I may add that one obtains quite similar phenomena with ordinary light and two ordinary (200 lines per millimetre) gratings, when the incident beam forms similar angles of incidence with the plane of the gratings. M. DE BROGLIE.

Increase of Definition in a Moving Telescope.

I HAVE received several suggestions, for which I wish to express here my indebtedness, as to the probable explanation of the increase of definition in a moving telescope, referred to in my letter in NATURE of March 27. They are chiefly based on the principle of "contrast" as described by Mr. G. W. Butler in NATURE of April 10, but Mr. W. H. Robinson, of Oxford, attributes the increase of definition to "averted vision," by which a faint source of light is better seen if the eye be directed a little on one side of it. This, at first, seemed to me the correct explanation, the more satisfactory that it involves but a well-known physiological property of the eye. By moving the telescope the object is continually eluding the eye, and visibility by continuous unconscious "averted vision" would be the result. I, however, satisfied myself that there must be some other cause, as a *deliberate* use of "averted vision" failed entirely to show me the time-ball when I tried it after receiving Mr. Robinson's letter, while I noticed that, as soon as the sweeping motion had begun, it was plainly visible by *direct vision*, my eye following it all the time. Mr. Butler's suggestion seems therefore more plausible, although less definite.

M. E. J. GHEURY.

Woolwich Polytechnic, April 15.

THE NINTH INTERNATIONAL CONGRESS OF ZOOLOGY AT MONACO.

THE ninth International Congress of Zoology terminated its session under the presidency of his Serene Highness the Prince of Monaco at Monaco on Saturday, March 29. Altogether, the meeting was an unqualified success, not only on account of its numbers, which, as already stated, were greater than on any previous occasion, but also for the general interest of the contributions, which, although no single one can be selected as absolutely outstanding, were all of very high quality, and demonstrated the result of much serious and useful work by zoologists during the past three years. The beauties of the Côte d'Azur doubtlessly attracted many from northern lands, and although the weather was not all that could be expected for the Riviera at this season, yet the rather copious rainfall settled and washed away the dust and refreshed the herbage, which was the more brilliant during the intermittent periods of bright sunshine. The chief attraction, however, was the noble Oceanographical Museum, which crowns the cliffs of the rock upon which the town of Monaco with its palace is situated, and the fact that the congress was to hold its chief meetings within its precincts, with its founder as their president.

The opening reception in the museum, the holding of many of the meetings of the congress within its walls or only across the other side of the road at the Lyceum, and the fact that members were entitled to visit all its galleries and its aquarium at any time during the whole congress enabled everybody to become thoroughly acquainted with the museum and its interesting collections. Since its opening in 1910 there have been great developments and additions, thanks to the indefatigable energy of Dr. Jules Richard, its able director, and his assistants. A very full account of the museum was given soon after its opening in the columns of NATURE by Mr. J. Y. Buchanan; it is not, therefore, necessary to repeat what he has said, but since that time there have been many developments, and among others the opening up of a large new gallery in the western wing of the building. Zoologists were especially delighted, not only in seeing the excellent cetacean collection—whales mostly captured by the Prince himself—but also the really marvellous collection of well-mounted deep-sea fishes, which were familiar to many as figures, but the original specimens of which they now saw for the first time, and the same may be said of the invertebrates. A particularly useful and instructive arrangement is that side by side of each specimen is placed, where possible, the original painting of the animal taken from the fresh specimen, or the reproduction of such a coloured drawing as presented in the unique plates appearing in the Prince's publications. This is specially valuable, since it is impossible to preserve the original colours of animals in alcohol and because a better idea of the form of the fresh animal is given.

Besides the Prince's collections were also shown the first fruits of exchange with outside collections, and notable among these was a case containing many of the deep-sea and shallow animals taken by the *Scotia*. There is also a well-mounted case of penguins taken by the French Antarctic Expedition, as well as seals, birds, and eggs taken by the *Scotia* in the antarctic regions.

The collection of instruments and various forms of fishing appliances, nets, trawls, dredges, traps, hooks, &c., used not only for scientific but also for economic fishing, was also a source of attraction, and not least of all the aquarium with its wonderful living forms of Mediterranean fishes and invertebrates, each more wonderful than its neighbour, and which only those who had previously visited such stations as Villefranche and Naples had seen before, but were more than ready to see again.

Some days before the opening of the congress many zoologists made their appearance, and on Monday, March 24, practically the complete roll of 723 members, including more than eighty British representatives, was signed, and members had received their insignia, cards, and papers. On Tuesday afternoon there was a meeting of the permanent committee for the election of vice-presidents of the congress and presidents of the sections, Lord Walsingham being chosen first vice-president. At 6 p.m. the congress was formally opened by the Prince, who, dressed in the official uniform of the Institut de France, delivered his inaugural address. The president