STATEMENTS OF INVENTION

1. A method of bonding a substantially planar sheet material to a corrugated sheet material using an automated process

   the method characterised by the steps of

   a) applying adhesive in discrete amounts to the contact points of the corrugated sheet material, and

   b) holding the sheet materials together until a bond is formed between them.

2. A method as claimed in claim 1 wherein the sheet materials are made from paper.

3. A method as claimed in claim 2 wherein at least one of the sheet materials are made from Kraft paper.

4. A method as claimed in any one of claims 1 to 3 wherein the adhesive is a water based glue.

5. A method as claimed in claim 4 wherein the adhesive includes a vinyl acetate copolymer dispersion.

6. A method as claimed in claim 5 wherein the adhesive has a viscosity in the range of 2100-2200 m.Pa.S and an open time of between 0.5 to 1 minute.

7. A method as claimed in any one of claims 1 to 6 wherein the discrete amount of adhesive is in the form of a droplet.

8. A method as claimed in any one of claims 1 to 7 wherein the pressure applied to bond the sheet materials together is applied by an endless tensioned belt.

9. A method as claimed in any one of claims 1 to 8 wherein the time that the sheet materials are pressed together is not less than two seconds.

10. A method as claimed in claim 9 wherein the time is between two and four seconds.

11. An applicator for applying adhesive in a discrete amount to a corrugated sheet material, the applicator including,

a roller,

characterised in that the outer surface of the roller has a contoured surface.

12. An applicator for applying adhesive in a discrete amount to a corrugated sheet material wherein the contoured surface is in the form of corrugations.

13. An applicator as claimed in claim 12 wherein the crests of the corrugations on the roller form a spiral.

14. A machine for making single face corrugated board which includes an applicator as claimed in any one of claims 11 to 13.

15. A machine as claimed in claim 14 wherein the adhesive is applied to the applicator by a pick up roller.

16. A machine as claimed in either claim 14 or claim 15 wherein the applicator is mounted with respect to the pick up roller such that the crests of the applicator make firm contact with the surface of the pick up roller.

17. A machine as claimed in any one of claims 13 to 15 wherein the mounting of the applicator with respect to the machine is such that the crests of the applicator corrugations make firm contact with the crests of the corrugated sheet material.

18. A machine for making single face corrugated board by bonding a corrugated sheet material having one or more crests onto substantially planar sheet, the machine including

an applicator configured to apply adhesive to the crest of the corrugated sheet material, and

a pressing mechanism for pressing the planar sheet against the crest of the corrugated sheet material,

characterised in that

the applicator is configured to apply adhesive in discrete amounts to the crest of the corrugated sheet material and the pressing mechanism is configured to hold the planar sheet against the crest until a bond is formed between them.

19. A single face corrugated board manufactured according to the method as claimed in claims 1 to 10.

20. A single face corrugated board manufactured by the machines as claimed in claims 11 to 18.

21. A method substantially as herein described in the Best Modes Section and illustrated with reference to the accompanying drawings.

22 An applicator substantially as herein described in the Best Modes Section and illustrated with reference to the accompanying drawings.

23. A machine substantially as herein described in the Best Modes Section and illustrated with reference to the accompanying drawings.