

Acknowledgement of priority

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In a previous issue of the Gazette, [1], I showed that the number of $n \times n$ upper triangular matrices in which every row consists of a string of 0's followed by a string of 1's, and every column consists of a string of 1's followed by a string of 0's, is the Catalan number $C(n+2)$.

Douglas Rogers (University of Hawaii) has pointed out that this result is not new. It apparently first appeared in a 1975 paper of Lou Shapiro (Howard University) in the American Mathematical Monthly, [2]. Shapiro's proof uses Dyck paths rather than bracketings, but is essentially the same as mine.

It is also curious that Shapiro used this correspondence to solve a problem similar to mine, namely classifying the ideals in the ring of $n \times n$ upper triangular matrices over a field.

References

- [1] P. Schultz, *Another Catalan avatar*, Aust. Math. Soc. Gazette **30** (2003), 265–266.
- [2] L. W. Shapiro, *Upper triangular rings, ideals and Catalan numbers*, Amer. Math. Monthly **82** (1975), 634–637.

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