

(No Model.)

L. BRAINARD.
BOOK BINDING.

No. 409,824.

Patented Aug. 27, 1889.

Fig. 1

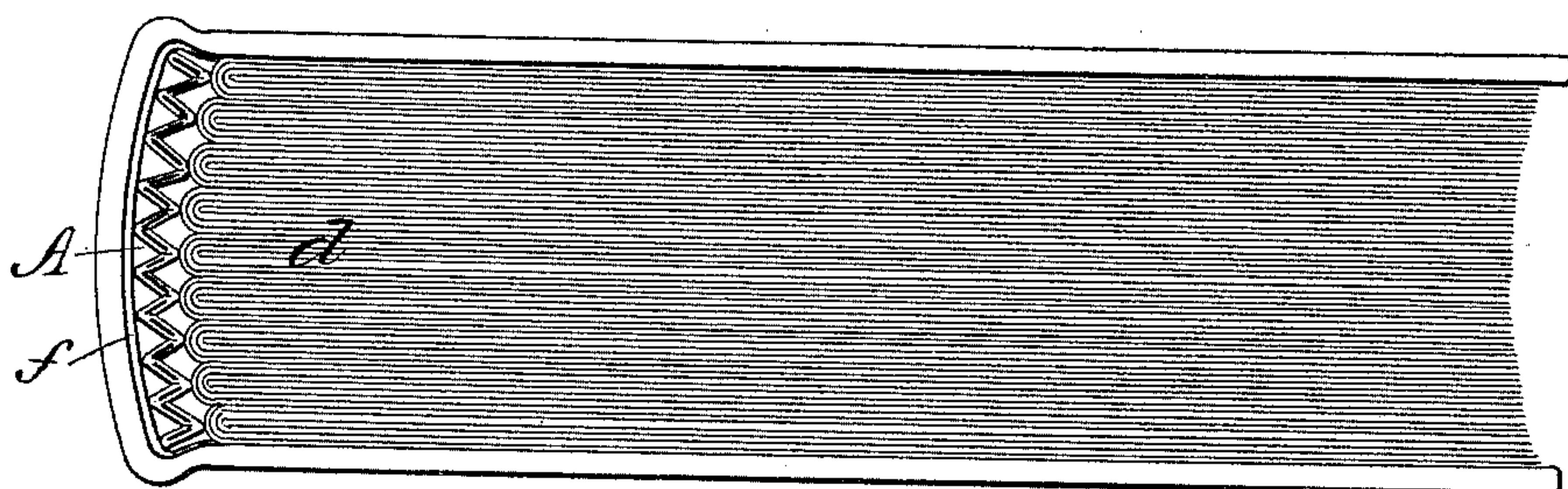


