from the dissociation at the other two levels is also about 7 volts. There are still a few bands in the region λ6270 to λ5600, overlapping both systems, which remain unassigned. Their general appearance is different from that of the bands in either analysed system.

ANDREW CHRISTY.

University of California,
April 22.

Mimicry.

THE objections to natural selection and chance variation raised by my friend Prof. E. W. MacBride in NATURE of May 11, are those expressed by Asa Gray and answered by Darwin, when in 1867 he sent the advanced sheets of "Variation of Animals and Plants under Domestication" to the great American botanist. The creative power of natural selection is explained by a metaphor:

"If an architect were to rear a noble and commodious edifice, without the use of cut stone, by selecting from the fragments at the base of a precipice wedge-formed stones for his arches, elongated stones for his lintels, and flat stones for his roof, we should admire his skill and regard him as the paramount power. Now, the fragments of stone, though indispensable to the architect, bear to the edifice built by him the same relation which the fluctuating variations of organic beings bear to the varied and admirable structures ultimately acquired by their modified descendants."

Now apply Prof. MacBride's argument to Darwin's metaphor. "Why are certain stones selected? Because they are the fittest." Certainly. "How do we know that they are the fittest? Because they are selected." Obviously absurd.

Again, referring to 'chance' or 'accident', Darwin wrote: "The shape of the fragments of stone at the base of our precipice may be called accidental, but this is not strictly correct; for the shape of each depends on a long sequence of events, all obeying natural laws. . . . But in regard to the use to which the fragments may be put, their shape may be strictly said to be accidental."

With regard to birds as enemies of butterflies, the necessities of space prevent me from doing more than refer Prof. MacBride to the publications of the Entomological Society of London, where he will find much evidence of serious attacks as well as numerous isolated examples.

In reply to Dr. Carter's interesting letter, I would point out that the behaviour of an insect-eating animal may suggest processes essentially similar to the simpler reactions of man. A chameleon once stung by a honey-bee would never touch another. The association and memory were perfect, after a single lesson. It must be remembered, too, that mimicry is especially characteristic of forest butterflies where the alternation of sunlight and shadow renders the imperfect resemblance of a flying insect far more effective than it would be in uniform light or shade.

EDWARD B. POULTON.

Oxford, May 24.

Another Species of Monœcious Oyster, *Ostrea plicata* Chemnitz.

IT was noted by me in 1926 (*Proc. Roy. Phys. Soc.*, vol. 21, Part 2; 1926) that the different species of *Ostrea* can be grouped into two categories, the monœcious and the dicœcious. I also enumerated several fundamental points of difference between them morphologically and physiologically. Later in 1928, J. H. Orton in NATURE, Mar. 3, 1928, put more emphasis upon the distinction of the two categories.

There are more than sixty species of *Ostrea* distributed all over the world. The greater part of them are dicœcious, while the recorded species of the monœcious oyster are not many. The first four species given below have already been recorded as having every character of a monœcious species.

I here introduce one more species of the monœcious category which has not yet been recorded as such, namely, *O. plicata* Chemnitz, or *O. plicatula* Gmelin, the latter being probably the synonym of the former. There are therefore five species now known to be monœcious *Ostrea*, as follow:

O. denselamellosa Lischke, the Japanese species.
O. edulis Linn., the European species.
O. lurida Carpenter, the British Columbian species.
O. angasi Sowerby, the Australian species.
O. plicata Chemnitz.

The present species is found on the east coast of Japan. It is by no means very rare, yet it has not attracted much attention of biologists or laymen, as its size is always rather small. The species can attain sexual maturity in one full year, showing 'white-sick' and 'black-sick' stages, as is typical for the monœcious habit. The size at maturity is only three centimetres in the longest diameter. Even the largest specimen rarely attains more than six centimetres.

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Television Inventions.

IN NATURE of April 27, p. 637, a notice appeared of a book by Mr. C. Francis Jenkins, of Dayton, Ohio, entitled "Radiomovies, Radiovision, Television". With some difficulty I have obtained a copy of this book from America, and find in it, in a picture which appears to be on page 74 (though no paging is given), a description copied from a journal of July 25, 1894, ascribing to C. Francis Jenkins an apparatus for transmitting pictures by electricity, under the name of the Jenkins' Phantoscope. This is identical in all essentials with the method of television proposed by G. R. Carey, an American, and dated 1875 according to "La Television Electrique", by A. Dauvillier, published much later, in 1928, by *La Revue Generale de L'Electricite*, of Paris; while an illustrated description of Carey's method also appears in a copy I possess of *Design and Work* for June 25, 1880.

These discrepancies in dates are worthy of notice, as is also the suggestion in "Television", by Alfred Dinsdale (editor of the *Television* magazine), published so recently as 1928, that Baird's transmitter was the first means by which real television was achieved; a means illustrated by apparatus at present on view in the Science Museum, South Kensington, in which the picture was formed piece by piece by passing light through staggered apertures in rapidly revolving discs, but which was, according to Dauvillier's very comprehensive survey of television inventions, actually patented by Nipkow, a German, so long ago as 1884, some forty-two years before the arrangement was attributed to Mr. J. L. Baird, that is to say, actually five years before Mr. Baird appears, from "Who's Who", to have been born.

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40 Chester Square,
London, S.W.1,
May 28.