Civil Service has been drawn up by the Ministry of Labour, and is even now being considered by an Inter-Departmental Committee. The recommendations advocated in that report are based on the fundamental hypothesis that both parties to an industrythe employer and the employed—are well organised. If, therefore, men of science desire to have a voice in framing the conditions under which they work for the State, they must organise themselves, and the sooner the better. A beginning has been made, but only a beginning.
G. F. HERBERT SMITH,

Joint Hon. Sec., pro tem., Society of Civil Servants.

2 Old Queen Street, S.W.1, November 5.

Modern Studies in Schools.

I was somewhat surprised to read in Nature of October 3 a vigorous attack upon the Government Committee on Modern Languages on the ground of its having considered nothing but the interests of trade and diplomacy. I trust this will not deter your readers from examining what is generally considered to be a most valuable report. It is certainly a document which has met with the general approval of modern language teachers and others interested in the subject with which it deals. Against the charge made I may point out that of the nine pages of the section entitled "The Value of Modern Studies," nearly three are devoted to the higher aspects of the subject, while the section on the aims of language teaching in schools begins with the sentence, "Language teaching has, and should have, a disciplinary and educative aim,

and the treatment of the subject is based on this text.

Most surprising of all is the view expressed in the article that "the opinions of the Committee on educational methods are astonishingly reactionary." If by "educational methods" is meant as one supposes must be meant, considering the context—"methods of language teaching," the statement is the exact reverse of the truth. The opinions enunciated are the most advanced which have ever appeared in a document issued by a public authority. The Committee recognises the strong position now held by the "direct method," and discusses its merits critically, yet sympathetically. A whole section is devoted to phonetics, and the need for a good phonetic training for teachers is insisted on. Uniformity in grammatical terminology is recommended. Of our own suggestions for examinations, which are usually considered to be of a moderately advanced character, the report says that they are "good so far as they go, but they do not go far enough." An oral test is recommended in all cases, and free composition, it is considered, should either be substituted for or be additional to translation into the foreign tongue. Finally, it is urged that translation in school "should be practised only so far as it is necessary"—a view which probably many teachers will think unsound, but which none will characterise as reactionary.

> G. F. BRIDGE, Hon. Sec., Modern Language Association.

I CORDIALLY agree that teaching for "breadwinning" is the first duty, but "bread-winning" be "bread-capturing," and it is this spirit, I am afraid, which pervades the report. But manufacturers to-day are more concerned with production and cooperation than with commerce, and they find the need for a wider knowledge of languages for this service, so I am not surprised that the questionnaire met with little response.

The aims and methods set forth in the report are

of the standard classical type, and they insist on the study of one or, at most, of two languages taught to a high state of proficiency; but the needs of the times, and the average capacities of boys, demand a less specialised course. The difference is fundaless specialised course. The difference is fundamental, as Mr. Bridge will admit. We expected a new method and a new outlook, but we got the old. In our opinion, schools should give boys the opportunity of reading many languages, not excluding the Eastern languages or the languages of Africa, and boys should use the languages for research and discovery. Whether this work is disciplinary or educative is of minor importance; or whether it cultivates taste or judgment. Of minor importance, too, as we think, are the various methods of teaching which are recounted by Mr. Bridge. It is true that these are the things which trouble the minds of many schoolmasters, but with deeper aims the methods would take care of themselves. We expected the Committee would have shown the way to more fundamental changes in method, but it did not do so.

THE WRITER OF THE ARTICLE.

THE MINISTRY OF HEALTH BILL AND AFTER.

SINCE October 17, when most of the newspapers gave prominence to an announcement that the Ministry of Health Bill had been re-cast and submitted to the War Cabinet, possibly because the body named has had other things to think of, nothing has been heard of this measure. Much, however, has been said and written of the Ministry itself, and a certain amount, none of it good, of the Local Government Board, the reason being the extent and severity of the influenza outbreak. If some of the speakers and writers are to be believed, the Board, because its methods are "wooden," or because of its "Poor Law taint," is mainly to blame for the epidemic: if there had been a Ministry in existence, the suggestion is that there most certainly would have been no outbreak.

The persons who make these statements are, many of them, those who are responsible for trying to convince the public that if only a Ministry of Health were formed there would follow an immediate and marked improvement in public health.

