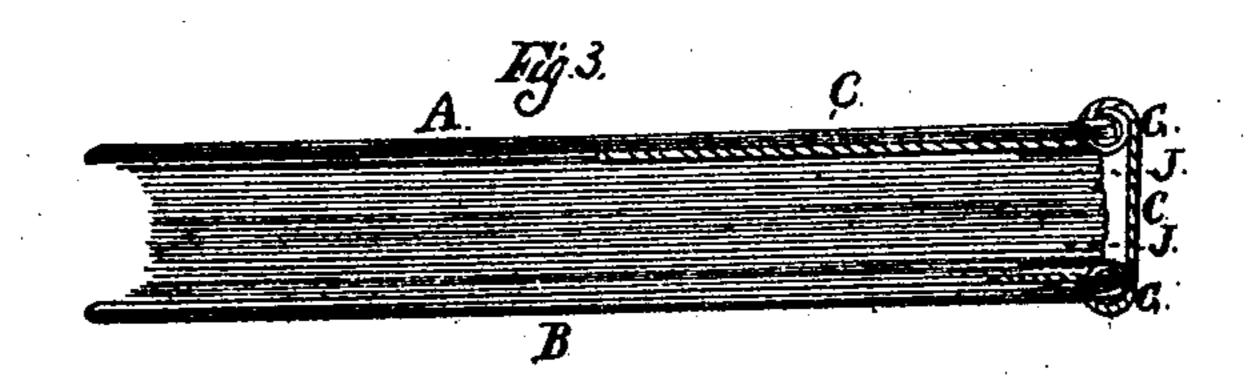
Witnesses. B. B. Anders.

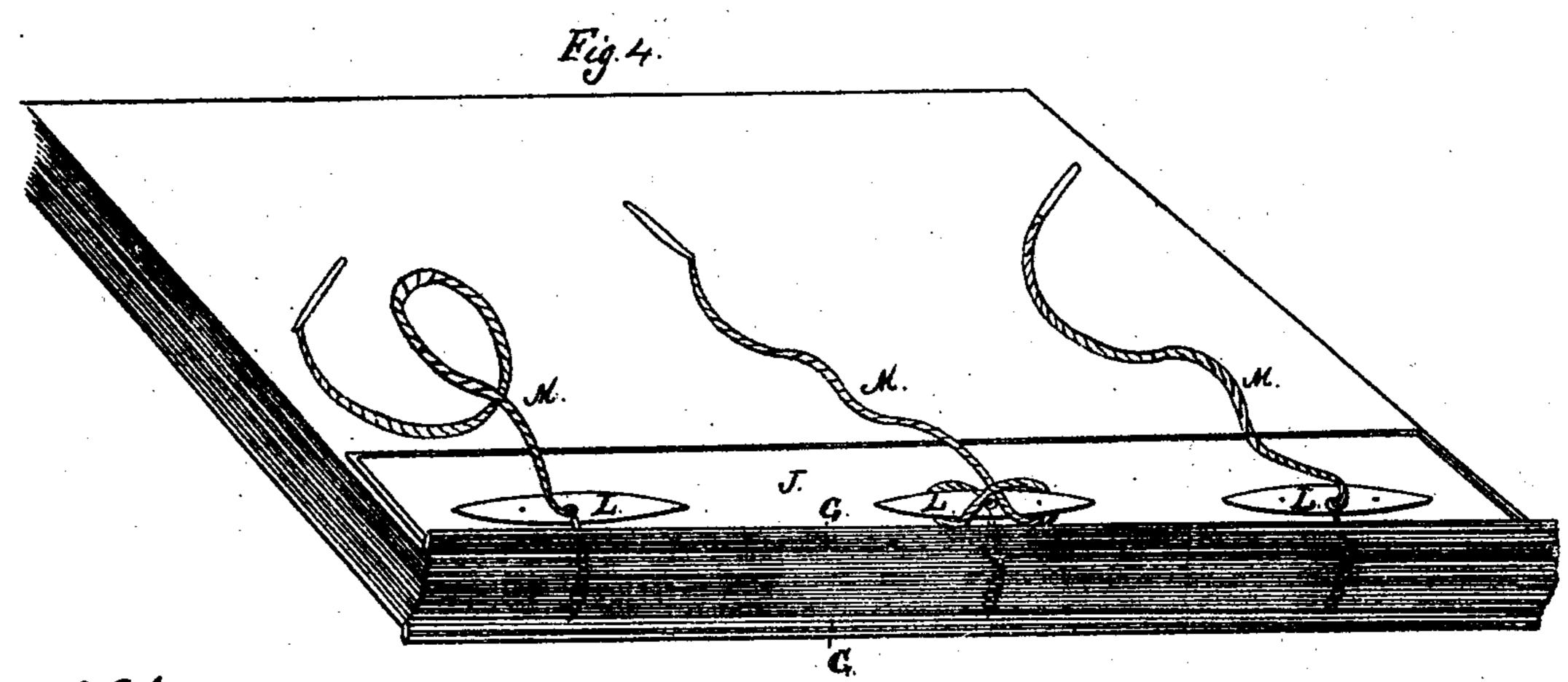
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2 SHEETS-SHEET 2.





