selected. This method is adopted by the Commission from the Board of Trade, which used it for the recruitment of the Labour Exchanges. In the circumstances it is curious that instead of acknowledging their debt the Commissioners find fault with the method adopted for the Labour Exchanges.

4. QUALIFYING EXAMINATION.—This method is used for subordinate posts for which educational attainments are of less importance than other qualities, postmen for instance. More than half of the posts in the Service are filled in this way, a greater number than by open competition. The Commission proposes that the Treasury should consider how to ensure that the patronage necessarily involved in the selection of these men shall be suitably exercised.

The General Civil Service.

A problem with which many have struggled is the finding of employment for the ex-boy-clerk, a problem which has resulted from a desire to spare the pocket of the taxpayer without sufficient regard to other circumstances. The boy is at present taken on and employed for a few years and then, in many cases, turned adrift. Many civil servants have laboured to find employment for the ex-boy-clerk. Their labours have, however, effected only an alleviation of the evil, and it is satisfactory to have the Commission decide that, in future, boys must be taken on only with a view to permanent employment provided their work proves satisfactory.

An aggravation of the evil was that in spite of the published regulations, many boys and their parents imagined that a boy selected by open competition for the Civil Service was made for life. The boy-clerk method of recruiting is to be replaced by a new class to be called the Junior Clerical Class, who will be recruited at the age of sixteen for permanent service. These boys are thus made for life in some sense, since provided they give satisfaction they may remain in the service and attain to a salary of 200*l*. It ought, however, to be made quite clear to this Junior Clerical Class that the bulk of them will be hewers of wood and drawers of water all their lives and never pass the 200*l*. limit. The staff posts to which these men may be promoted and the rare chances of promotion to a higher class will be small in numbers compared with the total numbers of the Class, and the bulk of the Class should be discouraged from looking forward to such promotion. Even so it will be difficult for a man who attains his maximum salary at thirty-six years of age to work on contentedly for thirty years more on that salary.

The General Civil Service will in future be recruited in three classes:

1. The Junior Clerical Class, appointed at sixteen at the close of the Intermediate School Course,

2. The Senior Clerical Class, appointed at eighteen at the close of the Secondary School Course.

3. The Administrative Class, appointed at the close of the University Course.

As already stated, the chief change is in the first-mentioned class which replaces the temporary boy-clerks. In course of time, when the Second Division Clerks have ceased to exist, their work will doubtless fall to the Junior Clericals. The second and third classes mentioned above are practically the Intermediate Class and the Class I. Clerks under new names. In all three classes, the conditions as to age and subjects are to be coordinated more closely than at present with the corresponding school epoch. It is, for instance, high time to abolish the test in copying manuscript which now stands in the examination schemes of the Boy Clerks and Second Division Clerks. The importance of the test to the Departments must be much reduced now that good handwriting is required of the Class I. Clerks.

MR. ROOSEVELT IN BRAZIL.

AT a special meeting of the Royal Geographical Society on Tuesday, June 16, Mr. Roosevelt gave an account of his recent journey in Central Brazil. In his opening remarks he alluded to the excellent work of the Telegraphic Commission under Col. Rondon in exploring the sandstone plateau which, under different names, extends west-north-west through northern Matto Grosso towards the cataracts of the Rio Madeira, and separates the drainage basins of the Paraguay and the Guaporé from those of the Xingu, Tapajos, and some of the tributaries of the Madeira. To the west of the affluents of the Juruena, the western fork of the Tapajos, they met with two considerable streams which they named the Ananaz and the Duvida; the ultimate courses of these were uncertain, hence the name, meaning "doubt" given to the latter. Beyond was another stream, which was descended and demonstrated to be the Gi-paraná, which enters the Madeira a little below San Antonio.

On Mr. Roosevelt's arrival in Brazil it was arranged that he and Col. Rondon should conduct an expedition down the Rio Duvida. Besides the two leaders, the *personnel* included Mr. Kermit Roosevelt, two American biologists, a Lieutenant of the Brazilian Engineering Corps, who determined the positions by astronomical observations, and a Brazilian army surgeon.

The expedition started in dug-outs from the bridge constructed by the Commission across the river, and for the first four days good progress was made, but then a succession of cataracts was met with, and forty-two days were occupied in covering one degree of latitude. All the cataracts had to be reconnoitred before they were negotiated, and in some cases the canoes had to be transported by land. At two points where low ranges of hills were traversed in narrow gorges the canoes had to be warped through with ropes. If, as was no doubt the case, these dug-outs were of the same type as those with which the writer was familiar on the Paraguay near its source,

any craft less suited for descending rapids could scarcely be imagined. Mr. Roosevelt recommended future explorers to use Canadian birch-bark canoes in their place. When the last cataract had been left behind, about latitude 10° 50′ S., the first rubber worker was soon encountered, and others were met with at intervals down the river to its junction with the Madeira about latitude 5° 20′ S.

