

river at its lowest. Amongst the various concessions rendered possible by the plentiful water supply, none was more appreciated than the early removal of the prohibition to irrigate the land for maize, which was effected on dates varying from 15th June to the 1st July."

The early sowing of maize results in a heavier yield. As maize is the main food of the fellah, any alteration of the present method of using the stored water so as to reintroduce a fallow in July would be unpopular.

The same difficulty may not present itself in Queensland. A comparison of the geographical positions of Egypt and Queensland, and the meteorological observations in the two countries, shows that the fallow land temperatures in Queensland during November will probably be similar to those in Egypt during July. The following comparison is made, the figures being taken from the Réseau Mondial for 1913:

EGYPT.			
Situating between 22° N. and 32° N.			
July.			
Station.		Av. Max.*	Abs. Max.
Cairo	.	307.6	316
QUEENSLAND.			
Situating between 10° S. and 29° S.			
November.			
Station.		Av. Max.	Abs. Max.
Georgetown	.	311.4	314.1
Mitchell	.	306.4	313.6
Rockhampton	.	308.2	313.6
Brisbane	.	303.8	314.2

* All temperatures in degrees absolute.

The maximum screen temperatures in July in Egypt are similar to those in November in Queensland at the stations quoted. Owing to the similarity in the geographical positions of the two countries, the number of hours sunshine in Queensland will be similar to that of Egypt. It seems, therefore, that soil temperatures in November in Queensland will be similar to those in July in Egypt. It appears probable that a temperature of 50° C. will be attained at a depth of 10 cm. in the soil in Queensland in November, and hence, that any resting larvæ of the pink boll-worm can be killed to this depth in fallow land. The intensity of this effect can be increased by the ploughing and cultivation of the fallow land.

It is suggested that, after the removal of the winter crops in October, the land which carried cotton the previous year should be fallow and thoroughly cultivated in November. This would ensure that the whole of the resting larvæ in the soil would be subjected to temperatures above their thermal death-point, and hence, the main source of infection of the cotton crop with pink boll-worm would be removed.

C. M'KENZIE TAYLOR.

Cotton Research Board, Giza, Egypt.

Ministry of Agriculture,
April 19.

Junior Teaching Appointments at Universities.

THE University Court of Edinburgh has notified the members of the non-professorial staffs that certain economies will be effected by reducing the salaries and altering the conditions of tenure of junior teaching appointments.

During the past triennial period assistants (demonstrators) have been paid at an initial salary of 250*l.* p.a. with annual increments, if reappointed, of 10*l.*,

rising to a maximum of 280*l.* p.a. Junior lecturers have been appointed at an initial salary of 300*l.* p.a. with annual increments of 20*l.*, rising to a maximum of 400*l.* p.a. Such appointments are made at the beginning of each academic year. For the forthcoming year, the University Court has decided that annual increments in both grades shall cease, and further, that in future, assistants shall be appointed at a salary of 200*l.* p.a. without increment. The economies thus effected will amount to about 700*l.* a year, which seems a very small sum compared with the resentment which the decision has aroused.

The decision of the Court, which we understand was received by the members of the Senatus with approval, comes at a most inopportune moment. On May 24 the University Grants Committee will be paying a visit to the University, presumably to discuss the financial position of the institution as well as the other matters germane to their functions, and they might well have been consulted previous to any such decision of the Court. The action of the Court will prejudice the issue and the possibility of the previous recommendations of the University Grants Committee regarding salaries of university staffs being put into effect.

The National Union of Scientific Workers protests emphatically against the reactionary policy of the Court. The Court's decision is one which affects all university teaching staffs and not merely those at Edinburgh. The importance to the nation of maintaining staffs at institutions of university rank who are capable of leading thought and giving a direction to industry cannot be over-estimated. The university should therefore offer conditions of service and salaries commensurate with the responsibilities of the staffs and sufficient to retain the services of the most efficient and distinguished juniors. It is evident that a local university authority, faced with financial embarrassment, is not a competent body to deal with the questions at issue. Such a body is too susceptible to considerations of precedent, of out-worn tradition regarding the treatment of university junior staffs, and apt to regard matters of national importance from a purely parochial point of view. What is wanted is a Royal Commission to investigate the financial condition and administration of British universities other than Oxford and Cambridge, but in the meantime, the recent decisions of the University Court of Edinburgh should be rescinded, and the Treasury be approached for such further assistance as the circumstances warrant. Steps to this end are being taken by this organisation.

G. H. HARDY, President.

A. G. CHURCH, General Secretary.

National Union of Scientific Workers,
25 Victoria Street,
Westminster, S.W.1, May 19.

Radial Velocities and the Curvature of Space-time.

IN a letter to NATURE of April 26, Dr. Silberstein makes a proposal for determining the distance of a remote star by observing the displacement of the spectral lines at six months interval; he claims that this method will separate the ordinary Doppler effect of the unknown motion of the star from the distance-effect predicted by de Sitter. It seems to me clear that this proposal contains a fallacy. The material to be experimented on is a certain regular train of light-waves proceeding through the small region round the sun accessible to us; the star itself is inaccessible. The frequency of these waves is to be