

R. W. BARNES.

COMBINED LETTER-SHEET AND ENVELOPE.

No. 171,497.

Patented Dec. 28, 1875.

Fig. 1.

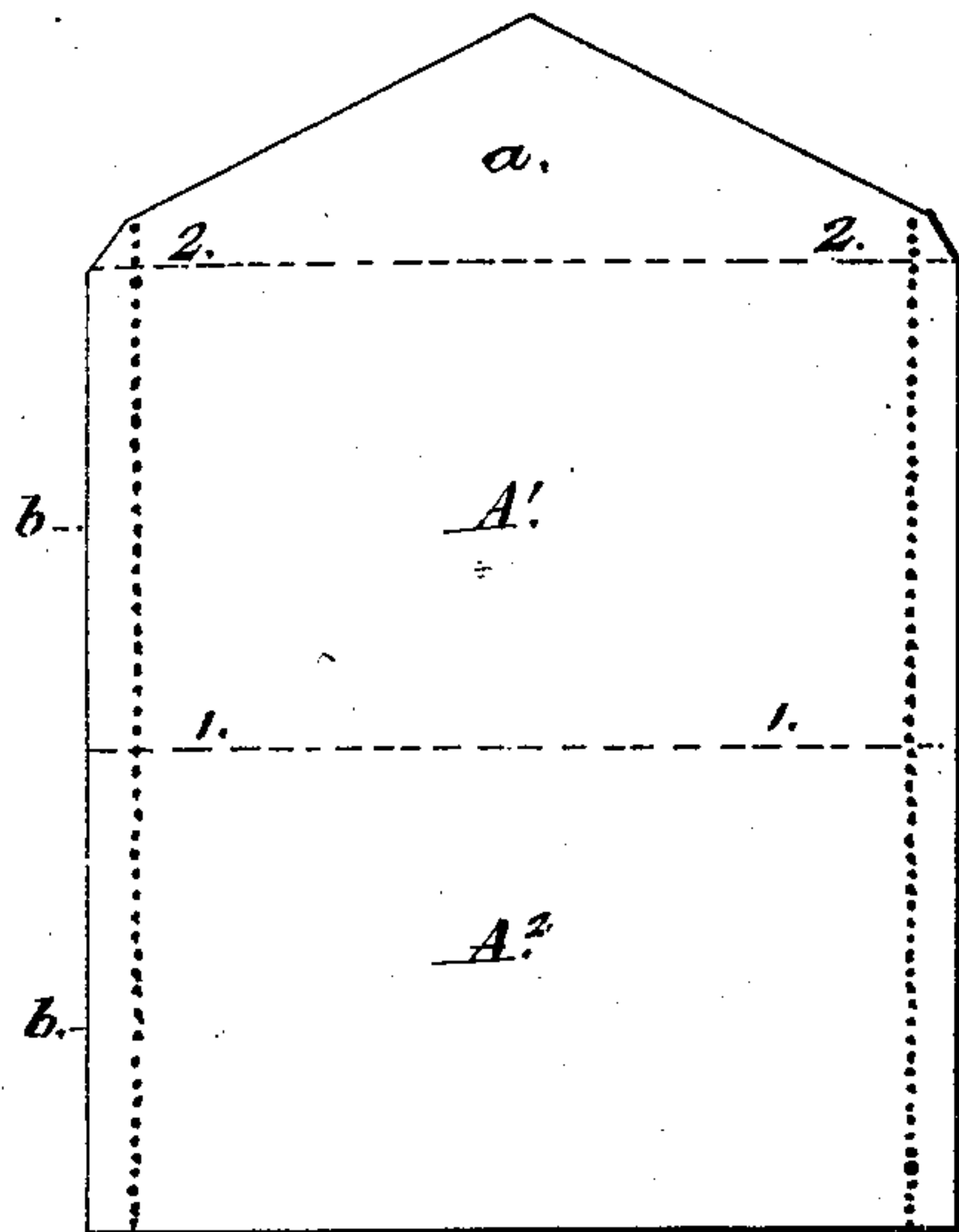


Fig. 3.

