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Kenneth Barrese* (kbarrese@ucsd.edu), **Nicholas Loehr**, **Jeffrey Remmel** and **Bruce E. Sagan**. *Bijections on m -level Rook Placements*.

Suppose the rows of a board are partitioned into sets of size m , called levels. An m -level rook placement is a subset of the squares of the board such that no two squares are in the same column or the same level. We can construct explicit bijections between Ferrers boards having the same number of m -level rook placements. One such bijection uses a generalization of transposition to generalize a map by Foata and Schützenberger. This bijection also preserves the m -inversion number statistic of an m -level rook placement, defined by Briggs and Remmel. (Received September 22, 2015)