

J. N. HAHN.
CORRUGATED PAPER BOARD.
APPLICATION FILED SEPT. 14, 1910.

997,994.

Patented July 18, 1911.

FIG. 1.

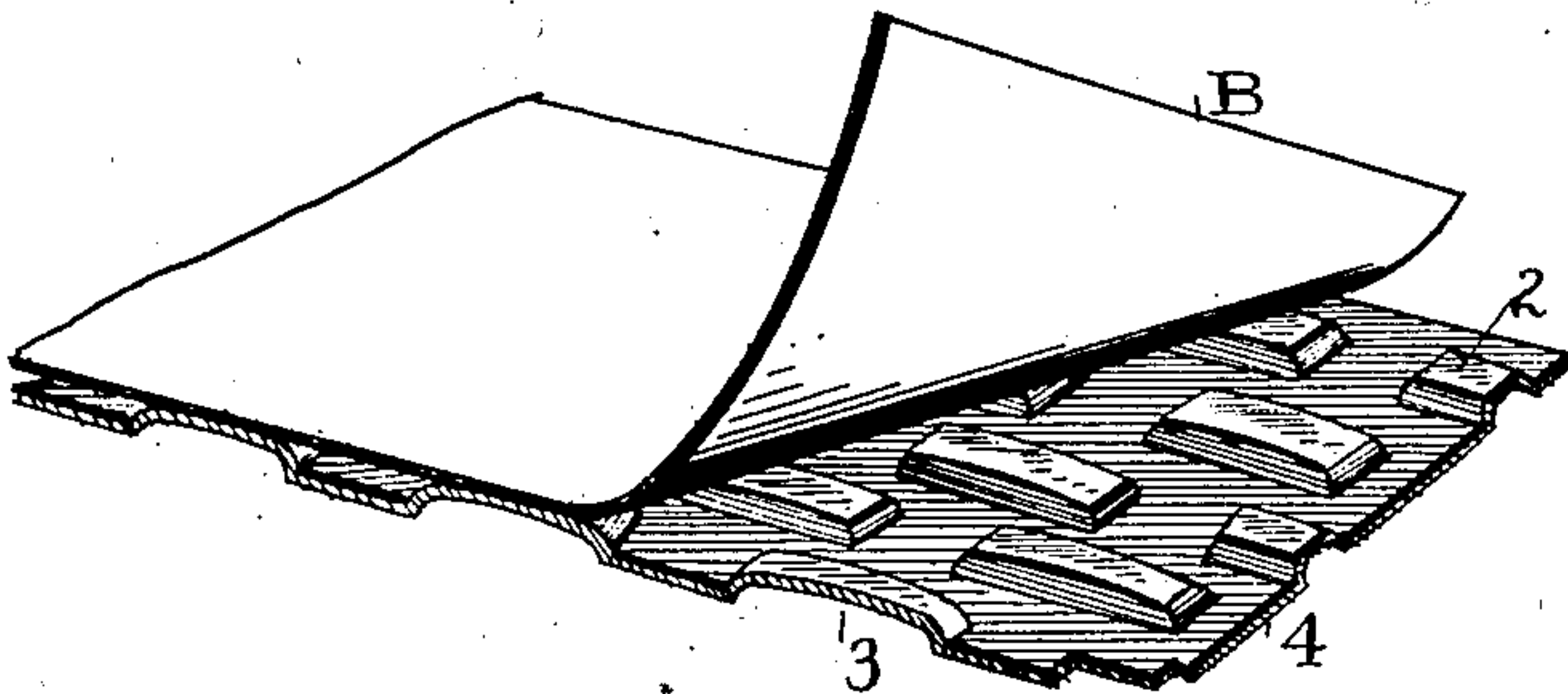


FIG. 2.

