Still again, the newest strata lie along the Sea and Gulf shores, and dip down under the water. These sheets of sediments are undisturbed. Beneath these are generally older strata which have a corresponding dip. These seaward dipping strata are Cænozoic and Mesozoic. When we descend to the Palæozoic strata we often find them considerably folded and irregular.

In general, the present positions of the strata may be explained as if they had been produced thus :- First, the universal ocean deposited sediments which hardened into Eozoic rocks which universally underlie. Then some portion of the bottom was uplifted to daylight, and the sediments of the next, or Palæozoic, Æon were not universal. Next the uplifted regions were further uplifted, and some of the Palæozoic sediments appeared along the margins of the Eozoic. Then followed Mesozoic sedimentation, another uplift of the same regions; then Cænozoic sedimentation and other uplifts. Meanwhile the destructive work of erosion was in progress, and the original shapes of the uplifted strata, already disguised by many movements, were further obscured by the wearing down of extensive formations, and the obliteration of some. But of all this we shall catch more satisfactory glimpses hereafter.

## THERMAL WATERS.

In the north-western corner of the territory of Wyoming is a tract sixty-five miles long and fifty-five miles broad which has been reserved by act of Congress (March 1, 1872) as a national park or reservation "dedicated and set apart as a public park or pleasuring ground for the benefit and enjoyment of the people." This was done on the recommendation of the national geologist, Dr. F. V. Hayden. The tract on the north extends about two miles into the territory of Montana, and on the west, two and a half miles into Montana and Idaho. For natural scenery it is one of the most remarkable

XIV. A WALK IN THE YELLOWSTONE PARK.