

survey has fully confirmed that of Mr. Lloyd, and proves that there are no obstacles which engineers and contractors of the present day could not encounter and overcome without much difficulty and expense,—the difficulties being more of a political character, and to be dealt with by statesmen rather than by engineers.

### New Books.

*Engineering Field Notes on Parish and Railway Surveying and Levelling.* By HENRY JAMES CASTLE. Simpkin and Marshall.

THIS is a work of considerable importance to practical engineers, inasmuch as it supplies them with a fund of useful information in reference to general surveying, but particularly so as regards levelling and the laying out of railways. The impression before us is the second that has been required, and is dedicated to Sir Richard Bonnycastle, a gentleman of high scientific attainments, and eminent as a surveyor in difficult and almost inaccessible localities. The author himself is advantageously known to the public, not only on account of his scientific labours, but from his extensive experience as a practical surveyor in the woody regions of Canada and elsewhere. Our space is too limited to admit of extracts as specimens of the manner in which the book is got up, but we may state in general, that the typography is good and the language sufficiently perspicuous to be comprehended by practical men of even the meagrest capacity. This speaks in commendation of the work, for modern writers, through the vanity of display, are apt to treat their subjects in a manner that can only be understood by men of science and extensive mathematical reading.

The work is divided into five parts, and subdivided into chapters, each chapter giving a lucid detail of the subject under consideration. The directions in Part I., on running the base lines and carrying on the range in case of obstacles, are particularly valuable, and worthy of the reader's attentive perusal; and the surveys of Hendon, Finchley, and Wigston, with the method of plotting, cannot fail, if carefully considered, to impart correct and extensive information in regard to those very important topics.

In Part II., where the mode of surveying by the theodolite is given, much useful matter is contained; but we cannot help thinking that the chapter on trigonometrical problems might have been extended with very considerable advantage, as there are many cases which occur in modern practice of some difficulty, that the author has not alluded to; and he might, with some show of candour, have acknowledged the source from whence he obtained the principles which he grounds his solutions. We are somewhat cognizant of this subject, and beg leave to refer our author to an early number of *Colburn's United Service Journal*, and say if the idea did not originate there, although the writer's name does not appear. "The lion is known by his paw."

The trigonometrical survey of Hampstead Heath, as connected with Streatham Common, will be found particularly useful to young surveyors; but we are forced to say that the example of triangulation, given in chapter 10, Part II., is not good; many much more instructive and interesting examples might have been selected from the "Ordnance Survey," and the author would not have depreciated the value of his work by producing them.

Part III. explains the method of surveying by the circumferentor, an instrument, which, as improved by the French, is likely, in our present extensive operations, to come into very general use. Part IV. is on levelling, one of the most important and delicate branches of general surveying; the author's mode of treating the subject is particularly judicious, and young surveyors will find their advantage in attending to his remarks. Part V. treats of railway curves, and the manner of staking them out. This is an important branch of modern engineering, and cannot be too carefully attended to by the aspirants to constructive fame. The work concludes with an appendix, containing field-notes, and a traverse table for carrying on a survey by the circumferentor; a mode of practice which we anticipate will meet a very general appliance in

subsequent operations in the field, as the instrument is very simple in its construction, and easily understood.

*A Popular Atlas of the World, Illustrated by Geographical and Statistical Descriptions.* Edited by JAMES WYLD. London. Wyld, Charing Cross, Nos. 1 to 4.

To Mr. Wyld, one of the most enterprising of our map publishers, the public are indebted for constant attention to passing events, and the supply of the best information in his department, at the right moment. The discovery of a new island, or the success of our arms in India, is no sooner announced, than Mr. Wyld issues a map of the locality, accurately though speedily prepared.

The work now before us, as its name explains, is of another kind. It is an endeavour to place a first-rate atlas within the reach of all, and deserves to be supported. Each monthly No. (of which there are to be 24) contains two large maps and illustrative letter-press at a very low price.

### Correspondence.

PLASTERING ON CLAY WALLS.

SIR,—In different parts of England there are cottages built with clay, and when newly plastered and whitewashed, they have a very neat appearance. But the misfortune is, that it does not continue long, for the frost and weather soon make the plaster break off from the clay-walls. Now the object of my troubling you is to know, whether any thing can be or has been invented to remedy this evil. It is an important question, and there are thousands that will be benefited by a successful solution of it.

I am, Sir, &c.

A YOUNG ARCHITECT.