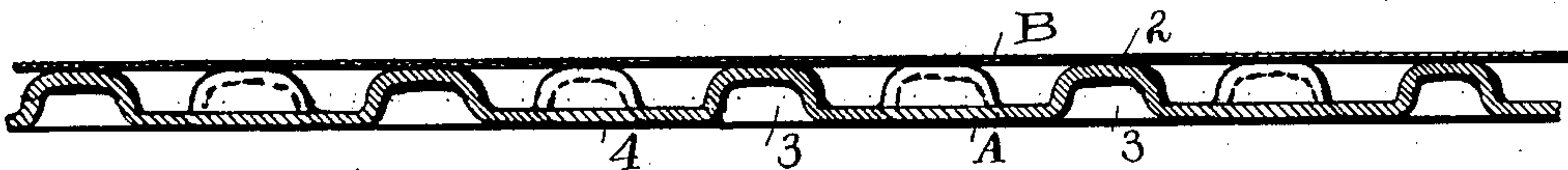
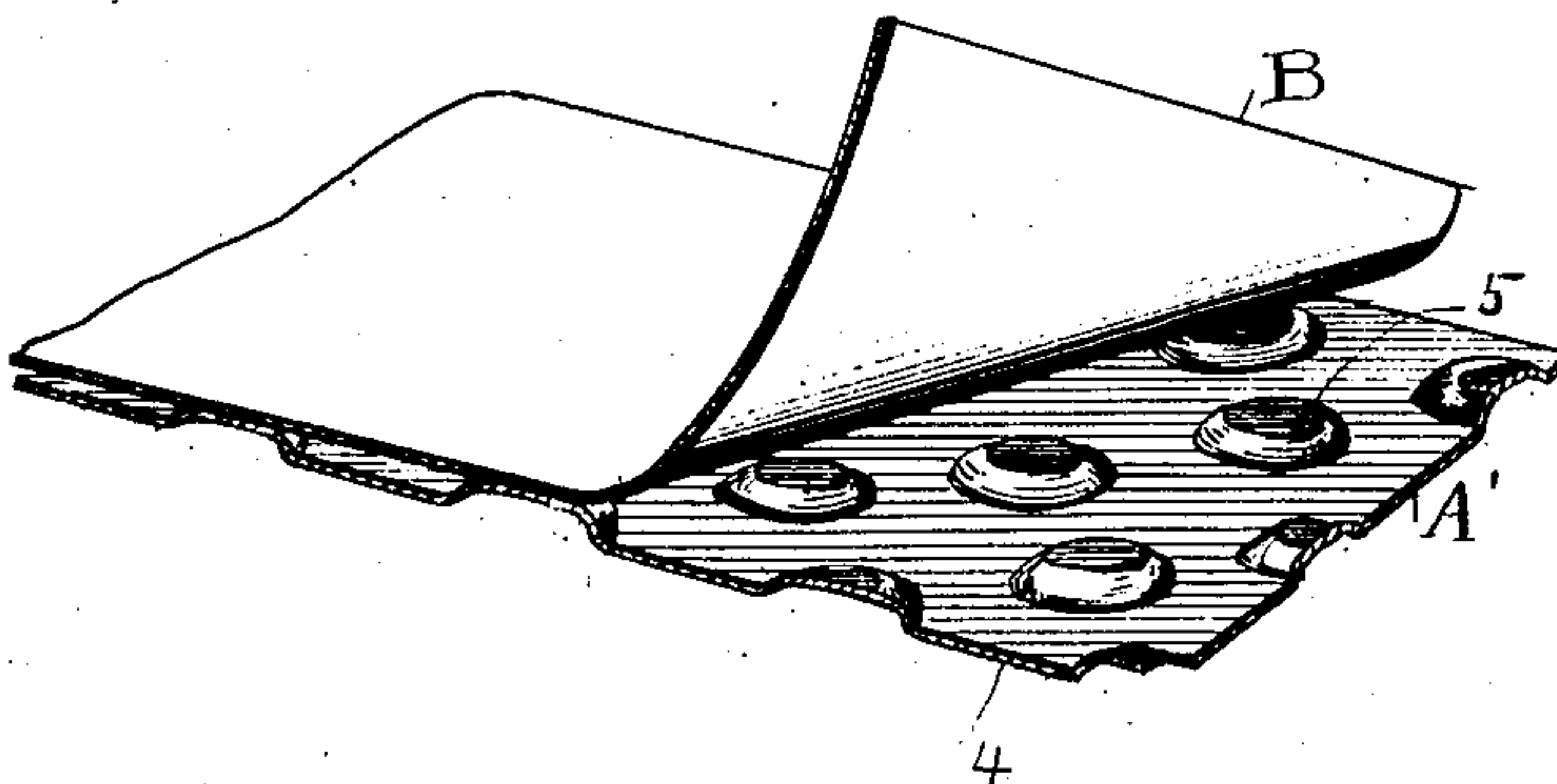


FIG. 3.