That many have listened to promises of this kind and look for something in the nature of a quick change is pathetically true. Unfortunately it is true also that disappointment awaits them. It has never been quite clear why it should have been necessary to exaggerate so much as to the benefits likely to follow the establishment of a Health Ministry. The case for a separate Ministry to co-ordinate health effort and ensure that all branches of hygiene, scientific, practical, and administrative, should have proper recognition and support was always sound, and no good can come of these exaggerations. On the contrary, a great deal of harm may result unless it is recognised at once and generally that it may be long, very long, before signs of improvement become

It has taken, and may still take, a long time to get a Ministry of Health Bill. It will take time to get the right Minister and to organise the Ministry; and then there is no more than a beginning made. The central organisation is probably the least important part of the health organisation in this country. The most effective portion of the work will have to be done at the periphery, by the local organisations, as it has always been done, or, unfortunately in some cases, left undone.

The problem that faces the first Minister and the new Ministry is the problem of the organisation of the working forces, and when it is attacked it is within the bounds of possibility that the Minister and the Ministry may find that these forces are not distributed throughout the country in a particularly suitable manner. An entirely new method of dividing up the country may very probably have to be devised before anything can be done.

As matters stand at present, health work is distributed most unevenly, for the reason that the necessity for a standard unit has never been recognised. The local authority of each district has been declared to be the sanitary authority; powers and duties in relation to public health have been imposed upon or delegated to it, and that has been the end of it. The size of the area, the population and, more important still, the rateable value and the wealth or poverty of the district have never been taken into account.

The result has been that the work has properly been attended to only in the districts where the means were adequate. The large, prosperous districts did all they possibly could; the small, rich districts did superbly because they were small and because they were rich. In the poorer areas as much as could be afforded was done and more or less was left undone.

Only within the last few years has it been seen that the question of affording was one of importance, and that good might result if grants in aid of necessary work were made. The experiment was tried in the case of maternity and child welfare schemes, and the result has been that in practically every area an attempt has been made to cover this work. If the whole of public health work is to be covered in every area, grants in aid of all of it will have to be made. The Minister of Health who recognises this and, having induced the Treasury to see it, gets it put into operation will obtain good results; and if, instead of having a flat rate of grant, he gives a percentage that accords with local needs, he will obtain, in the poorer districts particularly, results still better. If he desires to ensure the best results, in addition to making health work more of a national and less of a purely local charge, he will arrange also for the proper distribution of the work. Most of the larger areas are too large to be effectively worked; many of the smaller areas are too small to be thought worth while working. If possible a standard unit of area and population must be devised, and the need for cutting here and grouping there recognised and put into effect.

This part of the Minister's task will be less easy even than arranging for grants in aid.

Vested interests have stood and may still stand, for all that is known, in the way of the formation of the Ministry. Strong as they are, however, they are much less strong than the vested interests that must be overcome if local reorganisation is attempted. Until they are overcome and the nation's work of looking after the health of the nation is properly parcelled out, the best results cannot be expected.

The passing of the Ministry of Health Bill, the discovery of a suitable Minister, and the formation of a sound Ministry may bring satisfaction to many. They will not necessarily bring improvement in the national health; will not necessarily, as many appear to think, bring about a total disappearance of epidemics and a vast and immediate reduction in the amount of disease and the annual death-rate.

Marked improvement will be seen only when the work has been properly organised throughout, when it is recognised that the care of the nation's health is a national business and bound to succeed only if it is properly arranged, properly managed, properly financed, and properly supervised.

A Ministry of Health can, if it will, ensure that these things shall be done; it does not follow that they have been done when the Ministry has been formed.

RACIAL INVESTIGATIONS ON FISHES.

TWO very interesting papers 1 by Dr. Johs. Schmidt deal with the significance to be attached to variation statistics. Taking as his material collections of Zoarces viviparus, the viviparous Blenny, from different parts of the North European coasts, Dr. Schmidt makes mathematical analyses of measurements of various selected characters. The paper is tersely and very clearly written in English, and illustrated by numerous simple and adequate charts, and some maps showing the localities sampled. Excellent summaries of the reasoning and conclusions are given in each case.

A "population-analysis" by variation statistics can scarcely resolve any biological problem; it merely arranges the material and suggests lines of experiment. Let there be two fish populations, belonging to the same species, in different seas, which do not interbreed, and let certain measurable characters be chosen for study. Frequencydistributions with respect to each character and locality are made, average values of the selected character are calculated, and the fluctuations, or probable errors, are then found. If the differences observed are greater than the fluctuations, the usual conclusion is that the organisms are differentiated: that they belong to different "races," or elementary species. Dr. Schmidt contends that such a conclusion would, as a rule, be unsound. It may be that repeated sampling of a population gives the same average values for the characters the same "racial picture"; nevertheless, to speak of a "race" and found it on such evidence

1 Comptes rendus des Travaux du Laboratoire de Carlsberg, 13me vol., liv. 3, 14me vol., No. 1, 1917

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