

The observatory will be situated on a hill ten miles south of the city of Puebla, which is eighty miles east of Mexico City. This is a very favourable location in the southern hemisphere for observation. The latitude of the observatory is  $19^{\circ}$  N., which means that the sky can be seen to within  $19^{\circ}$  of the south celestial pole. The site is nearly eight thousand feet above sea-level. The work of the observatory will be closely linked with that of the Harvard College Observatory and of the Mexican Observatory at Tacubaya. It will consist largely of observations of southern variables and of star counts, colours, magnitudes and spectra for the southern hemisphere. The director of the observatory will be Mr. L. E. Erro, assisted by Dr. Carlos Graef, both of whom have already spent a year working at Harvard College Observatory.

### Post-War Zoos

THE forty-first Bulletin of the North of England Zoological Society deals with the increasing difficulties facing societies which will have to maintain zoological collections during 1942, and makes a plea for public recognition of the zoological garden on the same standing as the art gallery and museum. The Society's zoo at Chester, like other collections at Dudley and Maidstone, saw a considerable increase in attendance in 1941 compared with the disastrous figures in 1940—Maidstone had about 40 per cent of normal pre-war years—and it is planned to invest money for post-war construction plans. "Not only in this country, but one might say all over the world, the problems of preserving the zoological collections will become more and more difficult as the war progresses from stage to stage" it is noted, adding, "It is very unfortunate that in the past both museums and zoos have suffered from a certain amount of apathy from both the government and the local authorities with the inevitable result that their development has been retarded. Many zoological societies have had to introduce various methods to raise money which most of them would like to have left entirely alone, but the necessity of raising funds left them no alternative. In the post-war period it is likely that art galleries and museums will receive more financial support from government and local authorities, but I am afraid that for some time to come zoological gardens will have to depend upon their pre-war sources of income." Among the post-war zoo ideas are a greater use of open spaces to display the animals to a better advantage, using ditches instead of iron bars and railings, to improve the labelling of exhibits instead of relying upon commercialized guide-books to impart the necessary information to the novice visitor, and more use of zoos by schools with the establishment of zoo lecture halls. The difficulties facing such schemes and how they might be overcome are dealt with.

### The Birds of Leicestershire

THE Leicester Literary and Philosophical Society has formed an Ornithological Society for Leicestershire and Rutland, which is compiling a report on past and present field records, to be issued in 1942 as a preliminary to bringing up to date Montagu Browne's 1889 "Fauna of Leicestershire". A meeting in Leicester Museum last September decided to form an Ornithological Society, as a sub-section of the Leicester Literary and Philosophical Society, to meet

monthly, Mr. F. Brady being elected chairman and Mr. A. E. Jolley secretary. A duplicated December bulletin, just issued, records the little owl, kestrel, partridge, red-legged partridge and a flight of grey geese within Leicester City bounds, and at the sewage farm a flock of tree sparrows, while a pectoral sandpiper is reported from Northampton Sewage Farm. At a large starling roost at March Covert, near Lockington, the ground was found to be littered with rubber bands believed to have been swallowed by the birds and later either vomited or passed in their excreta. They varied from fruit bottle to tobacco tin bands. Similar instances of this type have been recorded elsewhere with arctic terns, gulls and rooks, and it is probable that the birds mistake them for food, afterwards ejecting them as undigestible. At the flooded Wanlip osier beds, teal, pochard, shoveler and wigeon have been observed among the duck, as well as snipe, curlew and a peregrine. A sheldrake is recorded inland from the River Sence near Kilby Bridge. Although only opened in 1941 the Eye Valley Reservoir has already proved an important bird haunt.

### Health of Scotland

ACCORDING to the report recently issued by the Department of Health for Scotland for the eighteen months January 1939 to June 1941, the health of that country in 1939 reached a level never attained before. The severe winter of 1940-41, however, was responsible for the deterioration in the first quarter of 1941 when the infantile mortality rose to 109. In 1939, 7,176 cases of tuberculosis with 3,526 deaths were reported, and in 1940, 7,670 and 4,003 respectively, while in the first half of 1941 the figures were 4,300 and 2,300. With the exception of tuberculosis, the War has so far not had much influence upon infectious diseases, unless the increased incidence of cerebrospinal fever be attributed to war conditions. There was an increase in diphtheria of about 50 per cent in 1940 over 1939, but in 1941 the incidence declined; about 440,000 children of school age and under, or approximately 40 per cent of the child population, have been immunized.

### Rotation of the Milky Way

A SUMMARY of the most up-to-date knowledge of the galaxy is provided by an article by Frank K. Edmondson in the *Telescope* of September-October. A short historical outline of the subject is given, commencing with Glydén's discovery in 1871 of the galactic rotation effect in stellar proper motions, and dealing finally with recent research on the constancy of orbital velocity over a range of about 5,000-15,000 parsecs from the galactic centre. The explanation of this constancy in the rotational velocity is that the distribution of stars in the galaxy lies between high concentration towards the centre and uniform distribution. It has been estimated that the number of stars per unit volume near the centre must be a hundred times that in the neighbourhood of the sun. If this is correct, the sky should appear very brilliant in the direction of the galactic centre. As it does not do so, it is believed that huge clouds of dark interstellar matter partially conceal the centre from our view. For this reason the mysteries of that massive nucleus which lies behind the interstellar veil can be penetrated only through the assistance rendered by the study of star motions.