

ADDENDUM

POTATO-PRINTING, A GAME FOR WINTER EVENINGS.

In "The Magic Mirror of M.C. Escher" (6), Bruno Ernst describes on page 40 a game with engraved stamps which M.C. Escher invented in 1942. We played a simplified version of it which can be quickly improvised for children or grandchildren looking for something different to do.

1. Draw a grid of squares on a sheet of paper and multiply it, for example by punching the corners with a sharp point through a stack of papers.
2. Draw on one square of the grid lines which intersect the four sides in the same places, so that when the squares are placed side by side the lines connect to each other.
3. Cut a potato in half and accurately shape the two flat faces into squares of the same size as the grid units.
4. Transfer the pattern of lines to one potato and with a pointed knife carefully cut away those parts which must remain white in the print.
5. Prepare a small "ink" pad by folding a rag on a saucer and soaking it with any color at hand: water color, food coloring, finger paint.
6. Press the finished potato stamp on the pad so that it picks up color on its raised portions. Soak up excess paint and moisture with tissue paper, then press one half potato against the other to transfer the pattern. Cut the second stamp, which is now a mirror image of the first.
7. Carve a reference mark on one side of each stamp.
8. The stamps can now be used in four different orientations to print sets of lines on the paper. By regular repetitions a great variety of symmetrical patterns can be created, which show features of translations, rotations and mirroring.

An example is given on the following two pages. It is intriguing to discover what lines on a stamp make interesting patterns and, of course, the game can be extended to triangular and hexagonal grids.

REFERENCE

- (6) Ernst, B., *The Magic Mirror of M.C. Escher* (Ballantine, New York, 1976)



