Viewing all objects unremittingly
In disconnection dead and spiritless ;
And still dividing, and dividing still,
Break down all grandeur . . .

. . . And if indeed there be
An all-pervading Spirit, upon whom
Our dark foundations rest, could he design
That this magnificent effect of power,
The earth we tread, the sky that we behold
By day, and all the pomp which night reveals ;
That these—and that superior mystery
Our vital frame, so fearfully devised,
And the dread soul within it—should exist
Only to be examined, pondered, searched,
Probed, vexed, and criticised ?

His spirit revolts at the ways of men of science, who
prize the human soul and the transcendent universe

No more than as a mirror that reflects
To proud Self-love her own intelligence.

In one passage only, of which I am aware, and that
still later in "The Excursion", does Wordsworth admit
that science may find "its most noble use . . . in
furnishing clear guidance to the mind's *excursive*
power" and "then, and only then, be worthy of her
name":

For then her heart shall kindle ; her dull eye,
Dull and inanimate, no more shall hang
Chained to its object in brute slavery.

Ought we then :

To reinstate wild Fancy, would we hide
Truths whose thick veil Science has drawn aside ?

No ! No matter how high we rate "the thirst that
wrought man's fall" . . . "the universe is infinitely
wide" and reason will ever meet "some new wall or
gulf of mystery" which nothing but "Imaginative
Faith" can overleap.

The fact is that Nature for Wordsworth has so
deep a meaning.

The sounding cataract

Haunted me like a passion : the tall rock,
The mountain, and the deep and gloomy wood,
Their colours and their forms, were then to me
An appetite.

Perhaps that is as far as most votaries of Nature get.
But in these lines Wordsworth, "so long a worshipper
of Nature" (and if Wordsworth says "worshipper"
he means it) is looking back to his "thoughtless
youth" before he had learned to hear in Nature
"the still sad music of humanity" and had gained
"a sense sublime of something far more deeply
interfused . . .", the "soul of all my moral being".
Indeed, he goes on almost to reproach his sister that
"in the shooting lights" of her "wild eyes" he can
read only those more superficial joys. She lacked as
yet :

. . . the spirit of religious love
In which I walked with Nature.

It is true that, for a time, depressed and bewildered
by the excesses of the Revolution in France and the
reactions it provoked, he "turned to abstract science"
and there sought

Work for the reasoning faculty enthroned
Where the disturbances of space and time,
. . . find no admission.

But he was soon recalled by Dorothy and "preserved
a Poet" to "seek beneath that name alone" his
"office upon earth" and to derive "genuine know-
ledge" from "sweet counsels between head and heart".

Such is a fair picture of Wordsworth's view of
science. Whether the poet would have deemed it an
act of piety to con and sift his writings in this way,
to the sorry detriment of his grand use of words, is
open to doubt. He might well have cried :

Our meddling intellect
Mis-shapes the beauteous forms of things :—
We murder to dissect.

To-day, when physics ends in the mists of mystic-
ism, it may be that science might claim kinship with
Wordsworth the poet. But science now claims all
society as her province, and Wordsworth the prophet
and reformer would fit less awkwardly into the pages
of NATURE. The Wordsworth who, standing at the
threshold of the Industrial Revolution, with a mind
not warped by politics, can compare with truly
scientific objectivity, though with all a poet's feeling,
the evil of the factory child with the grinding penury
of rural England and the ignorance and degradation
of the children on the land. The Wordsworth who
can describe the factories wherein "little children,
boys and girls" enter and

where is offered up
To Gain, the master idol of the realm,
Perpetual sacrifice,

and who can yet rejoice

(Measuring the force of those gigantic powers
That, by the thinking mind, have been compelled
To serve the will of feeble-bodied Man)

in the conviction that late or soon man will learn
that "physical science is unable to support itself"
and that

. . . all true glory rests,
All praise, all safety, and all happiness
Upon the moral law.

The Wordsworth who, surveying all these evils
present and to come, finds a solution and a hope
(this in 1810) in "a System of National Education
established universally by Government" and urges
that such a system be begun at once even "when
oppression, like the Egyptian plague of darkness" is
"stretched o'er guilty Europe". For then

Change wide, and deep, and silently performed,
This Land shall witness.

OBITUARIES

Mr. J. Reid Moir, F.R.S.

I FIRST met Reid Moir so long ago as 1911. Rumours
had been flying about that it had been demonstrated
without cavil that the Garden of Eden had been close
to Ipswich, that mankind's birthday had been thrown
back millions of years, that the 'missing link' had
been at last found ; that all these startling new dis-
coveries were the result of a Mr. Moir's finds in a
gravel pit near Ipswich. The facts were that Moir,
in business in Ipswich, instead of playing golf in his
spare time, spent all his leisure in the gravel pits
near his home in the hope of discovering the relics of

early man. In this he was helped and backed up by the late Sir Ray Lankester, without whose aid even Reid Moir might have failed to 'get his ideas over'. The age of the gravels in question has never been doubted. They contain a rich fauna and belong to a period antedating the Cromer Forest bed: in the still current nomenclature they are late Pliocene in date. Moir claimed that *in situ* in these gravels he had found artefacts, that is, flints which had been chipped by man, and which for reasons given could not have been the result of natural operations.

