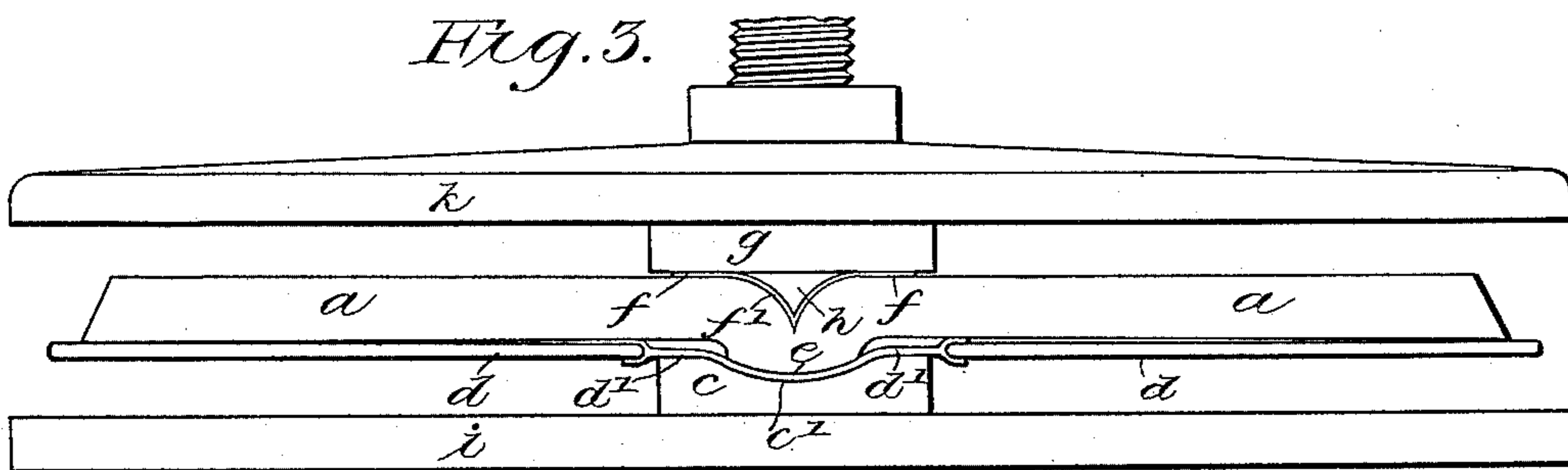
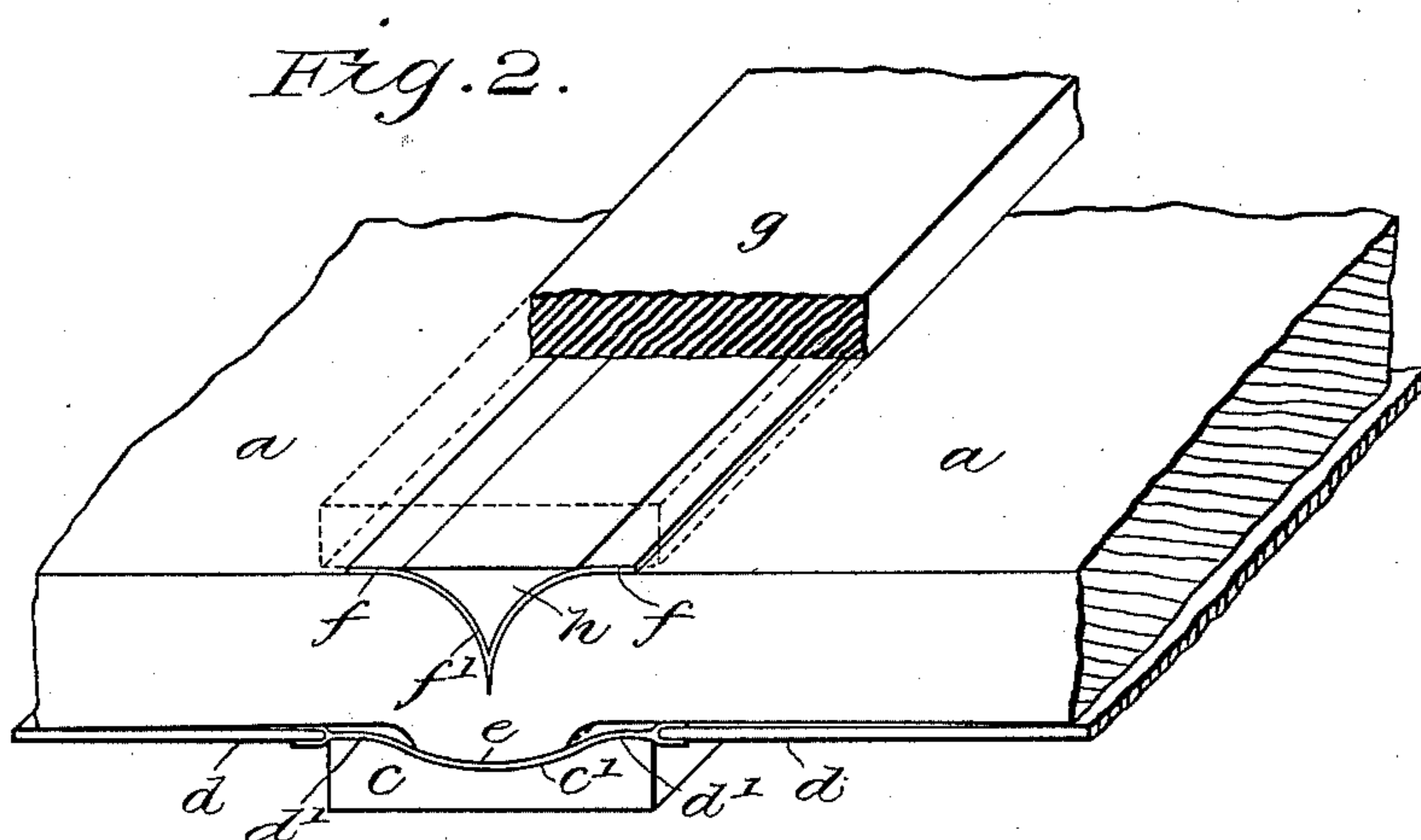
