

No. 693,412.

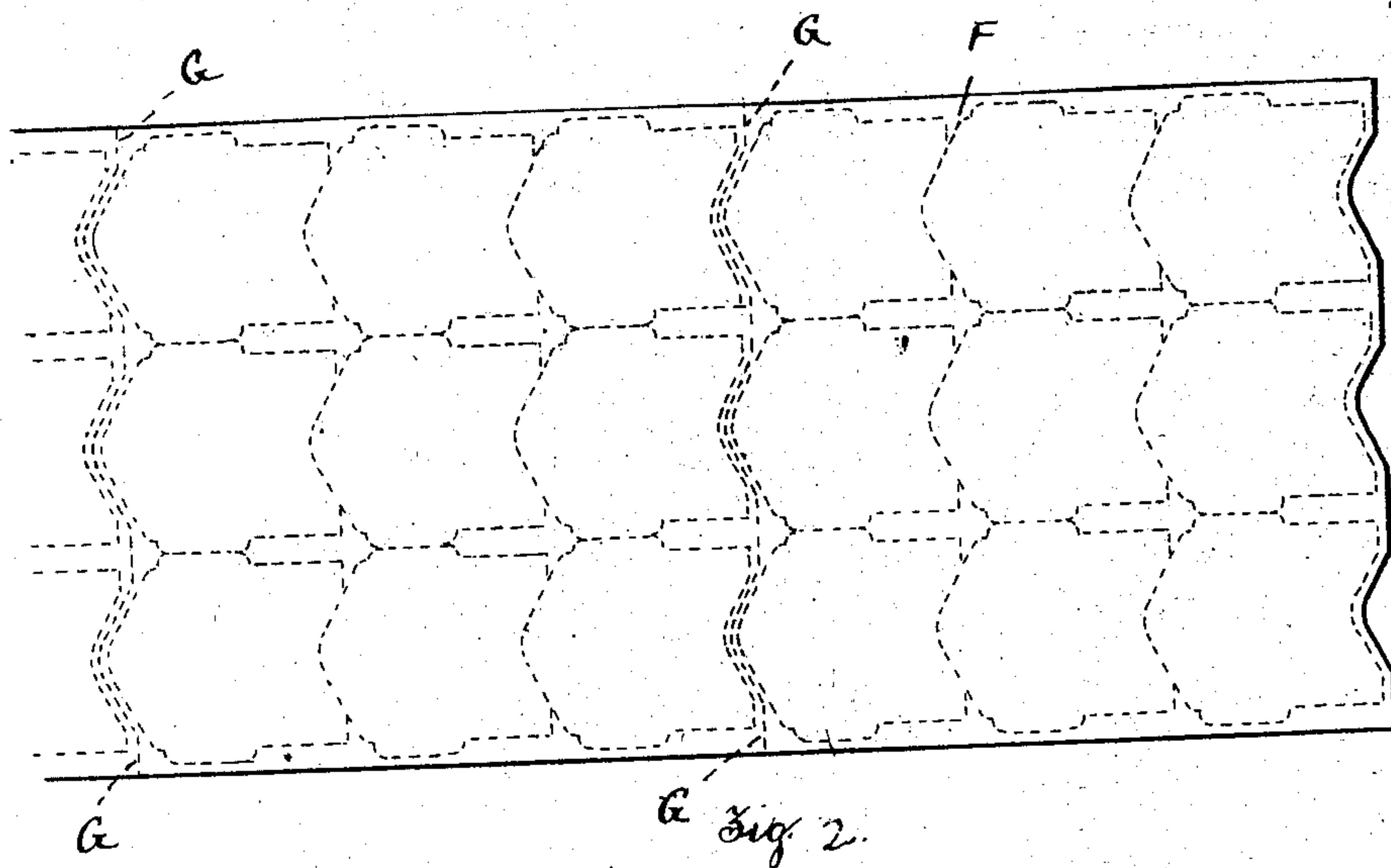