### Miscellaneous.

**UNION OF CHINESE MASONS AND CARPENTERS.**—After the recent extraordinary feat of British alacrity and valour in the taking of every fort on the Canton river, and the spiking of about 900 cannon by 1,000 men, without the loss of a single man, a proclamation was issued by the Chinese gentry, &c. of Canton, intimating, that as the English barbarians wished to build a temple for public worship; and also, across the river in Honan, to take possession of a tract of ground and to build a fort, the great body of masons and carpenters in the two cities (the old and the new) of Canton, had held a public consultation, and agreed together, that if the English undertake the prosecution of their works, as aforesaid, the men employed in these trades shall none of them be permitted to engage to complete their works on their own responsibility. And if at Hongkong, Macao, or Whampoa, there should be men who are willing to undertake it, the people of our two trades will make it their business to search out every workman of this sort by name and kill him, and to notify the inhabitants of the district to burn up the dwelling of every man who ventures to assume such a responsibility, which will be done without the least delay.

**FREEMASONS' ASYLUM.**—At the twelfth annual festival in aid of the funds of this incipient institution, held on Wednesday week, in the Freemason's Hall, Great Queen-street, Dr. Crucifix stated, that the committee proposed at once to erect the long-projected asylum, and intended in the ensuing month to submit a plan to the grand lodge for the purpose of carrying out the object of the association, by the immediate construction of a suitable building, towards the erection of which 4,116*l.* had already been contributed. He subsequently announced that 500*l.* had been subscribed at the dinner-table.

**ASSOCIATION FOR TESTING NEW INVENTIONS.**—An idea already broached in *THE BUILDER* has, it appears, assumed a practical form by the establishment of a company in France, "for the purpose of studying, constructing, and experimenting on new inventions connected with locomotives." A correspondent of the *Mining Journal* suggests the utility of such an association in England for the redemption of really valuable inventions from neglect or difficulty and oblivion.

**GIBSON'S STATUE OF THE QUEEN.**—The silence which prevailed in respect of this long talked-of work was somewhat curious. Report said it had been lost at sea on its way to England; in truth, however, it was safely landed at Southampton, and is now in the Royal Academy. *The Roman Advertiser* has given two articles on the statue, from which we learn that the colour, applied sparingly in its decoration, has led to a contest of opinion. We extract one or two paragraphs. "This work has become an object of much attention from the style in which the artist has completed its details, with the use of colour in the ornaments and embroidery of the dress. We need not dwell upon its beauties, except to say that its completion has enhanced those which, when in an unfinished state, were already so distinguishing; and that in majestic gracefulness it not only raises the subject to its highest ideal without sacrificing truth of resemblance, but is a perannification of the royal so obvious, that if discovered centuries hence, we believe there could be no hesitation in recognising it as the statue of a queen, even without the tiara, or any other insignia. We felt some alarm for its reputation on learning that it had been coloured, and visited it again, doubtful of receiving an impression so agreeable as the first. But the application of colour is so delicate, the tone so subdued, that no effect of glaring contrast is produced, and the pale purity of the marble does not, as a whole, suffer from the partial tinting. Nothing more is coloured than the rim of the tiara and the dolphins that ornament its circlet, in yellow; the wave-formed embroidery of the robe, and the rose, shamrock, and thistle at the corners, in red and blue; the acorns pendent from the extremities, where the Greeks wore weight of gold, in yellow." "The statue is one in which much detail is introduced, in which the effect sought is that of the majestic both from character and position. In such a one, where ornament is befitting, and richness, as far as suitable to sculpture, an attribute of propriety, the introduction of colour partially, and under the control of so refined a taste as this artist's, does not (speaking from our own impression) jar against principles, nor approach so near to the real as to prejudice the ideal of the subject. Though the detail is rich, it is softened almost to shadowiness, and not much nearer to the glare of dyed draperies, as actually worn, than the paleness of the marble to the warm hues of the flesh. It adds as much of the effect of splendour to the figure as to enhance its abstract character, that of female royalty, rather than destroy its purity in general effect."

**OVERBECK** (says a correspondent of the *Daily News*) has just executed one of those graceful and touching little outline drawings in which his real genius is conspicuous; and his present effort will be shortly known extensively in Edinburgh. Bishop Gillies, who is personally a most amiable and kindly man, full of zeal for bettering the operative classes, has founded, it appears, a sort of holy guild in modern Athens, and prizes are given to those of the brotherhood who excel in "thrift and cleanliness." Overbeck was asked by the patrician prelate to furnish the design for a medal to be distributed on these occasions, and I have seen the result. It is the holy dwelling at Nazareth displaying a modest but neat interior; Mary is at her distaff on the right, Joseph plying his axe on the left, and the mysterious young indweller among men is humbly engaged sweeping the chips of wood from the earthen floor with simple dignity. The general effect is harmonious and beautiful.

**ALTERATIONS IN WESTMINSTER ABBEY.**—A correspondent of *The Times* complains that the alterations for some time contemplated (not in Westminster Abbey alone) for the laudable purpose of increasing the accommodation of the public at divine service, were only delayed till the force of public opinion against them had settled down, and that the plan of removing the screens between the transepts and the choir, and fitting up the former spaces with seats, is now being carried into effect, although he conceives the nave to be the proper place to be appropriated to that purpose, the only obstacle being the organ screen, the architect of which objects to have it taken down.