In his work with marked tableaux, Stembridge shows that the number of admissible marked tableaux of shape $\lambda \vdash n$ and index $i$ is equal to the multiplicity of the irreducible Specht module $S^\lambda$ in a certain representation of $S_n$. Through their seemingly unrelated work with chromatic quasisymmetric functions, Shareshian and Wachs establish that this multiplicity is also equal to the number of $P_{n,2}$-tableaux of shape lambda and index $i$. This equality established by Shareshian and Wachs is indirect and relies on $q$-Eulerian polynomials, chromatic quasisymmetric functions, and Smirnov words. Therefore, they ask for a direct, index-preserving combinatorial bijection between marked tableaux and $P_{n,2}$-tableaux. We present such a bijection. In particular, we develop an index-preserving bijection from the set of all marked tableaux of shape $\lambda$ to the set of all $P_{n,2}$-tableaux of shape $\lambda$. (Received September 16, 2019)