Catalogue raisonné of 1845, indicated the number of Echinidæ discovered in the department of Sarthe at forty-one, and D'Orbigny in his Prodrome Stratigraphique at forty-four, the result of the joint labours of the authors, and other naturalists of the district, has raised the number to no less than two hundred and two. The discrimination, description, and illustration of the different species have been performed by M. Cotteau, whilst their stratigraphical arrangement and position have been accomplished by M. Triger. Some of the more remarkable forms discovered by them are the large *Heterocidaris trigeri*, with its peculiar arrangement of tubercles and its singular ambulacral pores, a species of which has recently been obtained by Mr. Wright from the inferior oolite of Yorkshire; the *Metaporhinus sarthacensis*, a curious and exceptional form representing in the Jurassic series the great family of *Spatangidæ*, which only make their appearance at the commencement of the cretaceous period; the *Echinocyphus tenui striatus*, which the authors are inclined to regard as the type of a new genus; the *Cidaris vendocinensis*, which presents such beauty of form and markings, with many others we have no space to particularise. The lithographic drawings are clearly drawn, and comprehend all the species discovered.

Progress of Chemistry. Jahresbericht über die Fortschritte der Chemie und verwandter Theile anderer Wissenschaften. Unter Mitwirkung von Th. Engelbach, Al. Naumann, W. Städel; herausgegeben von A. Strecker. Für 1868. 2tes Heft. (Williams and Norgate, 1870.)

THIS part, like the first, which we noticed a short time since, contains 480 pages; Organic Chemistry, continued from the first part, occupies 354, 13 of which are devoted to Animal Chemistry. Analysis fills 71 pages, the remainder being set apart for Technical Chemistry.

The section on Organic Chemistry contains accounts of Perkin's investigations on the hydrides of sodium and benzyl-salicyl, on butyric coumarin, and butyrocumaric acid, as well as Fittig's criticism of Perkin's views of the constitution of coumarin, which has since given rise to a lively discussion. Notices of Schützenberger's researches on triacetiodol, and of those of Perkin and Duppa on the constitution of glyoxylic acid are given. Stenhouse's experiments on benzol sulphuric acid are described, besides several papers by different chemists on the sulpho acids of the benzol series. Hofmann contributes, as usual, several valuable papers, the most important being those on the cyanide of naphthyl and its derivatives, and on the artificial mustard oils containing the radicals ethyl, methyl, amyl, tolyl, and benzyl, in the place of the allyl existing in the natural essence. The constitution of these compounds is also discussed. Gautier's researches on the carbylamines are continued, and also those of Lossen on hydroxylamine, which are noticed at considerable length. The action on organic bases is concluded by an account of Crum Brown and Fraser's experiments on the physiological effects of the compounds produced by the union of methylic iodide with the poisonous alkaloids.

Under Analysis we find the methods proposed by Frankland and Armstrong for the examination of potable waters, and which have since given rise to some controversy. Russell's apparatus for gas analysis is also described. The section on technical chemistry (only a portion of which appears in this part), contains papers by Rosenstiehl and Kopp, and by Schaffner on the preparation of sulphur from alkali waste, a subject of much importance, especially in this country, where the heaps of residues, which usually evolve sulphuretted hydrogen, and often pollute rivers in their neighbourhood, accumulate in immense quantities; this material, thanks to the study of scientific chemistry, may now be made to yield pure sulphur to such an extent as to make it worth the while of the manufacturer to extract it, while its removal renders the residues innocuous.

LETTERS TO THE EDITOR

[*The Editor does not hold himself responsible for opinions expressed by his Correspondents. No notice is taken of anonymous communications.*]

The Gulf-Stream

I SEND for the perusal of your readers an extract from a note sent to me by Mr. King Groom of Stornoway. The facts he mentioned may be interesting. The beans I have received. When I was in the Hebrides some time since, I was assured that clubs, paddles, and drinking vessels of wood were sometimes found on the shores of the islands, and that these things were supposed to float in the Gulf-Stream from Mexico, but I never saw any. Some of your readers will doubtless be able to say where these beans grow, and to give their opinion as to the probability of their floating from the Mexican Coast, or from some other tropical country or island whose shores are washed by the Gulf-Stream. If these beans are brought over by the Gulf-Stream, it is probable that they may also be found on the west coast of Ireland and on the coasts of Devon and Cornwall. If so it would be interesting to hear from your correspondents in those parts whether any particular virtue is attributed to them by the inhabitants.

Board of Trade, Aug. 25. THOMAS GRAY

"Upon travelling on the shore of Illery I found a, to me, curious bean, known as '*dolichos mens*,' or horse-eye bean. I was told that every year a few are found along the shores of the Outer Hebrides, and they are supposed to be carried by the Gulf-Stream from the Gulf of Mexico. These beans are much sought after, as they are superstitiously supposed by the South Uist and Barra people to be a charm in child-bearing; if at that time the woman has one in her hand she will have little pain in her labour. I was much interested in the story as told me by a Mr. Arbuckle, at Barra, the parish schoolmaster, and confirmed by Dr. M'Donald of North Uist. It is said the curious have a small band of silver wire placed round the bean that has travelled so far of itself, and a silver cross put on the side by a silversmith in the south. The inhabitants state they are sure the bean is brought to the shore of the Gulf-Stream from Mexico, as they have been thus found from time immemorial. Another bean is also brought by the same means—viz., 'Eig autea Mi; Mosa,' a large brown seed."

The British Medical Association

THE reference to the income and expenditure of the British Medical Association last week requires correction. The income of the association, from subscription, is not 5,000*l.* but 3,471*l.*; the subscription annually only one guinea. The association is one which includes an important political and social organisation. For the annual guinea the associates are enabled not only to supply themselves with a journal weekly, which stands on the same footing as those published at a higher price than their total annual subscription, but in addition they keep also an active and important organisation, with branches in every part of the kingdom, which protects medical and public interests and advances medical science. Many think with you that it would be desirable to make larger grants for special researches. But for this purpose it would be necessary to start a special fund. The annual mass of scientific matter published in the journal is treble what could be contained in any volume of Transactions, and has the advantage of being published at the opportune moments of discussion. You would confer a benefit by urging the propriety of a special fund for original research. But the members are so well pleased with the large return for their annual guinea, that their numbers have risen in four years from two to four thousand; and the weekly journal, which now takes the lead in periodical medical literature, is the essential condition of the political and professional authority of the association. To publish in its place an annual volume of Transactions would, it is universally felt, be a suicidal act of retrogression. Among the 4,000 members there are not a dozen who are not aware of this. X.

The Intended Engineering College

"Look not a gift horse in the mouth"

I WAS very sorry to see in NATURE for 18th August a letter from Mr. G. C. Foster complaining of a supposed intention of the Government to aid the teaching of science, and basing this