

record. They consist of clays and muds hardened into shales and slates, of sands compacted into sandstones and quartzites, of gravels and shingles solidified into conglomerates. These rocks prove beyond question that the processes of denudation and deposition were already in full operation with results exactly comparable to those of Palæozoic and later time.

Few parts of the stratified crust of the earth present greater interest than these earliest remaining sediments. As the geologist lingers among them, fascinated by their antiquity and by the stubbornness with which they have shrouded their secrets from his anxious scrutiny, he can sometimes scarcely believe that they belong to so remote a part of the earth's history as they can be assuredly proved to do. The shales are often not more venerable in appearance than those of Cambrian or Silurian time, and show as clearly as these do their alternations of finer and coarser sediment. The sandstones display their false-bedding as distinctly as any younger rock, and one can make out the shifting character of the currents and the prevalent direction from which they brought the sand. The conglomerates in their well-rounded fragments tell as distinctly as the shingle of a modern beach of the waste of a land-surface and the pounding action of waves along a shore.

Not only are these structural details precisely similar to those of younger detrital rocks, but we may here and there detect the remains of the pre-Cambrian topography from which these primeval sediments were derived, and on which they were deposited. Hills and valleys, lines of cliff and crag, rocky slopes and undulating hollows have been revealed by the slow denudation of the pre-Cambrian strata under which these features were gradually buried. To this