ATTEST
E. M. Fisher
H. H. Knapp

INVENTOR
JOHN N. HAHN
Fisher & Moser
ATTYS.
BY

UNITED STATES PATENT OFFICE.

JOHN N. HAHN, OF CLEVELAND, OHIO.

CORRUGATED PAPER-BOARD.

997,994.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed September 14, 1910. Serial No. 581,958.

To all whom it may concern:

Be it known that I, JOHN N. HAHN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Corrugated Paper-Board, of which the following is a specification.

This invention consists in an improvement in what has become known as corrugated paper-board, a manufacture now very generally used in making boxes or receptacles for transporting various articles of merchandise which are comparatively light and require precautions against breakage, and in the packing of such articles in boxes and parcels, all as will hereinafter more fully appear.

In the accompanying drawings, Figure 1 is a perspective view of a piece of my new and improved board in one of its forms showing the covering sheet as partly turned back from the body, and Fig. 2 is an edge elevation of the said board. Fig. 3 is a perspective view of a modification of the board.

Now, I have conceived the idea of a two-ply double faced board as a substitute for the three-ply board of commerce which I regard as equally as good as the three-ply board for all packing purposes especially and at least one-fourth cheaper in the cost of manufacture and to the purchaser. This board consists of a suitable sheet or part A, which is also referred to as the body of the board and which is formed up with scattered or staggered corrugations and indentations 2 and 3 respectively on opposite sides. All said corrugations or projections 2 are on one side of the sheet while all the indentations or hollow spaces 3 are on the other side, and the land or surface 4 between said indentations remain flat and smooth as originally.

A flat facing sheet B is pasted across or upon the backs or bottoms of the said corrugations and this completes the manufacture. There is this difference, however, to be noted respecting the two sheets shown that the body ply or sheet A is considerably heavier or thicker than the facing sheet B,

in this instance, and has stock enough to enable the said corrugations or indentations to be drawn out of the said body while the paper is suitably softened or moistened to maintain sufficient thickness to make the corrugations stiff and firm. In fact, upon examination it will be found that the stock in the back of the said corrugations or projections is substantially as heavy as in the flat or even portion or surface 4 between the said corrugations and which faces the board on that side. I thus obtain a two-ply corrugated board with smooth faces on both sides, the intervening surface or space between the indentations 3 being the same as before said indentations were made and hence flush and smooth, while the facing sheet B covers over the corrugations and evens that side. This gives me a double faced board with two even sides which serves every purpose of the three-ply board as a packing for fragile or easily injured articles and is at least equally as good if not better and very materially cheaper than three-ply boards can be made.

In Fig. 3 the same principle of construction obtains except that in this case the indentations 5 are circular rather than oblong. Otherwise the product is essentially the same as in Figs. 1 and 2 and has the same distinguishing characteristic of two smooth faces with corrugations or indentations between and giving the board a full corrugated value with only two plies or sheets of paper. The said projections 2 and 5, respectively, are formed with inclined sustaining walls all around as shown, so that each wall becomes a bracing portion capable in itself of withstanding relatively great lateral pressure while the flat portion of the stock about the said projections is non-stretchable. Hence when the flat sheet B has been pasted upon or across said projections, substantially as shown, an exceedingly strong two-ply sheet is produced.

What I claim is:

A paper board consisting of two sheets, one of said sheets having numerous individual projections struck up from the body thereof on one side and corresponding de-

pressions on the other side, the space between said projections and depressions respectively being flat and even on both sides of the sheet, and the said projections having inclined sustaining walls all around each projection and a plain flat surfaced sheet pasted upon said projections, whereby the equivalent of a three-ply corrugated paper board is produced by two sheets and flat on both sides. 10

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN N. HAHN.

Witnesses:

F. C. MUSSUN,
E. M. FISHER.