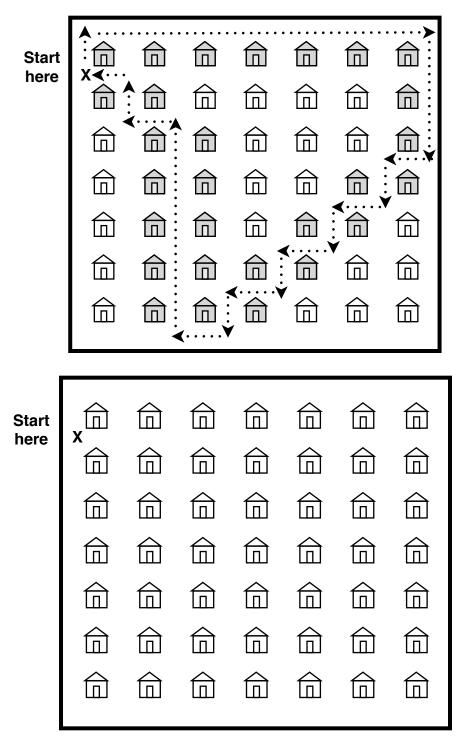
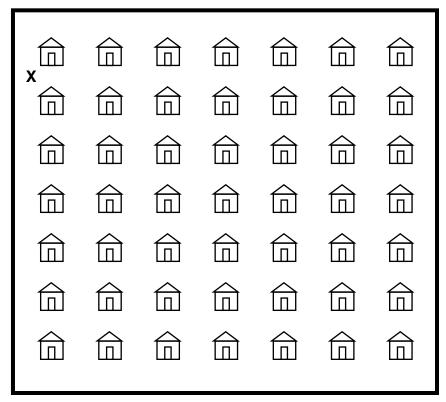
Sam Loyd's Patrolman's Puzzle

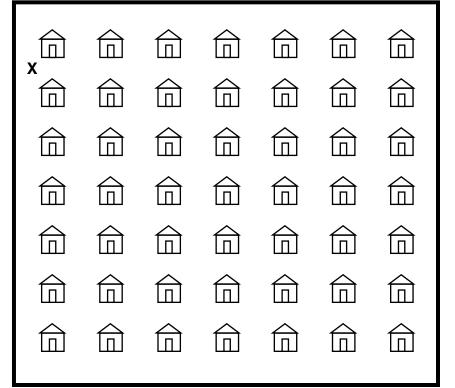
A local patrolman walks the streets in the neighborhood shown below. He starts and ends his patrol at point X. He is required to pass by an **odd number of houses** on any street and then make a turn onto the next street. He cannot repeat any path he has already walked but he can cross over a path he has already walked. The path he has been walking is shown below but it passes only passes the 28 homes shown in gray. Can you find a path that allows him to follow his orders and pass by every house in the neighborhood?



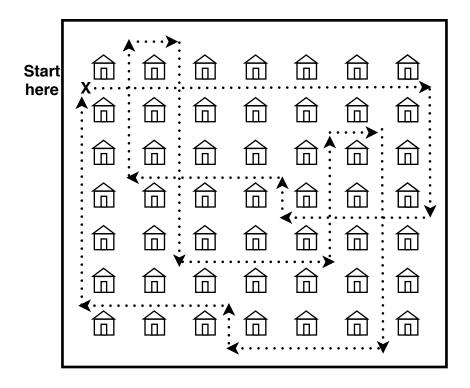




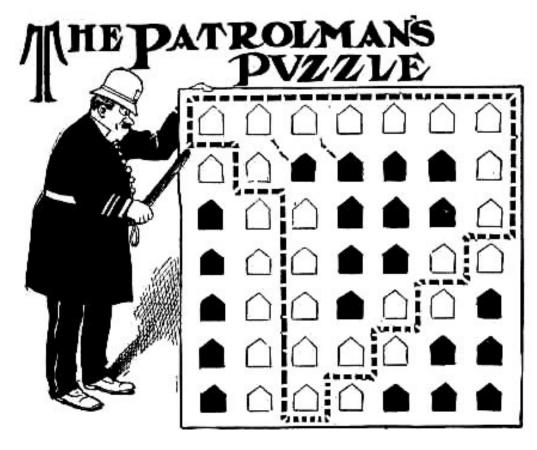
Start here



One Solution to Sam Loyd's Patrolman's Puzzle



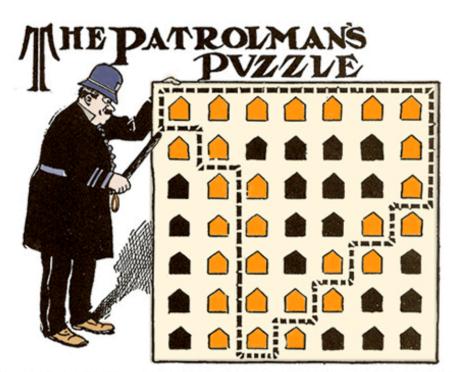
This is one version Loyd printed in the late 1800's



HERE'S a problem which has been puzzling Clancy ever since he got on the force. He has made a diagram of the situation and asks for the assistance of our clever puzzlists. He patrols seven blocks of the eighth ward, beginning and ending his nightly tour from the point he is indicating at the corner of Avenue A and Second Street. His orders are to patrol an uneven number of blocks on each street and avenue, so, as shown by the route, he goes either one, three, five or seven blocks before he turns. He knows all the servant girls in the houses he passes and some of them he says are right smart and pert, but before he selects a wife he would like to extend his route so as to discover a dark eyed beauty named Maggie Murphy, who he thinks lives in one of the houses off of his beat. You see he only passes those white houses and he wishes to find a route which complies to the regulations about only going an odd number of blocks on each avenue and street but will take him past the greatest possible number of houses.

Now, see if you can aid Clancy in the search for Maggie Murphy's home.

This is the version on the cover of Gardner's book in the early 2000's



CLANCY PATROLS THE HOUSES SHOWN ON THE MAP, BEGINNING AND ENDING AT THE SPOT HE IS POINTING TO WITH HIS STICK. HIS ORDERS ARE TO PASS AN UNEVEN NUMBER OF HOUSES ALONG ANY STREET OR AVENUE BEFORE HE MAKES A TURN, AND HE CAN'T WALK TWICE ALONG ANY PORTION OF HIS ROUTE. THE POTTED LINE SHOWS THE ROUTE HE HAS BEEN FOLLOWING. IT TAKES HIM PAST THE TWENTY-EIGHT HOUSES THAT ARE SHOWN WHITE ON THE MAP. CAN YOU HELP CLANCY FIND A ROUTE THAT WILL COMPLY WITH HIS ORDERS AND TAKE HIM PAST THE GREATEST POSSIBLE NUMBER OF HOUSES? AS BEFORE, THE PATH MUST BEGIN AND END AT THE SPOT INDICATED BY HIS POLICEMEN'S STICK.

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