book or a complete account of the geography and history of Northamptonshire and Rutland. He leads his readers in rambles through the country-side, dwelling principally in his descriptions on church architecture and historical anecdote. Modern developments find little place in the book, and the scenery and physical features are only lightly touched on. It is a book written by an archæologist for leisured readers of a like mind to whom Northampton and Rutland are native shires. Judged from that point of view, it is well written and full of interest. More than a hundred drawings by Mr. F. L. Griggs ably illustrate the volume, and there is a well-executed map.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of Nature. No notice is taken of anonymous communications.]

Marine Research at St. Andrews.

In his letter published in NATURE of March 27 Prof. McIntosh states that, while the country is spending large sums of money on international marine investigations, the Gatty Marine Laboratory of St. Andrews is closed for lack of funds. He also points out that the Gatty Marine Laboratory and its predecessor at St. Andrews were the institutions where many marine zoologists, now occupying important positions here and in the Colonies, received

their training.

In spite, however, of the manner in which the laboratory has been ignored by the Government Departments which might have been expected to give it support, it has been the centre for important marine research, the results of which must be appealed to and recognised long after much of the undigested material accumulated under more pretentious conditions has been buried under thick layers of dust on Government shelves. It is certainly a pity that in this country the three Government Departments concerned with marine investigations work independently of one another, and that each in turn is prepared to adopt a similar policy with reference to the marine laboratories.

The marine laboratories have claims which, at the present time when schemes of reconstruction are being considered, should not be forgotten—first, as useful adjuncts of the biological teaching of our universities; secondly, as centres for training those who are to take part in marine investigations; and, thirdly, as institutions where marine investigations are carried out, often to a large extent by voluntary

workers.

Surely, then, before the Government enters upon schemes of investigation, whether national or international, involving the expenditure of large sums of public money, the first endeavour should be to see that those institutions which have already proved so valuable are maintained and developed to their fullest extent.

A. Meek.

Dove Marine Laboratory, Cullercoats, Northumberland, March 31.

The Machinery of Government.

The quotation from Carlyle with which the article on the above subject opens in NATURE of April 3 is singularly appropriate—"A man without a purpose is like a ship without a rudder"—and the comments of the writer are very useful. I add another quotation

NO. 2580, VOL. 103]

from a more obscure source: "A man of great know-ledge and unweariable perseverance can really, by constantly pressing upon Ministers and Departments, do more than a tired and harassed official to shape public ends." There is a substratum of truth in this. The State Department lacks initiative. The Minister's time is taken up in assisting to run the political machine, in doing what is brought to him from his Department, and in seeing through such things as may arise in Parliament in connection with his Ministry. The Department itself is engaged in administrative work, and has little time, or perhaps little inclination, for devising reforms in the interests of the industry it represents. It may be argued by the Department that such is not the work of an administrative Department; and those relying on a Department for taking the initiative in any reform should consider whether they are entitled to do so.

No one should know better the wants of an industry than the more intelligent and far-seeing among the people who carry it on, and it is for them to see that some means is provided for direct access to the Department for suggestion and consultation. This can be done by the appointment of an advisory council as suggested in the Report of the Machinery of Government Committee. It is a matter of the highest importance to the industries of this country that when a Department is approached with this end in view it should receive the suggestion with sym-

athy.

The methods of appointing the members of an advisory council should be such as to secure, so far as possible, the appointment of men in whom those in the industry have confidence.

A. J. Brander.

Visualisation of Features.

MAY I direct the attention of readers of NATURE to a strange trick that I have found my memory to play me for many years? It occurs in the process of recollection of visual impressions ("visualisation") of faces.

Suppose, now, that I am attempting to visualise a face not seen for some time, and that I recollect the lower lip to be slightly pendulous, while the nose is large and rather prominent—well, I can visualise each separate feature correctly, but, so soon as I attempt to visualise the face as a whole, the features are grotesquely exaggerated, so that the lip (to take the above case) appears as a huge, pendulous, quite unnatural growth, and the nose as an equally absurd and grossly unreal structure.

My meaning may not be very clear to all, but if any other readers have had similar experiences, they will, no doubt, understand it. There is possibly some scientific explanation forthcoming; if so, I should be glad to hear of it.

R. F. POWELL.

Hodgsonites, Charterhouse, Godalming, Surrey, March 19.

The "Atom."

"To-day many chemists and physicists think that the chemical atoms of the last century are no longer to be considered as indivisible. In that case the old Greek name 'atom' is no longer fitting, because it denotes indivisibility." The above sentences are quoted from the presidential address of Prof. T. W. Richards, published in Nature of March 27.

Fifty years ago Prof. Brazier taught us, his students at Aberdeen University, very emphatically that the word "atom" must be taken in its primary Greek meaning of uncut. undivided—not as indivisible, but as what had not hitherto been divided. This was long before the discovery of radio-activity.

A. A.