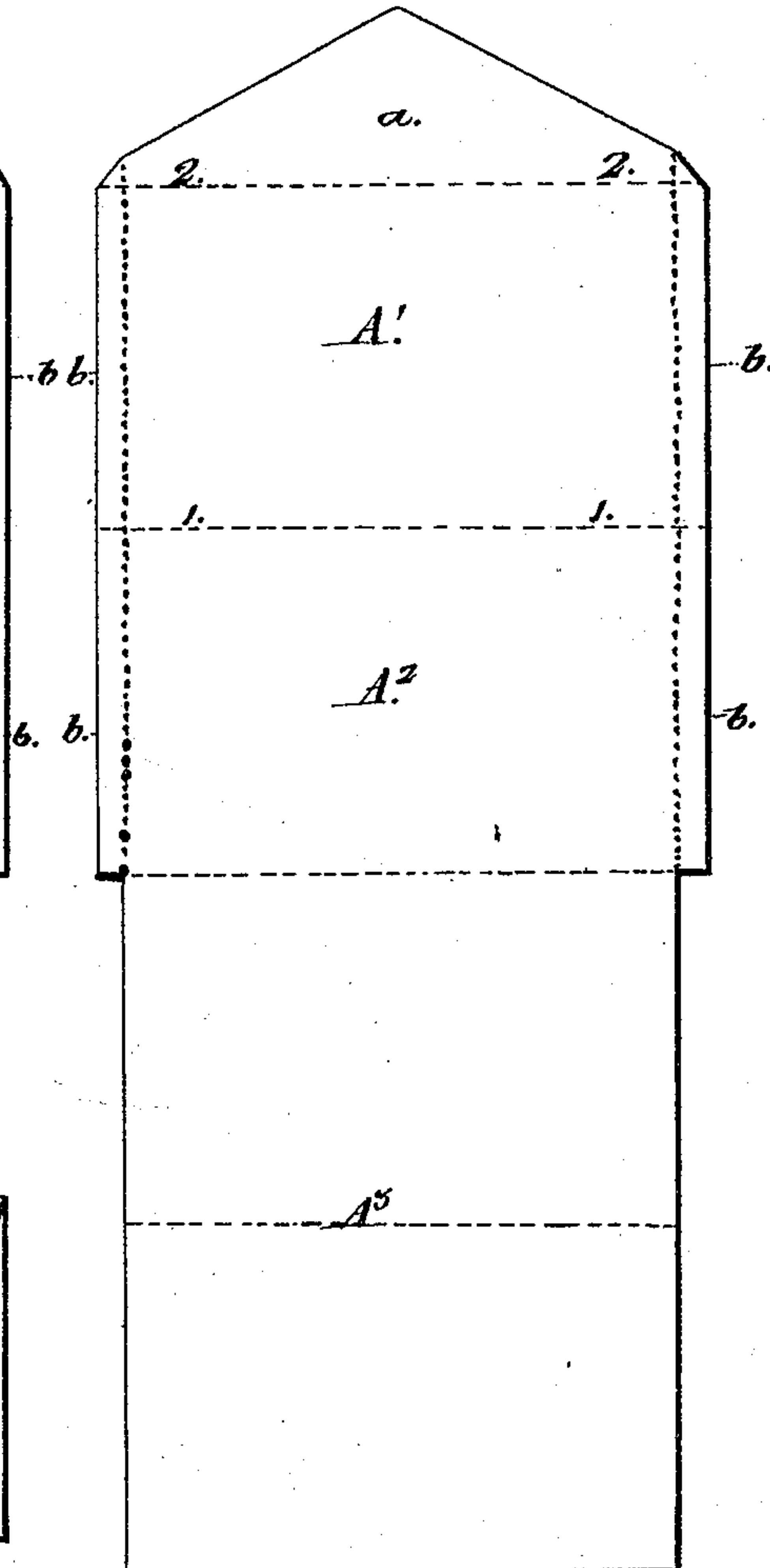
