the measures necessary for humouring the stream, so as to produce continuity of current effect, may be evolved. S curves should be avoided, as at points of contrary flexure shoals are likely to result. The relation between the widths and depths of the channel and the distance apart of lengths of inflexion are the cardinal features to be studied. A channel should be widest at the summit of a curve and narrowed when curves change.

Dredging Disturbance in the Thames.—In the years 1906-9 the Thames Conservancy and the Port of London Authority carried out dredging operations in the Thames, whereby a channel 30 feet in depth at low water and 1000 feet in width was dredged from the Nore to the Albert Docks. Through the lower reaches of the Thames the river flows for many miles between artificial clay embankments, the land in rear of these averaging 9 or 10 feet below high-water level. The standard of the Port of London Authority for the height of these protective embankments is 5 feet 6 inches above Trinity high water, equivalent to 18 feet above O.D. Operations on a scale of magnitude such as those defined above necessarily produced local changes in the configuration of the river bed, owing to the varying strata underlying the channel. Plate I shows a typical fluctuation in underwater depths along one short length of the frontage of the Thames. This same frontage is now slowly becoming re-stabilized, but, as a result of the changes in contour, heavy defensive works have been rendered necessary to conserve the marsh embankments, which are the protection against flooding of many hundreds of acres of land. The river for untold ages has wandered in devious channels throughout its estuary, redistributing diluvium of a patchy character irregularly. During the Human Period the level of the river has probably been lowered not less than 60 feet, the stream having sawn its way down, leaving, tier above tier, terraces of sand and gravel. The flood-loam of ancient periods constitutes those vast areas of brick earth which now occur on both banks of the river. The regrouping of these deposits of "drift", or "high-level gravels", was probably the work of floods toward the termination of the Glacial Epochs.