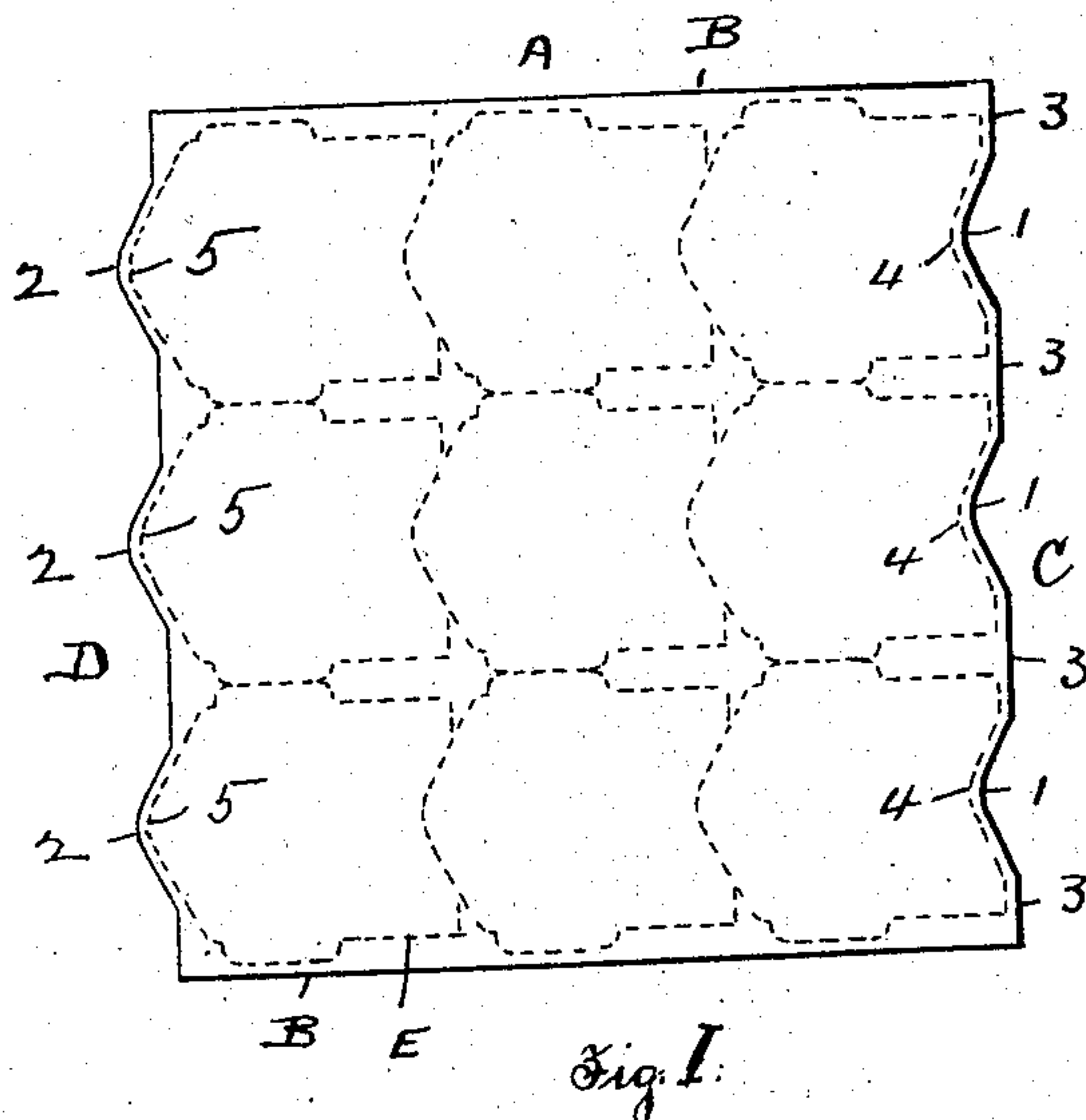
Patented Feb. 18, 1902.