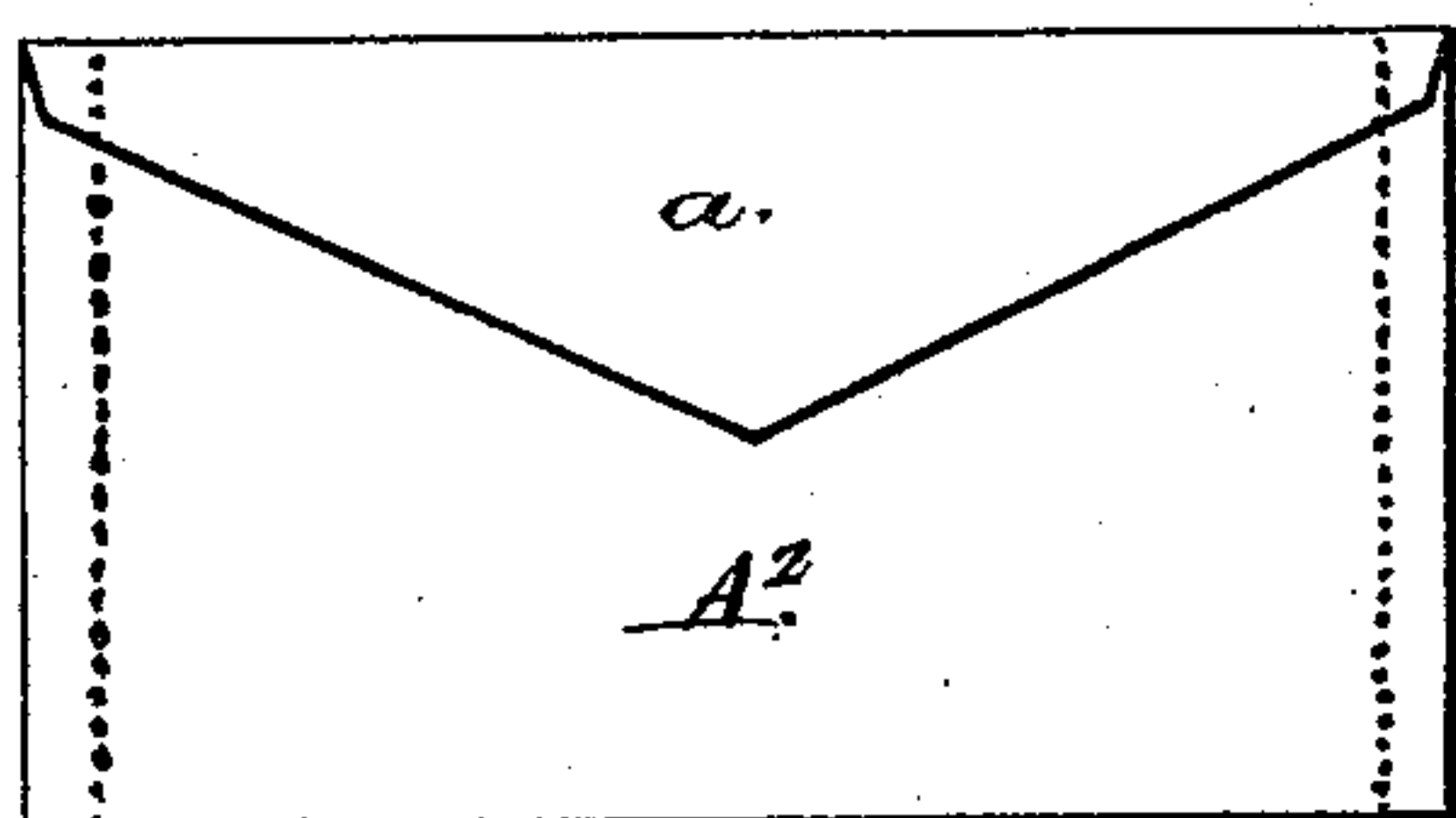


