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Springer fibers are a family of geometric objects that are a kind of “eigenspace” for an object called the flag variety (which consist of nested sequences of lines inside planes inside 3-dimensional spaces, etc.). The pieces of Springer fibers are called cells and can be described explicitly by matrices. The cells are also known to be counted by various combinatorial objects, including objects called *webs*. We describe recent work using webs to describe the topology of Springer fibers and to describe *promotion*, a combinatorial operation on Young tableaux (a filled array of boxes akin to Sudoku puzzles). (Received September 15, 2020)