W. Y. IRWIN.

FOLDED SHEET OF PAPER AND THE LIKE.

APPLICATION FILED MAY 31, 1917.

1,307,443.

Patented June 24, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

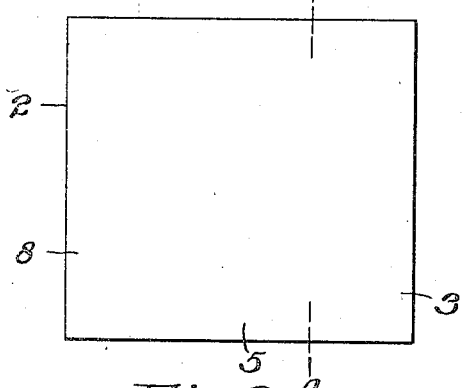


Fig. 2.

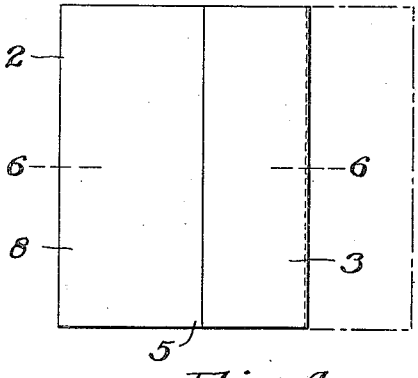


Fig. 3.

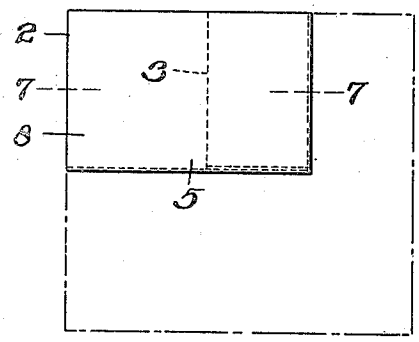


Fig. 4.

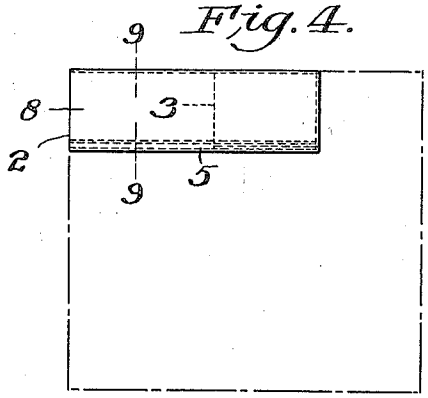
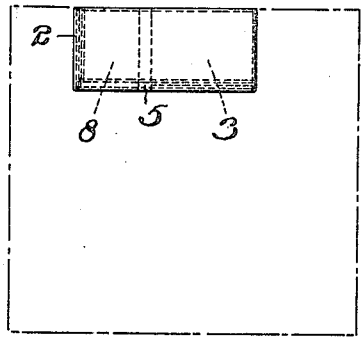


Fig. 5.



Inventor:
William Y. Irwin
By H. V. Hulbert
Attorney

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2 SHEETS—SHEET 2.

Fig. 6.

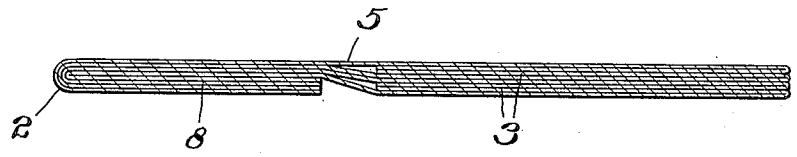


Fig. 7.

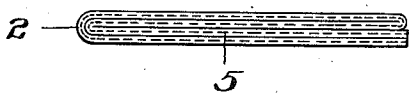
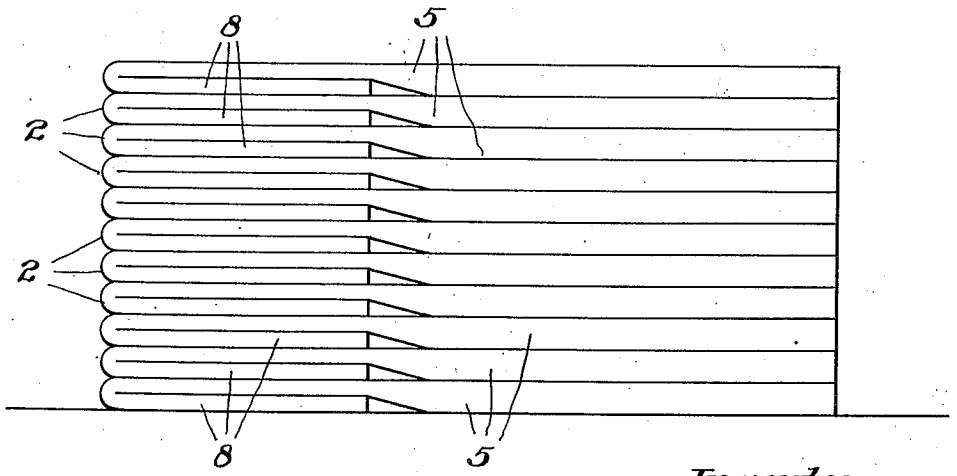


Fig. 8.



