

MAP OF KAWASAKI'S "ROSE CRYSTALLIZATION" (Tessellation) Shown in Jackson's Encyclopedia

Page
1 of 2

Drawing & Text 16 July 1995

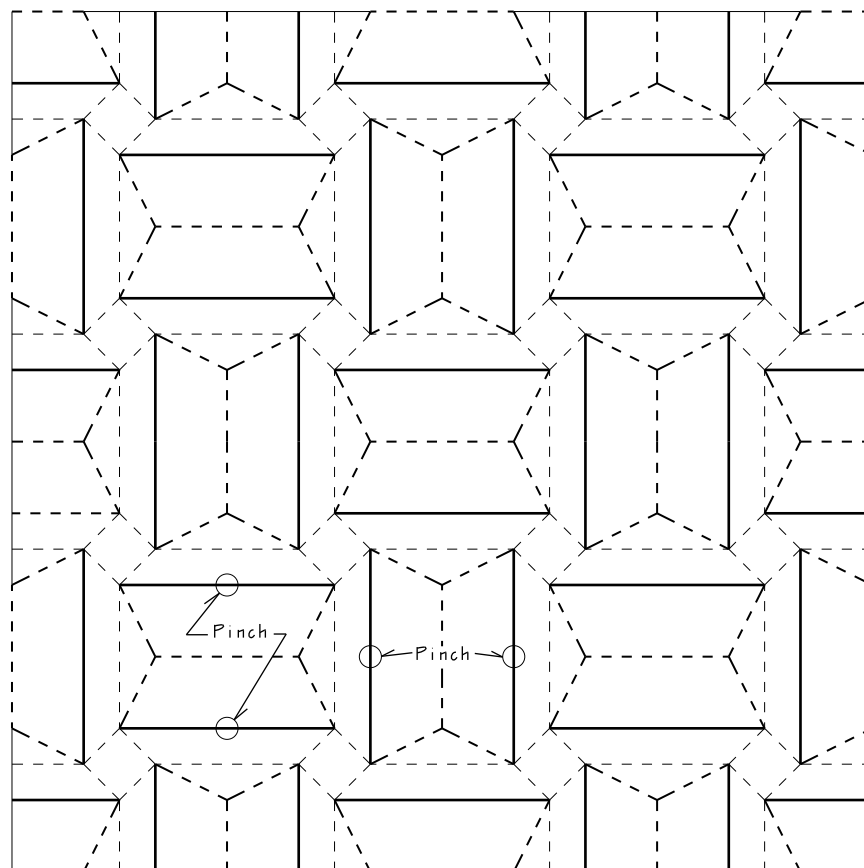
Copyright 1995 Valerie Vann

Internet: 75070.304 @compuserve.com

Use square paper. Start with 8 - 10 inch kami or heavier at first. Bond letter size or colored copy paper is OK. Foil not recommended. Photos of this model are in Paul Jackson's Encyclopedia of Origami and Paper Crafts

——— Mountain Fold
- - - Main Valley Fold
- - - - Initial Valley Fold

TOP VIEW



1. With Color Side Up, Valley Fold on 1/8ths (eighths). (Crease in both directions.)
2. Mountain Fold on 1/12ths (twelfths), except those that already have Valley Folds; you get a guide line grid.
3. Pre-Crease the SINKs at the Small Squares and the Diagonal Valley Folds; sharpen all creases on the Map.
4. Collapse the Sinks using only the Initial Valley Folds and the Mountain Folds. (See page 2 for results.)
5. With Top up, Pinch adjacent Mountain Folds together. (See second drawing on page 2). Allow the Sinks to twist and let the main valley folds between the walls (pleats) take over.
6. Turn over and sharpen creases, allowing the sinks to twist further as necessary until the whole model is reduced to about the size (area) of the sixteen sink squares. (See last 2 drawings on page 2.)

NOTE: This Diagram is a "Best Solution So Far" case of Reverse Engineering. It may not be how Kawasaki did it!

