are not large, and have attached to portions of their surfaces the very hard ferruginous matrix in which they were embedded. The larger specimen is a roughly shaped flint such as are found in some quantity at Cromer. The yellow-stained surfaces are typical, and exhibit the well-marked band of black unchanged flint under the layer of cortex. The other specimen is a small flake, with bulb of percussion, radiating fissures, and *éraillure*, and shows similar characteristics to the last-described flint, together with a whitish coloration on the bulbar surface, which is encroached upon extensively by the ochreous staining. This discovery establishes the fact of the occurrence at Sheringham of ochreous flints, comparable in every respect with many found at Cromer, *in situ* in the surface of the sub-Crag Stone Bed. It is established also that artefacts of the same order are to be found scattered among the large flints resting upon the chalk, and exposed at low water immediately opposite to the section in the cliff where the two flints were found *in situ*. There would seem, therefore, to be little doubt that the Cromer specimens are referable to the same horizon as those discovered at Sheringham, namely, the basal layer of the Cromer Forest Bed deposits.

In my paper read before the Royal Anthropological Institute I record the finding, at the Cromer site, of a large, yellow-stained flake exhibiting a mass of ferruginous "pan" material firmly adherent to a portion of its surface. This ferruginous deposit appears to be, in all respects, similar to that in which the two Sheringham flints were embedded, and its presence upon this flake supports the conclusion above stated as to the geological age of the Cromer artefacts.

J. REID MOIR.

One House, Ipswich.

The Physical Status of "Space."

IT does not appear from Dr. Jeffreys's letter in NATURE of May 26, p. 394, that we are at variance about anything really vital. What I do contend is this: that, thanks to the searching character of the theory of relativity, the time has come when it is profitable to attempt a much-needed unification of fundamental terms and conceptions, particularly in face of the curious indifference to such matters shown by some of those physicists who, with consummate skill, have developed the differential equations representing the natural forces. As the space of NATURE is limited, may I briefly, in a series of categories, amplify my previous letters (April 7 and 21 and May 5), stating the case for the extension theory suggestively, but in no way dogmatically?

(1) If you objectify the pure spatial co-ordinate system of the mathematician you are of necessity dealing with attributes of some entity which, speaking within the limitations of human experience, must be supposed to answer to the designation "physical." I press for no other use of the term "æther," and this only as a safeguard against language suggestive of nothingness or absolute emptiness.

(2) The validity of the logical step (1) is supported by the theory of relativity, particularly the generalised theory, which actually affirms that the only objective space of human experience is physical space—out of which basis of experience the mathematician constructs his subjective spaces and pure geometries (in Dr. Jeffreys's sense of the word) representing various ideal, or possible, universes.

(3) The whole trend of twentieth-century physics is to teach us to think in terms of energy, not in those of matter. Matter is to be regarded as so much bound energy, as symbolised, indeed, in Einstein's expression, mc^2, for the energy equivalent of mass. It seems legitimate, therefore, to infer that the attribute of extension or extendedness ultimately belongs to energy.

(4) In the light of (1), (2), and (3), I submit that a desirable unification of ideas can be effected, and much confusion of thought avoided, if, instead of regarding the universe as *containing* energy, we regard it as *being* energy. Let the physical universe be defined as an evolutionary system of energy—that is to say, as an extensive entity the very nature of which is to express itself in changes and transformations (motions). This definition would render Comdr. McHardy's artifice of "container" and "content" (NATURE, May 19, p. 360) unreal; and I cannot see that the distinction he makes is ontologically sound. Furthermore, does not the picture of the universe herewith presented throw into relief the necessary association of time with space, and illustrate that physical difference which leads us to regard time as *imaginary* space?

Finally, I would like to refer to the passage in Sir Oliver Lodge's article (NATURE, February 17, p. 800) wherein he speaks of the necessity of "diving down into the æther." The metaphor is literally pregnant with meaning. It suggests, indeed, that when we shall have peered into the untold depths of the mere nameless *thing*—call it "space," "æther," "world," "metric," "substratum"—which is the scene of such momentous phenomena as light transmission and gravitational potential, it will prove to be a veritable mine of energy and a truly formidable physical reality. The great "æther" controversy seems now nearly spent, and I think it could be settled to-day if only the "non-ætherites" would frankly acknowledge that the world-energy is *continuous*, and the "ætherites" would think of their entity as an energy *continuum* rather than as functioning as a kind of independent luminiferous medium.

L. C. W. BONACINA.

May 29.

The Colours of Primroses.

IN view of the turn given to this discussion by Dr. Heslop Harrison's letter in NATURE of May 19, it may be worth while to state that in the Island of Sark twenty-four years ago, in addition to an abundance of normal primroses, there were also plenty of (*a*) white, (*b*) pink, and (*c*) red flowers. Necessarily there can have been no appreciable difference of altitude.

Occasionally we find red primroses hereabouts, but my impression is—although I will not venture to write positively—that they do not run to the deep red of the Sark specimens. I remember finding one plant on the edge of a field three miles east of Polperro at an altitude of possibly 200 ft. or so.

I feel fairly certain that I never saw any cowslips in Sark—and I explored the island fairly thoroughly.

FRANK H. PERRYCOSTE.

Higher Shute Cottage, Polperro, R.S.O.,
Cornwall, May 27.

Gold-coloured Teeth of Sheep.

DURING the early part of the war the transport of sheep about the country districts was strictly regulated so that a local butcher could state definitely in which locality his meat had been fed. I noticed a large number of sheep's teeth encrusted with bright yellow tartar, identical in appearance with good average bright non-arsenical iron pyrites. I was assured that the sheep were fed upon Rye Marshes. I have a number of these jaws, and I should be pleased to send specimens to any museum interested in them or to anyone who would undertake to publish a full analysis and report upon the material.

W. J. LEWIS ABBOTT