Inventor:
William Y. Irwin
By H. V. Heuton
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM Y. IRWIN, OF NORWOOD, PENNSYLVANIA.

FOLDED SHEET OF PAPER AND THE LIKE.

1,307,443. Specification of Letters Patent. Patented June 24, 1919.

Application filed May 31, 1917. Serial No. 172,131.

To all whom it may concern:

Be it known that I, WILLIAM Y. IRWIN, citizen of the United States, residing at Norwood, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Folded Sheets of Paper and the like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to improvements in folded sheets of paper or other material having a main body portion and a flap extending from one end thereof and adapted to be dispensed by apparatus of the character illustrated in Letters Patent of the United States No. 1,151,792, dated the 31st day of August, 1915.

The object of my invention is to construct and arrange the folded portions of a sheet of paper so that the main body of the folded sheet shall have a flap extending beneath the same at one end thereof of less length than the main body of the sheet, and between which and the main body of the sheet a part of the dispensing apparatus may enter and so that the layers of the superposed portions of the folded sheet at one end portion thereof which includes the said flap shall correspond in number with the superposed portions of the folded sheet at the other end portion thereof which does not include the said flap; whereby, the folded sheets shall all lie in horizontal positions when placed one upon another and form an even, uniform and compact stack containing the maximum quantity of paper for the space it occupies.

My invented folded sheet consists of the parts and the folds and the combinations thereof as will be hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention:

Figure 1 is a view of a sheet of paper before being folded in accordance with my invention.

Figs. 2 to 5, inclusive, are views of the sheet of paper at progressive stages during the folding thereof in accordance with my invention.

Fig. 6 is a longitudinal section of the complete folded sheet, exaggerated in thickness.

Fig. 7 is a view of the right hand end of the complete folded sheet, exaggerated in thickness.

Fig. 8 is a side of a stack of the folded sheets, exaggerated in thickness.

Referring to the drawings, 2 designates a sheet of paper before being folded in accordance with my invention. To produce my improved folded sheet, as shown in Figs. 5 to 8, inclusive, the sheet 2 is folded as illustrated in Figs. 1 to 5, inclusive, and in these figures I have shown by dot-and-dash lines in the several views the complete outline of the open blank and its relation to the folded portions of the sheet. The first operation is to fold the edge portion 3 of the sheet 2 inwardly, on the line 4—4 of Fig. 1, to a position adjacent to the central body portion 5 of the sheet 2, as shown in Fig. 2. The lower portion of the sheet 2, as shown in Fig. 2, is then folded upon the upper portion thereof, on the line 6—6 of Fig. 2, in the position shown in Fig. 3. The lower portion of the sheet 2, as shown in Fig. 3, is now folded upon the upper portion thereof, on the line 7—7 of Fig. 3, parallel to the line 6—6, in the position shown in Fig. 4; and, finally, the edge portion 8 of the sheet opposite to the edge portion 3 thereof is folded downwardly and inwardly on the line 9—9 of Fig. 4, parallel to the line 4—4, against the bottom of the central body portion 5, as shown in Figs. 5 to 8, inclusive, and my folded sheet is complete. In the complete folded sheet, the folded edge portion 3 is entirely within the folds of the central body portion 5, providing a smooth and unobstructed top and bottom surface for the folded central body portion 5, which may readily slide over and beneath parts of a dispensing apparatus and beneath a stack of folded sheets therein; and, in the complete folded sheet, the folded edge portion 8 provides a flap between which and the body of the sheet a part of a dispensing apparatus may enter to act upon and project the folded sheet from the apparatus. The inwardly-folded edge portions 3 and 8 of the sheet 2 terminate before meeting each other, and the superposed layers of the edge portion 3 and the central body portion 5 of the sheet form the maximum thickness of the folded sheet and correspond in number with the superposed layers of the edge portion 8 and the central body portion 5 of the sheet, so

that the two end portions of the folded sheet containing the respective edge portions 3 and 8 will be of the maximum thickness of the folded sheet; and therefore when the folded sheets are stacked one upon another they will all lie in horizontal positions and in parallel relation to each other and form an even, uniform and compact stack, as shown in Fig. 8.

I claim:

1. A sheet of paper having a central body portion and opposite edge portions folded on substantially parallel lines and extending inwardly from said lines adjacent to the body portion, said body portion and said edge portions being also folded on lines substantially at right angles to said parallel lines, one of said edge portions and the body portion forming the maximum thickness of the entire folded sheet at one portion thereof, and the other of said edge portions and the body portion forming the maximum thickness of the entire folded sheet at another portion thereof.

2. A sheet of paper having a central body portion and opposite edge portions folded on substantially parallel lines and extending inwardly from said lines adjacent to the body portion, said body portion and said edge portions being also folded on lines substantially at right angles to said parallel lines, one of said edge portions being inside of said folded body portion, and the other of said edge portions being outside of said folded body portion.

In testimony whereof I have hereunto affixed my signature this 19th day of May, A. D. 1917.

WILLIAM Y. IRWIN.

Witnesses:

ALEXANDER PARK,

MARIE C. RYAN.