J. LOGAN.

PAPER SHEET FOR ENVELOP BLANKS.

(Application filed Sept. 28, 1900.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

JAMES LOGAN, OF WORCESTER, MASSACHUSETTS.

## PAPER SHEET FOR ENVELOP-BLANKS.

SPECIFICATION forming part of Letters Patent No. 693,412, dated February 18, 1902.

Application filed September 28, 1900. Serial No. 31,354. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES LOGAN, a citizen of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Paper Sheets for Envelop-Blanks, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 represents a plan view of a paper sheet designed for envelop-blanks and embodying my invention. Fig. 2 represents a plan view of a portion of a continuous web of paper as it is delivered from a paper-making machine, showing the lines of severance upon which the web is cut to form one of my improved sheets.

Similar reference letters and figures refer to similar parts in both views.

My invention relates to a paper sheet designed for the use of envelop manufacturers; and it consists in forming the sheet with two opposing straight and parallel sides and with two opposing sinuous wavy parallel sides, as hereinafter described, and pointed out in the annexed claim.

My present invention is designed to provide a sheet of paper for the use of envelop manufacturers whereby a material saving is effected in cutting the envelop-blanks from the sheet, and this is accomplished by providing a sheet having two of its opposite sides bounded by wavy or sinuous lines, which are parallel to each other, so that an indentation on one side of the sheet will be placed opposite a similar projection on the opposite side of the sheet, the outline of one side exactly fitting the outline of the opposite side when the sides are brought into contact.

Referring to the drawings, A, Fig. 1, represents a paper sheet embodying my invention, having its sides B B straight and parallel and its side C wavy or sinuous, with indentations 1 1, and the opposite side D parallel to the side C and having projections 2 2, corresponding in extent and shape with the indentations 1 1 on the side C. I preferably cut the paper at each side the indentations 1 1 on straight lines 3 3 and at right angles with the sides B B, which allows the sheet to be registered by means of suitable gages against two adjacent sides. A sheet cut in the form shown in Fig. 1 allows a series of envelop-blanks to be cut therefrom, as represented by the broken line E, said envelop-blanks being arranged to

match the indentations 1 1 on the side C of the paper sheet and the projecting flap 5 on the envelop-blank arranged to match the projections 2 2 on the side D of the sheet A. The sheet A is formed by severing the continuous web F, as it is usually delivered from the paper-mill, on a wavy or sinuous line, (indicated by the broken lines G G, Fig. 2,) each single cut across the web of paper forming an end of each of two adjacent sheets, the end of one sheet having the indentations 1 1 and the end of the other sheet having the corresponding projections 2 2. By providing the sheet with a series of bearing-surfaces on the lines 3 3 at the end C at right angles with the sides B B the sheets, placed one upon another, can be securely packed and be made to fit the corner of a rectangular box or case and the sheets be supported at their end C in the same manner as they would be supported if the entire end C were cut upon a straight line.

My improved sheet for envelop-blanks is cut from the web with equal facility as a square sheet, requiring but a single cut upon the lines G G to form a sheet, and the surface of the sheet included in the indentations 1 1 is transferred to the next adjacent sheet in order to form the projections 2 2 instead of being wasted, as they would be if the web were cut upon straight lines at right angles to its sides.

My improved sheet allows the envelop-blank to be cut therefrom as readily as from the square sheet and effects a material saving in the stock required.

What I claim as my invention, and desire to secure by Letters Patent, is—

A paper sheet having its edges B, B, straight and parallel, its edge C wavy and sinuous, with indentations 1, 1, and the opposite edge D parallel with edge C and having projections 2, 2, corresponding in extent and shape with the indentations 1, 1, on edge C, the paper cut on each side of the indentation on straight lines 3, 3, and at right angles with the edges B, B, thus permitting the sheet to be registered by means of suitable gages against two adjacent edges.

Dated this 26th day of September, 1900.

JAMES LOGAN.

Witnesses:

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