The heat of the controversy which at once burst on Moir's head can only be explained if we remember that theological as well as archaeological considerations were involved. The theory of evolution as outlined by Darwin had, it is true, been somewhat grudgingly accepted by the Churches; but here was a little business man in a provincial town who ventured to throw back the antiquity of man to some incredible date, to throw completely out of balance the accepted order of man's history. On no other ground can one explain the fury of the conflict. One of Moir's opponents actually had printed in colour a Christmas card burlesquing the whole theory. But Moir was of Scottish origin and had been hardly brought up by his father, the founder of the tailoring business he was later to inherit. Indeed, he once told me that at first he was made to sweep out the premises in the morning. He just persisted in his theories, collected more and more evidence from the pits, and studied more and more closely the complicated phenomena of flint fracture. Through thick and thin he continued to have the support of Lankester and a small number of scientific men with open minds.

But it was not until 1920 that the great moment came. It must be remembered that prehistory was recognized as a definite subject much earlier on the Continent—more especially in France—than in Great Britain. The two chief exponents there were Profs. Boule and Breuil. Both had written long articles against Moir's ideas. One based his objections on observations of a mortar-making machine at Mantes, the other on some finds of flints flaked as a result of earth pressure. It was in 1920 that Moir discovered certain chipped flints which seemed to him conclusive, and he sent them to the Sedgwick Museum at Cambridge for consideration. The late Prof. J. Marr called me in for consultation and as a result I invited the Abbé Breuil to come to Cambridge at once, which he did. I took him over to Ipswich, and a long afternoon was spent poring over the finds spread out over the floor of Moir's study. Breuil said little, and when driving back in the evening he was still more silent. Then he quietly remarked, "Mon cher ami, aujourd'hui a beaucoup vieilli l'humanité". It was a magic moment! In the following year he announced his change of ideas at an international congress held at Liège. That each and all of the specimens Moir claimed as humanly fashioned were really artefacts may be doubted: that tool-making animals, almost certainly therefore primitive humans, existed at that remote period is, however, a fact accepted to-day by the vast majority of prehistorians. This is Moir's great work, for which he was eventually awarded a fellowship of the Royal Society.

It would take too long to describe in detail all the investigations Reid Moir undertook in the Ipswich district and elsewhere. Some proved to be important and the results were accepted by the scientific world; others proved less so, and the explanations put for-

ward at the time had later to be modified. But this is true for any active investigator in the field. Moir was generous with the specimens found in the course of his excavations, and these are now widely distributed in the museums of England and France; but his first loyalty was to the well-known Ipswich Museum, of which he was the godfather, having, in fact, made it what it is to-day. At the time of his death, he had been studying certain finds made long ago in the Puy Courty district of France. It is to be hoped that his notes are extant. The drawings were already made some considerable time ago; but the War stopped all idea of publication on a scale necessary for such a work.

Moir was interested in many things besides prehistory, and I have letters of his philosophizing on life generally. He had a soft heart and was much concerned that the slaughter of animals for food should be painless. Indeed, he inaugurated a local campaign to this end. To gain time for his many scientific commitments and interests, he turned his business into a company and as such it did not prosper too well. In fact Moir, in the latter part of his life, was an exceedingly poor man as a result of his scientific toil. He was interested in water geology and took this matter up professionally to some extent. As was to be expected, Moir in his younger days in the heat of controversy could be fierce. I have had letters from him which I promptly burnt! Nevertheless, his characteristic and ferocious brand of language was part of his robust personality, which never shirked a challenge, and indeed helped to endear him to many of us. But there was a lovable strain right through him, and this, together with his charm of manner, in later years took a more and more prominent place in his nature. I can only add that personally I had a real affection for Reid Moir and sincere regrets that he has gone. This emotion, I am convinced, will be shared by everyone who knew him well.

MILES C. BURKITT.

Dr. L. H. Baekeland

IN the passing of Dr. Leo H. Baekeland on February 23 in his eighty-first year, the world of applied science has lost an outstanding man. He was an individual of outstanding character with a high moral status and charming personality. One never tired of hearing his stories of his adventures connected with his travels to most lands and his yachting experiences. He lived to see and to gain the benefit of his two great developments, namely, 'Velox' gas-light paper and 'Bakelite' synthetic resins. Of late years he had been in failing health, and the chemical and technical societies of the United States and Great Britain have missed his presence at their annual meetings for about eight years.

Baekeland was born in Ghent on November 14, 1863. He studied science in the University of his birthplace, making chemistry his chief subject, and afterwards became a lecturer in the University. In 1884 he graduated as a doctor of science at the University of Ghent. Although he was not yet twenty years of age he became professor and taught chemistry at the University from 1882 until 1889, and during 1885-89 he taught both chemistry and physics at the State College of Science, Bruges. During this period he also went to Germany, meeting German men of science and learning their language.

He married Miss Celine Swarts, the daughter of