RATING - Complex, Experience with Sinks and Fold Maps Recommended

MAP OF KAWASAKI'S "ROSE CRYSTALLIZATION" (Tessellation) Shown in Jackson's Encyclopedia

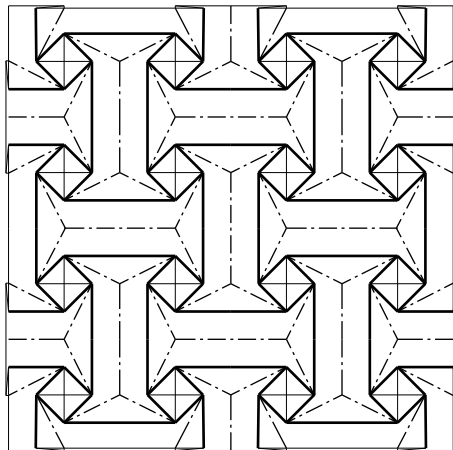
Page
2 of 2

Drawing & Text 16 July 1995

Copyright 1995 Valerie Vann

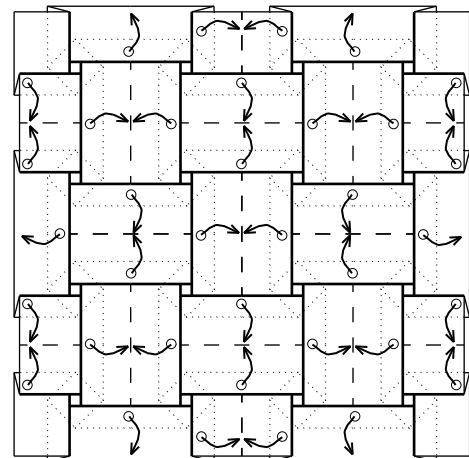
Internet: 75070.304 @compuserve.com

This is how the model will look after all the sinks have been completed along the initial valley folds, and the final valley folds are precreased. The heavy lines are the mountain folds around the sinks and the edges of the pleats radiating from the sinks. The pleats and sinks lie flat at this step. The dashed lines are the precreased valley folds, although these are actually MOUNTAIN creases in this BACK VIEW.



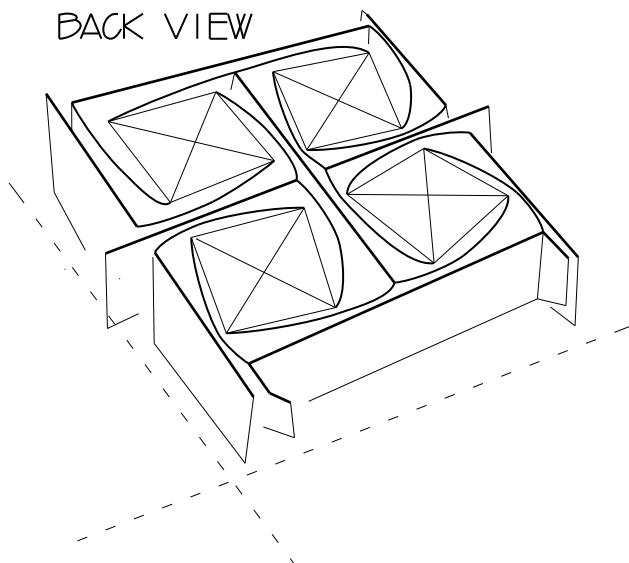
BACK VIEW

BELOW: The heavy lines are edges of pleats, with openings over the sinks where pleats cross shown exaggerated. Stand the pleats up in pairs by bringing circles together, allowing the valley folds between to drop down.



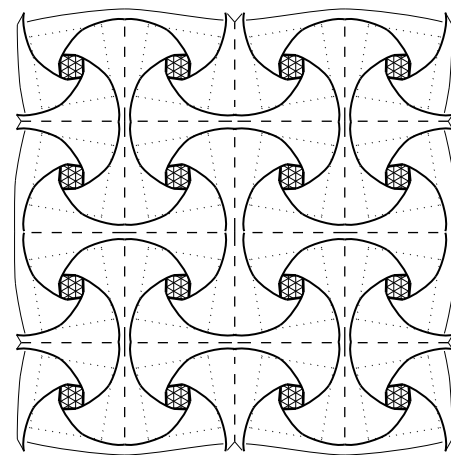
TOP VIEW

BACK VIEW of one quarter of model, with only four of sixteen sinks shown. The heavy curved lines are the bottom of the valleys between the walls; the square sinks are sunken in about 1/3 the height of the model.



BACK VIEW

TOP VIEW. The ROSE PETALS are formed by the walls curving into the center of the sinks. Compress the model so the walls twist around. The model will reduce to a square about 1/4 the size of the original, or about the size of the sink square bottoms, shown by dotted lines.



TOP VIEW

RATING - Complex, Experience with Sinks and Fold Maps Recommended