or nearly 1 per cent of the total mortality of the population. The mortality falls mainly upon the first two years of life, while, in 1921-30, more than 90 per cent of the deaths were concentrated on the first five years, a ratio which was equally true at the end of the eighteenth century. In view of this concentration upon very young children, steps to control it are earnestly to be desired. One of the most curious anomalies of whooping-cough mortality, which has long been recognised, is the consistently heavier mortality of female children. attempts have been made in the past to explain this, for example, in terms of the sex differences in the formation and development of the larynx, sex differences in sensitiveness of the nervous system, but none of the hypotheses so far put forward seems, on careful examination, to be adequate.

ANOTHER curious feature of the mortality of infants from whooping cough is the lower death rates of illegitimate infants, when compared with the legitimate, in the first three months of life, while at the same age lower death rates are found in urban districts when compared with rural. An abnormal characteristic of the epidemiology of the disease, that has existed for at least three quarters of a century, is the increasing proportion of early deaths with decreasing urbanisation. This feature of the disease is not shown by measles. The latter acts according to 'expectation', namely, the more the 'overcrowding' the earlier the liability to attack and death. Yet whooping-cough statistics for England and Wales suggest the reverse. The relative importance to-day of whooping cough as a cause of widespread sickness and death is perhaps still under-rated, and further steps to combat it are required.

## British Claims in the Antarctic

By an Order in Council dated February 7 and published in the London Gazette of February 14, a sector of the antarctic comprising an extent of one hundred and fifteen degrees of longitude and covering more than a quarter of the antarctic continent has been placed under the authority of the Commonwealth of Australia. The Times reports the order as stating that "that part of the territory in Antarctic Seas which comprises all the islands and territories other than Adélie Land situated south of the 60th degree of South Latitude and lying between 160° E. and 45° E. is territory over which His Majesty has sovereign rights". The order comes into force when the necessary legislation has been passed by the Commonwealth Parliament. Adélie Land was claimed by France in 1924 but its boundaries were not defined. The new territory adjoins the Ross Dependency of New Zealand on the east and extends from Oates Land through King George, Wilkes, Banzare, Knox, Queen Mary, Wilhelm, and Mac-Robertson Lands to Enderby Land, beyond which Norwegian discoveries link it to Coats Land. The coasts of most of the territory were discovered by British, including Australian, and American explorers. The glaciated interior is unknown. No one name is

in use for the whole of the area. The only commercial value of the coasts is for whaling.

## The Shrimp Industry of Leigh-on-Sea

UNDER this title Mr. A. Laurence Wells has written a long and comprehensive account of this once important industry of the Thames Estuary (Southend Standard, Dec. 29, 1932, Jan. 5 and 12, 1933). Unfortunately, shrimping at Leigh has steadily dwindled since the beginning of this century. From six boats in 1832, the numbers rose to a hundred in 1850 and two hundred in 1875, dropping from 1905 to the present time, when there are only sixteen shrimpers among the forty boats engaged in fishing activities. These records of a vanishing industry are well worth preserving and Mr. Wells with the help of the manuscript notes now safely preserved in the Southend Museum made by the late Dr. James Murie gives us a most interesting survey both historical and biological. The term 'shrimp' embraces several species which are all described and differentiated. Thus from this district we have the common 'brown shrimp', the original shrimp of commerce, at first the only kind fished; the 'banded shrimp', the 'yellow shrimp' and the 'channelled shrimp'. Besides these true shrimps there is the 'pink shrimp' which, though not a prawn, is prawn-like, and four species of real prawns. Finally, there is Nika edulis, the so-called 'Risso's shrimp' which, although rather rare, is very good to eat. Each of these has its own individual habitat. Their life-histories are different and the fisherman knows a great deal about themwhich is not known to the general naturalist. There is much valuable information in this series of articles which all interested would do well to study.

## Aquaria

THE importance of observing the hydrogen ion concentration in the aquarium is now fully recognised. Both the Aquarist and Pond Keeper of January-February 1933, and the Aquarium Review of December 1932, include articles on this subject ("PH Values, Their Meaning and their Significance to the Aquarist", by J. F. Corrigan. "The Aquarium and pH" by L. C. Mandeville). The same number of the Aquarist contains notes from the Brighton Aquarium by the Curator, Mr. George W. Weller, and notes from the Zoological Society's aquarium by the Director, Mr. E. G. Boulenger. In the Brighton Aquarium there are now living one hundred and twenty herrings; also an angler, Lophius piscatorius, which is very difficult to keep alive and one of the most voracious of all fishes. Mr. Lester L. Swift gives a very interesting account of the American tropical fishes belonging to the genus Mollienesia, and how to keep and rear them. These fishes are viviparous but somewhat difficult and irregular in breeding in captivity. They require much vegetable food as well as animal, and a certain kind of slimy alga, known as 'frog-spit', is apparently essential to the raising of healthy broods. A female may have 2-10 young every few days for a month or she may have a litter once a year or once a month for several months in succession.