

only be a matter of time to obtain rust-resisting varieties. Saleability in the market is a somewhat artificial affair. At the present time millers require a "hard" wheat yielding a "strong" flour rather than a "weak" wheat, and, therefore, pay more for it. It is not claimed that strong wheat is more nutritious, but merely that it makes larger and more shapely loaves; there is the further advantage to the baker that a given quantity of strong flour makes a greater weight of bread because it takes up and retains more moisture than an equal weight of weak flour. No doubt an excellent case could be made out for "weak" flour, but that is not the business of the agriculturist; he has simply to provide what his customer wants. The scientific problem of discovering what constitutes strength is under investigation, and the fact that strength is inherited indicates the possibility of crossing it on to wheats possessing other desirable features.

The economic problems in wheat production have rarely been stated better than in Mr. Humphries's lecture before the Royal Society of Arts. For a number of years past British wheat has been sold at prices substantially lower than the best foreign wheat because it lacks strength. Probably few bakers would risk making bread from British wheat alone; they require foreign wheat to be mixed with it. Consequently, the mills are handicapped unless they are within easy access of a seaport. The Home-grown Wheat Association are trying to find whether strong wheat can be profitably produced in England; their experiments have already shown that strength is inherent in the variety, and is not the result of external conditions, though it is influenced by them; they have also demonstrated that the great Canadian wheat, Red Fife, keeps its strength when grown here. The Canadian farmer is satisfied with 20 bushels to the acre, but the British farmer, having heavier charges to meet, must get more than 30, and on occasions, in favourable districts, will even get 60 or more bushels of grain and good crops of straw. Unfortunately, Red Fife does not give these heavy crops, and is, therefore, not in much favour here. It is hoped, however, that crosses combining the strength of Red Fife with the cropping power of the standard English varieties will in time be available.

Other countries are also seeking to improve the strength of their wheats. Indian wheat, for instance, is at present no stronger than ours, but Mr. and Mrs. Howard have grown wheats at Pusa which were very favourably reported on by the English milling expert who examined them. One especially was praised, a wheat (Pusa 6) selected in 1906 and grown from a single plant. It has the further advantage that it is resistant to rust, and matures well even on second-class wheat soils. Canadian wheats are under constant investigation at Ottawa. The Agricultural Department of South Australia also conducts experiments, the results of which appear from time to time in its journal.

The introduction of strong wheats into English agriculture would unquestionably alter the conditions of wheat-growing here, and whilst strong varieties are being raised it is desirable to ascertain the precise cost of wheat production by modern methods and using modern labour-saving appliances. There is a great deal of work to be done in this direction. Mr. MacKenzie's paper in the *Journal of the Board of Agriculture* provides data for ascertaining the cost of harvesting; similar records for other operations are badly needed.

E. J. RUSSELL.

THE LONDON INSTITUTION.

AT the annual meeting of the proprietors of the London Institution, held on April 28, it was announced that, in view of the appointment of the Royal Commission on University Education in London, which had officially informed the Institution that they regarded it as coming under their purview, the scheme for amalgamation with the Royal Society of Arts must remain in abeyance. The solicitor of the institution had advised that Parliament would not pass a Bill altering the status of an institution the position of which was already under the consideration of a Royal Commission, and, assuming that opinion to be sound, as it probably is, it would certainly be inexpedient immediately to proceed with the Royal Society of Arts scheme, or any other that involved an Act of Parliament. A considerable opposition to the ratification of the scheme had been worked up, and an attempt was to be made to alter the constitution of the board, but upon the announcement that the scheme was not to be proceeded with at present, the opposition to the existing board was withdrawn. Whether the scheme which has now been shelved, at any rate for the present session, will be revived after the Royal Commission on University Education in London has reported is very doubtful.

From the outset the Royal Society of Arts has been unwilling to be a party to the scheme unless there was something like practical unanimity on the part of members of the London Institution. If the management of that institution had been in stronger hands it is probable that little would have been heard of opposition. Very similar opposition to the proposal to dispose of the Zoological Society's freehold premises in Hanover Square, and to expend the proceeds in providing suitable accommodation for the Society's offices and library at the Zoological Gardens, was summarily dealt with on April 29. But there seems to have been no strong hand at the helm at the London Institution, and the final result will probably be that a scheme which would have been of considerable benefit to two important institutions will fall through. The idea seems to be to make the London Institution a sort of school of economics, an excellent thing in itself, but not wanted, seeing that there is already existing an institution amply able to meet the requirements of the public in this direction.

At the meeting last week Lord Aldenham stated that the managers had received a letter from the Corporation asking whether they were open to receive proposals, and they answered in the affirmative, but no definite suggestion has been received from that source. Probably the best thing to do with the institution, if the scheme of amalgamation with the Royal Society of Arts is to fall through, would be to sell its land, and whatever else it has to sell, and divide the proceeds, so far as other claims permit, amongst certain educational institutions in the City.

NOTES.

THE first of the two annual soirees of the Royal Society will be held on Wednesday next, May 12.

WE announce with regret the death of Dr. F. G. Yeo, F.R.S., emeritus professor of physiology, King's College, London, at sixty-four years of age.

WE regret to see the announcement of the death, at seventy-five years of age, of Dr. J. Marshall Lang, Chancellor and Principal of Aberdeen University since 1900.