Mr. Roosevelt remarked on the fact that, though this was by far the most important tributary of the Madeira below the junction of the Beni and Mamoré, it did not appear on any map, except as a short and unimportant creek. It remains to be seen whether the whole of the water of the river takes this course. It seems quite possible that, when the river is high, some may pass into the Madeira by other routes, or may find an outlet into the Amazon by way of the Canumá channel, a lateral branch of the Madeira.

There is no doubt that the expedition has accomplished a valuable piece of work, and has, in Mr. Roosevelt's own words, placed a river comparable in size to the Elbe for the first time on the map. It is probably the most important achievement in river exploration in tropical South America since 1880, when Heath descended the Beni from Rurenabaque and showed that it united with the Manutata (Madre de Dios) and Mamoré to form the Madeira.

The collections made by the expedition should prove of interest, especially the rocks of the cataracts, which are on the line of strike of the crystalline rocks of the Madeira cataracts described by the writer. It was in descending the rapids that Mr. Roosevelt contracted fever, so that they appear to have the same malarial character as many other cataracts in South America, presumably because they offer facilities for the breeding of Anopheles in rock pools.

JOHN W. EVANS.

NOTES.

THE list of honours conferred on the occasion of the celebration of the King's birthday on Monday, June 22, includes the names of a few men of distinguished eminence in the scientific world, and of others who, while belonging to various departments of the public service, have done notable work for science. Among the new peers is Sir Leonard Lyell, Bart., a nephew of Sir Charles Lyell, and formerly a professor of natural science in the University College of Wales. Colonel S. G. Burrard, F.R.S., Surveyor-General in India, has been appointed a K.C.S.I., and Mr. R. A. S. Redmayne, C.B., Chief Inspector of Mines, Home Office, has been promoted to the rank of K.C.B. The new knights include:—Dr. J. G. Frazer, author of "The Golden Bough"; Dr. W. P. Herringham, Vice-Chancellor of London University and physician to St. Bartholomew's Hospital; Dr. W. H. St. John Hope, archæologist; Dr. W. Milligan, known by his investigation into the connection of human and animal anthrax; Lieut.-Colonel Leonard Rogers, Indian Medical Service, professor of pathology, Medical College, and bacteriologist to Government, Calcutta; Dr. T. Kirke Rose, chemist and assayer to the Royal Mint; Dr. S. J. Sharkey, lecturer on medicine at St. Thomas's Hospital; and Mr. J F. C. Snell, president-elect of the Institute of Electrical Engineers. The honour of Knight Bachelor has been conferred upon Dr. Douglas Mawson, the Antarctic explorer, and Prof. T. P. Anderson Stuart, dean of the faculty of medicine at Sydney University. Mr. R. Meredith, Director of Telegraphs, India; Mr. A. Howard, imperial economic botanist at Pusa, Bengal; Major E. D. W. Greig, assistant director, Central Research Institute, Kasauli; Dr. T. Summers, late Bombay Public Works Department; and Mr. R. H. Tickell, chief engineer, Central Provinces, have received the honour of C.I.E. Dr. H. R. D. Spitta, bacteriologist to his Majesty's Household, has been appointed M.V.O. (Fourth Class).

AT the meeting of the London Mathematical Society on June 11 it was announced that the de Morgan medal had been awarded to Sir Joseph Larmor.

BY the will of Sir David Gill, the Royal Astronomical Society is bequeathed the sum of 250*l.* to be employed by the council of the society in aid of astronomical research in remembrance of the like sum paid out of the funds of the society in aid of his expedition to Ascension in 1876.

WE learn from the *Lancet* that the Emile Chr. Hansen prize for 1914, which consists of a gold medal and 2000 kroner (approximately 100 guineas), has been awarded to Prof. Jules Bordet, director of the Institut Pasteur of Brabant, in recognition of his original medical work in microbiology.

THE president of the British Science Guild (the Right Hon. Sir William Mather), and Lady Mather, have arranged to give a garden party to the members of the British Science Guild on Wednesday, July 8, at the Garden Club of the Anglo-American Peace Centenary Exposition, Shepherd's Bush.

THE work done on behalf of tropical medicine by Mr. Joseph Chamberlain and Mr. Austen Chamberlain has been commemorated by placing their portraits in bronze relief in the Albert Dock Hospital of the Seaman's Hospital Society. The tablets were unveiled on Tuesday by Mr. Harcourt, Secretary of State for the Colonies.

MR. G. A. HIGHT writes from Samer, Pas de Calais, giving particulars of the storm experienced on June 14. The rainfall measured at Samer during the storm between 12.50 and 2.45 p.m., was 3·86 inches, and nearly all fell before 2.15 p.m. The most remarkable feature of the storm was its local character, for in villages only two or three miles to the south of Samer there was no rain. During the storm the temperature fell from 70° to 61° F.

ACCORDING to a Reuter telegram from Copenhagen, Mr. Ole Olsen, the Danish millionaire, has offered to place sufficient funds for the fitting out of a north pole expedition at the disposal of M. Knud Rasmussen, the Danish explorer who has travelled much in Green-