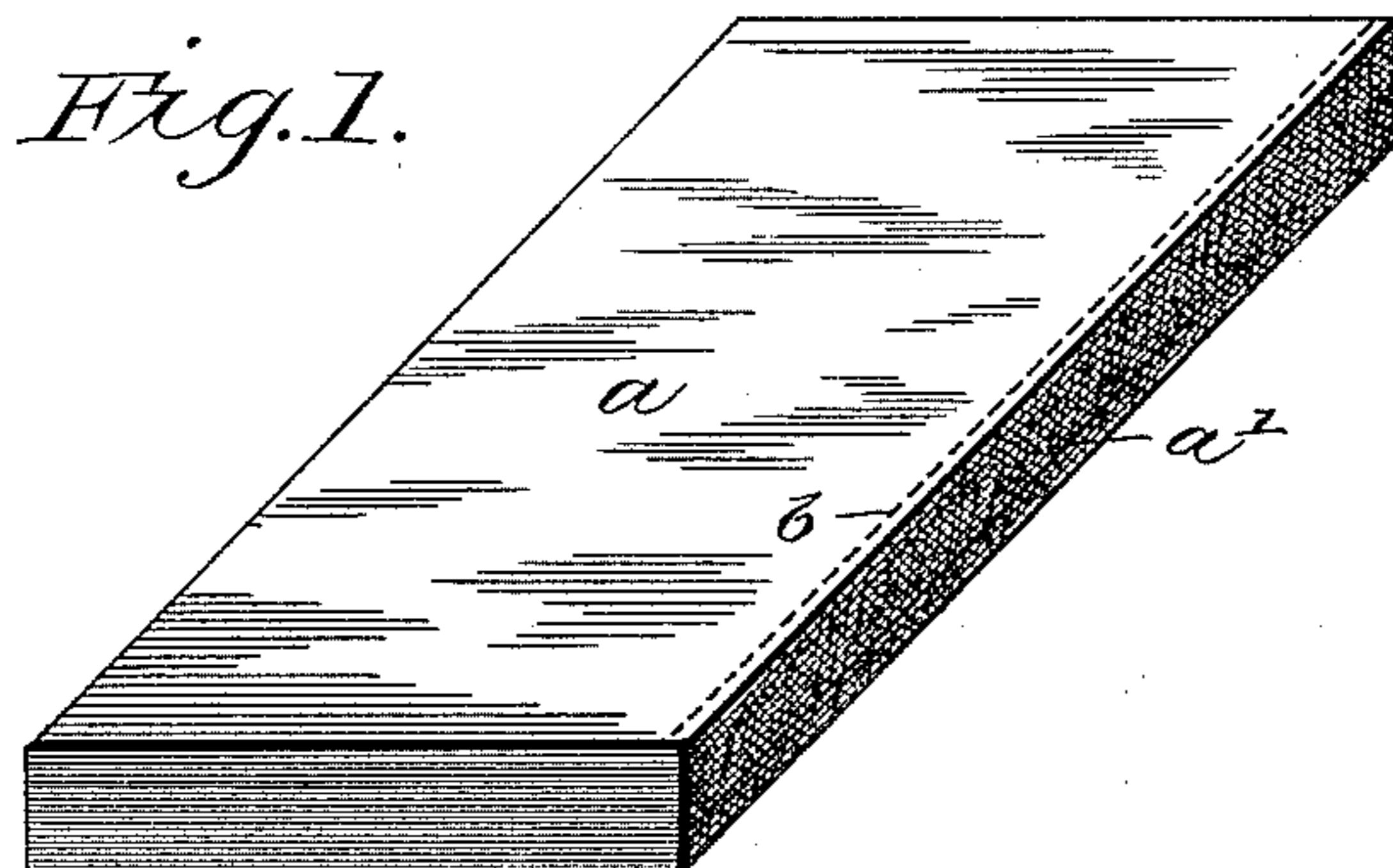