Fig. 2

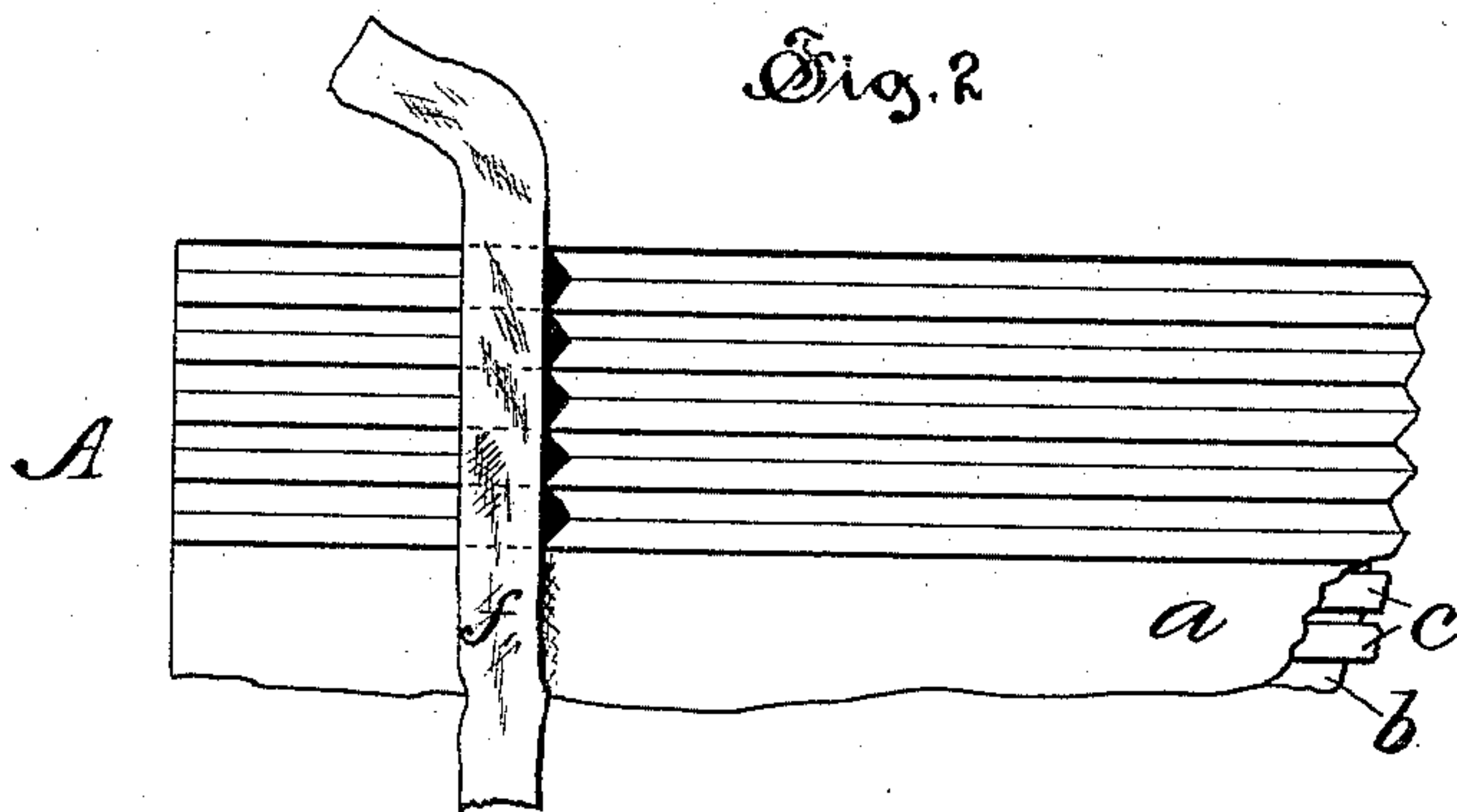
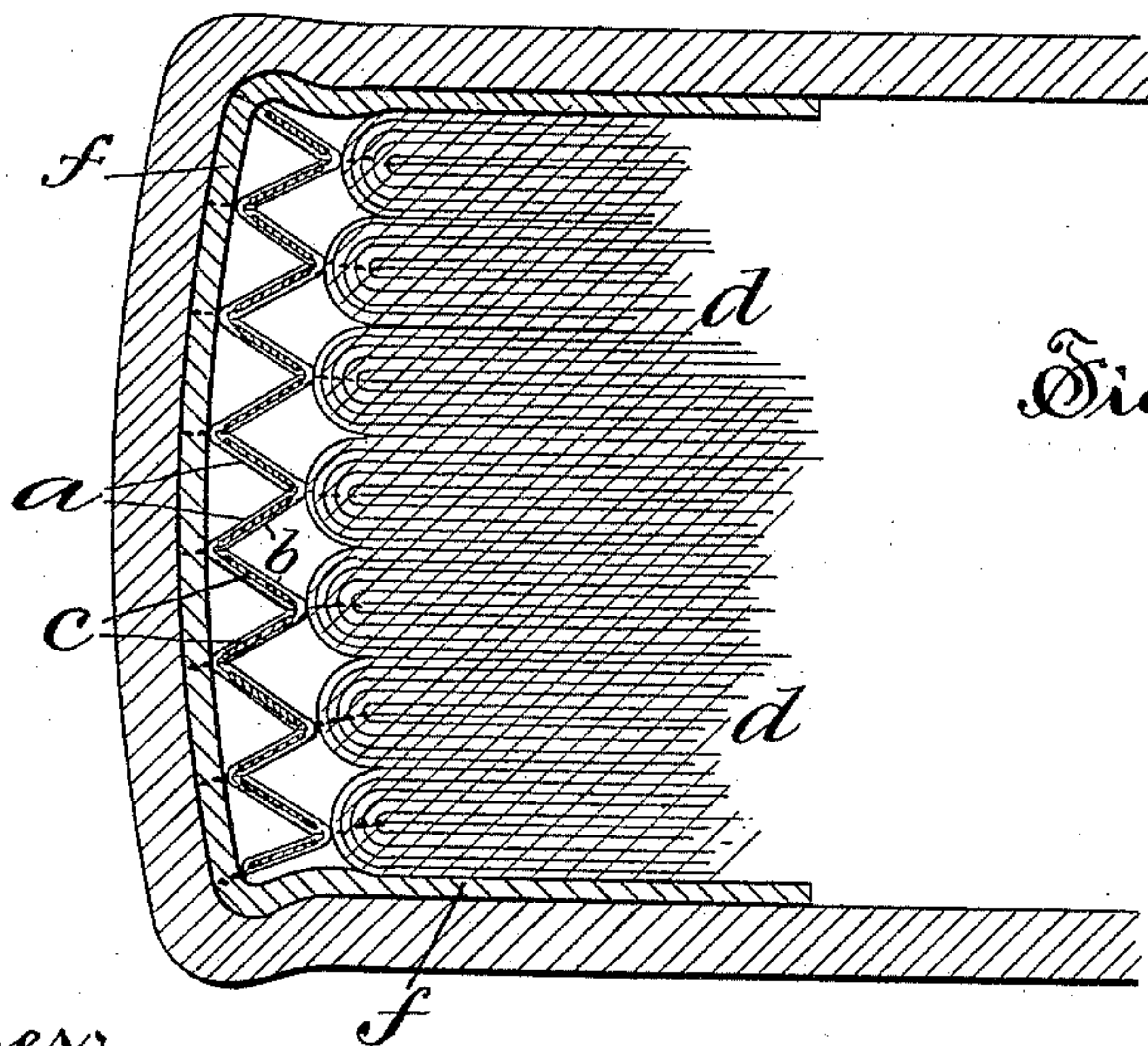


