companies are understandably anxious to recover as quickly as possible some return on the capital which they have spent on exploration, and so have a vested interest, represented numerically by the interest charges payable on the money spent on exploration, in rapid exploitation. Rapid exploitation is also a potential benefit in a wider sense if there is, for example, a prospect that the price of petroleum sold to industry can in the process be significantly reduced, but it is easy to exaggerate the value of this benefit by forgetting that the cost of fuel is a small and diminishing proportion of industrial costs.

What this implies, for countries such as Britain, is that there may be advantages in more rapid exploration but more deliberate exploitation of the newly discovered domestic reserves. Just precisely where the balance should be struck depends not merely on the price of OPEC petroleum but on the real and substantial costs of arranging that the cost of exploration for new sources of petroleum should not go unrequited for longer than the oil companies would like, which in turn implies that the price of petroleum and its products will be higher than would otherwise be possible, even in circumstances in which newly discovered reserves were big enough to provide a substantial fraction of a country's need of liquid fuel. It is hoped that the British government will have thought this problem out before the time comes to license the next block of territory in the North Sea.

Similar considerations should apply to the strategy for the exploitation of mineral reserves of other kinds. In Australia, for example, the past few years have seen a great spate of new discovery, and Australia has quickly become an even larger exporter of the ores of iron, nickel, copper and the like. Most arguments about the strategy for the exploitation of Australian mineral resources centre around the largely irrelevant question of whether it is in the national interest that the mining companies should frequently rely on non-Australian capital for exploitation of the known reserves. There has been much less discussion of the more important question of how quickly—or slowly—the reserves should be exploited. Moreover, it seems to be assumed that the export of, say, copper ore in return for cash is the most that can be done for the national interests of Australia. In reality, however, it would be much more advantageous if the country could become an exporter not of unprocessed ores but of the corresponding metals or metal products. In short, a more vigorous conservation policy might be married with an economic strategy to yield more national benefit from the reserves now known to exist. This, after all, is the strategy which development agencies are constantly advising developing countries to follow. The OPEC countries have taken the lesson to heart. It is paradoxical that countries such as the United Kingdom and Australia should be so slow to follow suit.

New Instrument Reviews

THIS issue of *Nature* contains the first of what are intended to be occasional reviews of scientific instruments and it is hoped that the scheme will be of value to practising scientists by helping to draw attention to some of the valuable features of new scientific instruments and also to their limitations. The intention is that new instruments should be reviewed much as if they were new books. In other words, arrangements will be made for an appropriate scientist to have access to a new instrument for a few weeks or even months, and he or she will then be invited to write a brief account of his or her experience with the instrument. But it must be acknowledged at the outset that there are several ways in which the analogy between book reviews and instrument reviews is invalid.

In the first place, because it is intended to deal only with instruments which are truly novel, either because they embody a new technique or an especially clever application of an established technique, reviewers will find themselves on many occasions working with prototypes and not production models. In the circumstances, it may be hard to make the detailed criticism of practical utility on which the success of an instrument may in the long run depend. For this and other reasons, it will also be difficult for reviewers to make the kind of detailed comparisons with other instruments which the zealots for consumerism may look for. A further difficulty is that reviewing scientific instruments in the manner now intended will be possible only with the collaboration of manufacturers, who may be asked to lend a prototype to a reviewer or to suggest how else he might have access to an instrument. Inevitably, manufacturers will be keen to point out the virtues of their new designs and to defend them against the criticisms of the reviewers, so that it will be impractical for instrument reviewers to keep themselves at a distance from the commercial organizations from which their products originate in the sense in which book reviewers keep publishers at arm's length.

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100 Years Ago

THE "dead season" has brought up its usual crop of reports of the re-appearance of the sea-serpent, mostly easily resolvable into masses of floating sea-weed. The following extract from an evening contemporary well illustrates the hazy ideas prevalent as to the extinct Saurian monsters of which the sea-serpent is supposed to be a descendant :—"If the sea-serpent continues in its present sociable state of mind, we may perhaps have an opportunity of deciding the vexed question regarding the formation of that portion of his figure which, according to English observers, he keeps concealed under the water. The legend of the Lambton Worm, a popular tale in the North of England, describes the worm as a serpent of enormous size, who used to coil himself round a hill overhanging the River Wear, just as thread is wound round a reel, but a very ancient stone effigy of the creature which lately existed at Lambton Castle, represents it with ears, legs, and a pair of wings. If this effigy was made, as it probably was, *from some recollection* or recent tradition of the Lambton Worm, these adjuncts would indicate that the beast was one of the *winged land monsters* which existed at the same time as the *Ichthyosaurus*, but would naturally become an extinct species far sooner than the *fish lizard*, which can conceal itself in the depths of the ocean from the curiosity and violence of man."

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