

of timber to be avoided, and a stealthy Indian tread to be fancied in the rustle of every leaf.

Coming up from Kingston in the spring of 1860 by way of the lakes to Chicago, one railway only was then in existence in the direction I wished to travel, its termination being Prairie-du-Chien, on the Mississippi. From this point the only connection to St. Paul, then a large frontier town and trading post, was by steamers built for the navigation of the upper Mississippi, and well do I remember my first look at these extraordinary boats; accustomed as I was to seeing the vessels used on the great lakes, where strength and solidity is required, they seemed frail to absurdity in contrast. The supports of the upper decks, scarcely heavier than the trellis work of grape vines, were called stanchions; and I discovered that two inch oak was considered heavy planking for these extraordinary craft. The boiler was on deck, the four feet of hold not of course having room for it, and the power was conveyed to an immense wheel at the stern, which, extraordinary as it looked to one accustomed to the heavy side wheels and screws of the steam craft on other waters, was yet found to serve an admirable purpose when approaching the shallows and sand bars in the upper part of the river.

No ordinary rule of navigation seemed to be followed in the running of these steamers; and watching everything with the curiosity and interest of nineteen, I especially marked the method in which the "heaving of the lead," which was ordered from the wheel-house, as we approached some shallow navigation, was carried out by the mate on the fore-deck. That functionary first seated himself near the bow, with his legs hanging over the unbulwarked deck, and in this position, with a ten-foot pole, the lower four feet of which were painted alternately red and white, he plunged it into the water, announcing as he drew it up "three feet full;" plunged again, he announced "three feet scant;" another effort brought "two-and-a-half feet;" then the bell rang and the steamer's speed was decreased, and when "only two feet" was announced, the