Retnesses. & BAnderson & Chilson Inventor Lewis Heyl

## United States Patent Office.

LEWIS HEYL, OF PHILADELPHIA, PENNSYLVANIA.

## PORTFOLIO

Specification forming part of Letters Patent No. 53,299, dated March 20, 1866.

To all whom it may concern:

Be it known that I, LEWIS HEYL, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Portfolio; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, all of which are made part of this specification, and in which-

Figure 1 is an interior view of a portfolio in an open condition, illustrating my invention. Fig. 2 is a side or edge view of the metal spring represented in Fig. 1, (marked E.) Fig. 3 is an end view of the portfolio and sheets or leaves bound in it. Fig. 4 is a perspective view divested of the covers, and exhibits the mode of binding the sheets or leaves in the portfolio.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention (which is an improvement of the portfolio heretofore invented by me, and upon which Letters Patent of the United States were granted me on the 6th day of September, A. D. 1864, and to which original patent, with the specifications on file in the Patent Office, reference is also hereby had) is to provide in a more perfect form a portfolio which may by means of a simple contrivance be adapted to contain any desirable number of sheets, either many or few; and, in order to thus render the portfolio capable of conforming to various quantities which it is to inclose, I employ a back piece in a novel manner, so that it may be extended or let out and drawn in or contracted in such a way as to increase or diminish its width between or at the back of the two leaves or side covers of the portfolio, and be securely adjusted in any desired position, as will be hereinafter fully explained.

In order that others skilled in the art to which my invention appertains may be enabled fully to understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A B represent the respective leaves or side covers of a portfolio, which may be made of any suitable material and of any desired dimensions.

GG are metal tubes, turning upon metal pivots or tongues HHHH, which are securely attached to the leaves or side covers, A B, so as to leave narrow spaces (marked II) between

the tubes and edges of the said leaves or side

C C C is the back piece or strap, of leather or other suitable material, the office of which is, principally, to serve as a connecting medium between the two leaves or side covers of the portfolio, and at the same time to constitute part of the inclosure. It is manifest that if this back piece were permanently affixed at each side to the leaves or side covers of the portfolio the latter would only be capable of containing in its fullest capacity a certain quantity, which would be regulated by the width of the back piece, or rather the distance which it would allow the leaves of the portfolio to be separated at the back. When the back piece is thus permanently attached even a diminution of the quantity or number of sheets to be inclosed has the effect to impair the appearance of, if not to injure, the portfolio, inasmuch as when the two leaves are not held sufficiently far apart to draw the back piece taut a wrinkling or crimping of the latter is induced, which greatly hastens its destruction.

To obviate these objectionable features, which are observable in portfolios in use previous to my invention, I arrange and employ the back piece or strap, C C C, in such manner that its width between the leaves A B may be varied, in order that it may be made to conform to any quantity of sheets that may be placed within the portfolio, as will be understood from the following: To the inner side of the leaf, B, and near its edge, the back piece, C C C, is securely and permanently fastened. Thence the said back piece is extended through the space I' at the edge of the leaf B, behind both the tubes G G, and along the inner side of the leaf A, through the space I, and is continued until its width (in the direction indicated) is such as to adapt it for use in connection with the largest quantity of sheets it may be desired to inclose. This extended end of the back piece, C C C, is provided with a metallic spring, E, curvéd, as shown in Fig. 2, and having very small staples ff, which enter the heads of the apertures in the metallic plates D D, and are by the straightening and consequent extension of the spring pushed into the narrow parts or necks of the apertures and held tightly. The metal plates D D are firmly secured to the leaf A by rivets or otherwise, a slight groove being taken from the inner side

of the leaf under the said apertures to admit the staples ff. The adjustment of the spring E produces a corresponding variation in the width of that portion of the back piece, C C C, which constitutes the back proper and occupies a position between the approximate connected ends of the leaves. It will at once be seen that the width of the back proper may be increased or diminished by the adjustment of the spring to the apertures corresponding with the desired width. The staples ff are easily withdrawn from the apertures by simply lifting or bending upward the center of the spring E.

In order that the sheets may be conveniently bound in the portfolio, narrow flaps of cloth or other suitable material are firmly fastened to the tubes G G, turning with them, and marked in the drawings J J. Cords or binding-strings, (marked M,) tipped with metal at one end and knotted at the other, are drawn through small metallic plates K K K in the flap J and through the apertures in the center of the cleats L L L in the flap J', and tied, substantially as shown in the drawings. These cleats are of metal, and are riveted or other-

wise fastened to the flap.

The papers or sheets to be inclosed or bound

in the portfolio may be fastened within the same and to each other by means of the said cords M M M and of the devices for which I obtained Letters Patent October 13, 1863, known as "Heyl's binding-tags," or in any other suitable manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The arrangement of the movable tubes G G at the edges of both leaves of the portfolio, as and for the purpose set forth.

2. The spring E, having the buttons or staples ff, in combination with the plates D D, as and

for the purpose set forth.

3. The cleats L L L, as above described, and adapted to portfolios, in combination with the binding-strings M M M, the said cleats having an aperture in their center to admit of the passage of the said binding-strings, as shown and described, and for the purpose set forth, for the proper and convenient fastening of the said strings.

LEWIS HEYL.

Witnesses: DARIUS LYMAN, GEO. F. DRIGGS.