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

LEVERETT BRAINARD, OF HARTFORD, CONNECTICUT.

BOOK-BINDING.

SPECIFICATION forming part of Letters Patent No. 409,824, dated August 27, 1889.

Application filed January 7, 1889. Serial No. 295,604. (No model.)

To all whom it may concern:

Be it known that I, LEVERETT BRAINARD, of Hartford, Connecticut, have invented certain new and useful Improvements in Books, of which the following is a specification.

My invention relates to the class of books which are so bound that the leaves will lie flat at whatever page the book is opened, the object being to so construct the fan-shaped stub-strip that it will be very firm and stiff, and yet can be easily sewed to the signatures and form a strong flexible joint between them.

Referring to the accompanying drawings, Figure 1 is an edge view of a book embodying my improvement. Fig. 2 is a detail view of a portion of the stub-strip. Fig. 3 is a detail view, on an enlarged scale, of a portion of the end of a book embodying my improvement.

In the drawings, the letter A denotes the stub-strip as a whole, which is made up of two pieces of thin textile fabric *a b*, as cambric or muslin, pasted together, between which, before pasting, a number of stiffening-strips *c*, preferably cut from paper, have been placed a short distance apart. These strips extend across the stub-strip the length of the book and are a little less in width than it is desired the stub-strip shall be when folded up. The signatures of the leaves *d* are sewed to the

apexes of the folds of the stub-strip upon one side, while to the apexes of the other side are attached the bridge-strips *f*, which strips are attached to the covers of the book in the usual manner. When the book is opened the stiffening-strips *c* support the folds of the zigzag stub-strip and hold the end of the leaves up, so they will lie flat, while the flexible cloth, through which the sewing is easily done, forms a soft and flexible hinge for the leaves and for the bridge-strips *f*. By placing a layer of cloth upon each side of the strips *c* the strips are held securely in place, cannot break out, and may be made quite thick, while the cloth, being double, may be made very thin and flexible.

I claim as my improvement—

A book the signatures of which are attached to a continuous stub-strip formed of two layers of thin flexible material, between which are held a short distance apart strips of much thicker material of nearly the width of the stub-strip when folded, the said stub-strip being secured to the covers by bridge-strips, substantially as described.

LEVERETT BRAINARD.

Witnesses:

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