(No Model.)

L. BAILEY.
BOOK BINDING.

No. 462,027.

Patented Oct. 27, 1891.



WITNESSES

Wm. Musser,
Arthur B. Jenkins,

INVENTOR

Leonard Bailey.
by *Simonds & Burdett*
Attorneys

UNITED STATES PATENT OFFICE.

LEONARD BAILEY, OF WETHERSFIELD, CONNECTICUT.

BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 462,027, dated October 27, 1891.

Application filed January 30, 1891. Serial No. 379,656. (No model.)

To all whom it may concern:

Be it known that I, LEONARD BAILEY, of Wethersfield, in the county of Hartford and State of Connecticut, have invented certain
5 new and useful Improvements in Book-Binding, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

The principal object of my invention is to
10 provide a copying-book such as is used for taking press copies of letters or other written matter, the book being so made as to particularly adapt it to withstand the severe usage to which such a book is put in copying.

15 To this end my invention consists in the method of binding the book, and in the details of such method, as more particularly hereinafter described, and pointed out in the claims.

20 Referring to the drawings, Figure 1 is a perspective view of a mass of leaves showing one step in the process of my invention. Fig. 2 is a detail perspective view, on enlarged scale, of the book and devices used in
25 the process of binding. Fig. 3 is a detail view in end elevation of the book shown in the press.

In the accompanying drawings, the letter
30 *a* denotes a mass of leaves that are arranged in a pile of desired thickness depending on the number of leaves to be used in the book, and one edge *a'* of this mass is trimmed straight and glued or secured along the trimmed edge. A strip of cloth or like ma-
35 terial is then glued along the back edge *a'*, and a lining *e* of cloth or like suitable material is glued to the back of the mass and extends so as to form a lining for the covers. The mass of leaves is then sewed through
40 and through, preferably with wire, as near the back edge as possible, but thread or other material than copper wire may be used for sewing, if desired.