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN COMBINED LETTER-SHEETS AND ENVELOPES.

Specification forming part of Letters Patent No. **171,497**, dated December 28, 1875; application filed May 21, 1875.

*To all whom it may concern:*

Be it known that I, RICHARD W. BARNES, of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Combined Letter-Sheet and Envelope; and I do hereby declare that the following is a full, clear, and exact description thereof, and of its construction and operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and making a part of this specification.

The object of this invention is the production of a sheet which combines both letter-sheet and envelope, and which, after the letter or communication has been written thereon, can be folded and sealed without the need of any separate envelope, thereby not only effecting a saving in the cost of the envelope, but being also much more convenient for use than when an envelope is required, and which also enables the letter to be readily opened without interfering with or mutilating the written page.

Figure 1 is a surface view of a single-fold letter-sheet embodying my invention. Fig. 2 shows the same when folded ready for sealing. Fig. 3 is a surface view of a sheet having double folds, also embodying my invention.

The sheet, which may be of any shape desired, consists of a letter-sheet proper,  $A^1 A^2$ , which folds along the line 1 1, one end,  $a$ , of which is shaped so as to form a seal-flap, which turns down along the line 2 2, over the outside of the part  $A^2$  of the sheet, which constitutes the back of the letter when folded, the part  $A^1$  making the inner fold. The seal-flap  $a$  is to be gummed substantially in the same manner as the seal-flap of ordinary envelopes. Along the edges or ends  $b b$  of the sheet a series of perforations or indentations, or equivalent devices, are made, a little distance from such edges, so as to furnish a line of easy separation or tearing off the ends, and the space between such perforations and edges or ends, or any portion thereof, is also gummed, so as to be capable of being fastened together, in the usual manner, by merely moistening such gummed portion. The whole surface of such sheet  $A^1 A^2$ , Fig. 1, within the lines of perforations gives space for writing, and the letter, when written, is complete for sending by merely folding the sheet along the line 1 1, and sticking the edges  $b b$  together,

and folding down the flap along the line 2 2, and sealing the same. To open the letter the ends of the letter are torn off along the lines of perforations, when the seal-flap can be lifted or cut along its fold. To facilitate the separation of the flap a line or lines of perforations may be made, when desired, along the line of its fold or other portion of the seal-flap.

The presence and use of the seal-flap  $a$  not only gives a completeness to the sheet or letter when folded, but also permits the use of a larger sheet, with one or more additional folds, without changing the arrangement or construction of the sealing portions. Fig. 3 represents such a larger sheet, which is substantially double the size of the sheet  $A^1 A^2$ , Fig. 1, but, when folded, is the same size as this latter. The second or additional leaf or sheet  $A^3$  may be shorter or longer than the single sheet  $A^1 A^2$ , but is a little narrower, in order to lie, when folded, within the perforations, so as to permit the edges or ends  $b b$  to come in contact for sealing. This device or plan of making the second sheet narrow, so as not to interfere with the gummed edges or ends of the first sheet, permits the use of still additional sheets or folds, and in all cases, when the letter is folded, the seal-flap  $a$  will turn down over and fasten to the same part of the sheet as when only a single sheet, like that shown on Fig. 1, is used, and without touching or adhering to any portion of the said additional narrow sheet or fold.

I do not claim, broadly, perforating and gumming the edges of a sheet of letter-paper, so that it can be folded and sealed without using an envelope; but

What is claimed is—

1. The combined letter-sheet and envelope  $A^1 A^2$ , consisting of a rectangular sheet, having a folding sealing-flap across one end, and having its two opposite sides or edges gummed and perforated, all substantially as described.

2. The combined letter-sheet and envelope  $A^1 A^2$ , consisting of a rectangular sheet, having a folding sealing-flap across one end, and having its two opposite sides or edges gummed and perforated with additional narrower fold or folds  $A^3$ , all substantially as described.

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