

departed cycles. Why? It was an act of beneficence which saved these relics of ancient dynasties from total destruction. There was purpose, not accident, in the failure of their complete extinction, and the assignment of the world exclusively to more modern creatures. These are precious examples preserved in a museum. These are caskets filled with documents from an olden time. The gar-pike and the sturgeon and the shark are missionaries from the past to the present. Hear them. They are preaching to man's intelligence. They are unfolding the plans of Infinite Wisdom. "He that hath ears to hear, let him hear."

XLII. SCENES FROM THE COAL PERIOD.

HOW THE COAL BEDS WERE FORMED.

WHILE the grizzly monsters of the ancient deep were luxuriating in empire and blood, the premonitions of progress were felt. The world was not made for them, but only an age of the world. Behold, the tide bears out into the sea a floating log. Its exterior is marked by peculiar and significant impressions. They reveal the crest of a dynasty in the vegetal world. They are the seal of a *Sigilla'ria*, or the scars of a *Lepidoden'dron*. It has floated from the shore of a low-lying and silent continent. There is a meager nursery there where nature is training vegetation for thriftier times. In this log is written the doom of the old Placoderms which had stirred the Devonian mud of the Ohio sea-bottom. It is a voice crying in the wilderness of waves, Prepare the way for new land, new forms, new scenes, and new history.

It was the beginning of the Carboniferous Age. The tremors incident to the upthrow of a new belt of land had strewn the submerged continental slope with the sandy ruins of older lands, and left the bed to mark the beginning of a new system of strata. We know these hardened sands as Waverly Sandstone and Marshall Sandstone. They were not outspread in a day. There was a chapter of the world's organic history enacted while these formations were laid down—