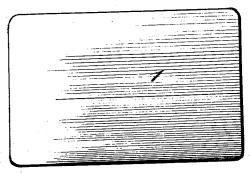
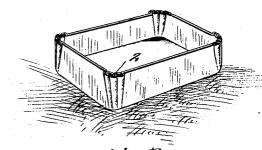
J. GODFREY.
PASTEBOARD BOX.
APPLICATION FILED JUNE 12, 1907.

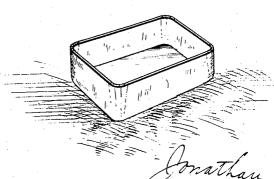
Jig.1.



Tig. h.



Tig.3.



Inventor Sed vier

Witnesses

Al Bowell. Bordne

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attorney

UNITED STATES PATENT OFFICE.

JONATHAN GODFREY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE COMPRESSED PAPER BOX CO., OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

PASTEBOARD BOX.

No. 879,865.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed June 12, 1907; Serial No. 378,514.

To all whom it may concern:

Be it known that I, Jonathan Godfrey, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and 5 State of Connecticut, have invented certain new and useful Improvements in Pasteboard Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others 13 skilled in the art to which it appertains to make and use the same.

My invention pertains to pasteboard boxes and relates more particularly to a box of this nature which is formed of a single blank of material without the use of any adhesive substance or any other fastening device whatever to maintain the corners of the box in

their relative stiff rigid position.

My present invention relates to the box 20 formed by practice of the apparatus forming the subject matter of my application filed Feb. 8, 1906, Serial No. 300,181, and of the process forming the subject matter of my application filed August 6, 1906, Serial No.

25 329,436. The object of my invention is to provide a box formed of pasteboard having rounded stiff rigid corners, which latter are formed during the process of manufacture from the 30 surplus stock which necessarily gathers at the corners during the striking up step, which corners are compressed to be of but slightly greater thickness than that of the original blank, and are caused so far as possible to 35 assume the same thickness as that of the adjacent sides and ends of the box. Further I aim to completely eliminate the use of any adhesive material or other extraneous fastening means to cause the corners to as-40 sume stiff, rigid relation with respect to the sides of the box.

Further objects will appear in the course

of the following specification.

Referring to the accompanying drawings
45 wherein like characters of reference denote
similar parts throughout the several views—
Figure 1 is a plan view of the blank from
which the box is made—Fig. 2 is a perspective view of the box showing the overlapping
50 plaits as they appear during the process of
construction and prior to being completely
and finally compressed, and Fig. 3 is a perspective view of the completed box.

As I have set forth in my apparatus and 55 process applications, as above identified, in

the practice of my inventiou I employ a single pasteboard blank 1, which by means of the male and female dies is caused during the process of formation to assume the form depicted in Fig. 2, wherein there is shown a 60 series of overlapping plaits 2, at each of the box corners. These plaits extend obversely and reversely outside and inside said corners and in their overlapped relations are then compressed by ironing which is done by car- 65 rying the blank through a long female ironing surface of the form of the completed exterior of the box, the interior of the box being carried by the male die which has the form of the completed interior of the box. These 70 plaits at the corners of the box are disposed in substantially a vertical plane with respect to the bottom of the box, and the ironing operation is performed in a direction which is substantially the same as that in which 75 said plaits are disposed, and inasmuch as the space existing between the male and female dies substantially equals the thickness of the blank it will thus be observed that the blank during the entire time it is in contact with 80 the two dies will be ironed and pressed, and the overlapping plaits will be compressed into a mass which will be shaped, ironed, and pressed into permanent stiff, rigid form of the same contour as that of the space be- 85 tween the two dies at their corner portions, and will be ejected having smooth, plain unbroken faces which form continuations of the sides and ends of the box, and bear but slightly perceptible traces of the overlapping 90 plaits where they existed prior to their compression and ironing. Thus it is apparent that the completed box is formed without the use of adhesive substances or any extraneous fastening devices, which latter are com- 95 pletely eliminated, since the act of compression and prolonged ironing forms the corners stiff and rigid, of but slightly increased thickness, which is a desideratum since strength is given the box at these important points. 100 In actual practice the compression and ironing are so complete and perfect, that a box can be made from pasteboard previously covered with a colored or ornamental paper, with the traces of the corner plaits so effec- 105 tually eliminated, that, even to a careful observer, it would appear that the paper had been applied to the box after the latter had been made.

A box constructed as described can only 110

with great pressure at the corners be dis-rupted at the latter place, and can only be separated by exerting a strong pulling force at such points.

Having thus fully described my invention

what I claim as new is:-

A box formed of a single pasteboard blank which has rounded corners, the corners of the completed box being formed of substantially vertically disposed plaits which overlap and approach, and approach as a plait. extend obversely and reversely, said plaits being compressed into each other both inside

and outside said corners and finally subjected to a prolonged ironing in substantially the direction in which said plaits are disposed, 13 whereby said corners will have smooth unbroken faces that form continuations of the smooth unbroken faces of the sides of the box.

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

JONATHAN GODFREY.

 ${f Witnesses:}$

F. W. SMITH, Jr., M. T. LONGDEN.