A form *c*, consisting of a strip of material
45 of a width greater than the thickness of the book is prepared with its upper surface hollowed out to form a recess *c'*, in which the back of the book rests in the process of binding. On this form *c* the cover *d* of the book
50 is placed opened out, as shown in Figs. 2 and 3 of the drawings, and the mass of leaves is

fastened, as by glue, along the back and a short distance on each side of the portion *d'*, that may be called the "hinge," this hinge
being made preferably of leather or like tough 55 and flexible material, to which the stiffer covers are secured in any convenient way, usually by means of glue. This hinge is considerably wider than the mass of leaves *a* is thick, and the mass, after the back edge has
60 been smeared with glue, cement, or like adhesive material, is placed upon it as near as possible in the center upon the cover, the central line of the mass of leaves being located along the central line of the back of the cover. 65
After the mass *a* of separate leaves has been stitched along the back edge, as described, the whole is cut to the desired size and shape by trimming the remaining three edges of the mass by any ordinary means. When this 70
trimmed mass has been opened out in the manner described and placed on the covers that are located on the form, a shield *f* of suitable stiff material, preferably metal, as tin, having a V-shaped groove *f'* along its 75
length, is then placed upon the mass of leaves, as shown in Figs. 2 and 3 of the drawings, and a thick strip *g* of elastic material, as india-rubber, is laid over the shield, the V-
80 shaped groove in the shield being filled by a strip *h*, either of metal secured to the shield or of other comparatively rigid material, the object being to provide a flat upper surface for the shield, so that pressure may be brought
85 directly upon the mass of leaves in that part that is held between the shield and the form. The book in this form, with the binding device in place, is described as closed between the bed *i* and platen *k* of a press, and a sufficient pressure exerted upon it to firmly unite 90
the back edge of the leaves and the cover of the book. The lining-strip is usually glued to the inside of the cover for a short distance beyond the edge in this step in the process, and after the book has been removed from 95
the press the remaining portion of the lining is glued to the cover, as when the book comes out of the press it is all formed, the lining only remaining to be glued in. In this press described the shield may be of any conven- 100
ient material, but a smooth-surfaced metallic shield is preferred, so that the leaves may be

securely held to shape between the shield and the form without creasing or wrinkling. It is preferred that the strip *g* overlying the shield should be of elastic material, as the best results have been found to accrue from the use; but the specific form, shape, and material of the several parts used in the above-described process is not material, the main feature being the improved method of binding the book by securing the cover to the leaves when the mass of the latter is opened out, as described.

This process of binding produces a book each leaf of which is separate and so secured as to prevent it from being completely removed or drawn out from the mass, and the book is extremely flexible and the covers so united to the mass as to allow a number of sheets of copying-board and pads to be used without injuring the binding or loosening the hold between the mass and the cover. The book is also capable of being opened out flat and remaining open at any desired point.

I claim as my invention—

1. The improved method of binding books, that consists in securing a mass of leaves together along one edge, then placing the book and central portion of the cover in a recessed form, then opening out the mass of leaves with the back located along the back portion

of the covers placed in the form, then subjecting the book and cover while opened out to pressure, and firmly uniting the two by a layer of glue or cement applied to the parts in contact, all substantially as described.

2. The improved process of binding a book, that consists in securing a mass of leaves together along one edge, then treating this edge with glue, then placing the cover of the book upon a recessed form, then opening out the mass of leaves about in their center, then placing a shield with a V-shaped projecting ridge upon the mass of leaves along the opened parts, then overlying the shield with a strip of elastic material, and then subjecting the parts to pressure, all substantially as described.

3. The improved method of binding a book, that consists in securing a mass of leaves together along one edge and then securing the cover and the mass of leaves together by pressure upon the parts placed in contact while the mass of leaves is opened out, all substantially as described.

LEONARD BAILEY.

Witnesses:

WM. MUSSER,
A. B. JENKINS.