

The instrument had been found very useful not only in experiments but in practice on the large scale, and he deposited it in the Gallery of the Institution in order that it might serve as a model for those who were inclined to adopt it in marine boilers.

May 31, 1842.

The PRESIDENT in the Chair.

“On the construction of Model Maps, as a better mode than On Model Sectioplanography for delineating the Drainage and Agricultural Mapping. Improvements of a Country, or projected lines of Railways, Canals, &c.” By John Bailey Denton, Assoc. Inst. C. E.

This communication was accompanied by a map in relief of an estate, as a specimen of the method which the author recommends.

The subject of mapping in relief is not new, and the author had previously published a treatise on the subject,* but having made extensive experiments, he was enabled to bring the subject before the Institution in a more defined form, showing that the construction of the models had been reduced to a simple and cheap method. These models are peculiarly recommended for pointing out the capabilities of a district for drainage either for agricultural purposes, or for collecting waters together for manufacturing power. They are superior to maps, as they show at a glance the relative heights of the various points, display the geological phenomena, and may be made to delineate the state of cultivation of the districts. The lines of railways, of roads, or of canals, can be more clearly defined upon them, and they are stated to be peculiarly adapted for parish surveys.

The expense of making a model of an estate of compact form is stated to be from two shillings and sixpence to three shillings and sixpence per acre.

“Observations on the Periodical Drainage and Replenishment of the Subterraneous Reservoir in the Chalk Basin of London.” By the Reverend James Clutterbuck, &c., &c.

This paper, which formed the substance of a letter to the Reverend Dr. Buckland, and was by him communicated to the Institution, consists of a series of observations on the periodical drainage and replenishment of the subterranean reservoir of the chalk basin of

* Outline of a Method of Model Mapping, by J. B. Denton. Weale, 1841.

Water in
the Chalk
Basin of
London.