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## Landowners and the State.

LORD BLEDISLOE, as president of the Agricultural Section of the British Association at Hull this year, struck a new note in his address. Put very briefly, his text was a demand for more leadership, and in particular for educated leadership by landowners in the business of farming. British farming has for the last two centuries in the main been carried on by tenants possessed of considerable capital, which is employed in the business and not in the land itself nor in its permanent equipment. The result, at any rate until fifty years ago, was successful. Complicated as the question of tenure was in detail, by custom it worked well on the whole; a sufficiency of capital was attracted to the land to permit of cultivation on a comparatively large scale with sufficient continuity to encourage experiment and improvement, until British farming, whether as regards operations of cultivation, productivity of crops grown or quality of stock bred, stood easily foremost in the whole world.

British agriculture no longer enjoys the same undisputed position. We can still point with pride to its technical excellence, but it has not succeeded in so adapting itself to the changed economic conditions as to continue to be regarded as a prosperous industry or to attract the confidence of capitalists. Farmers, despite some protestations, can still make a living out of it, because they can always adjust their style of farming to any range of prices, but the position of the other two parties to the occupation of the land is far from satisfactory. Landowners' rents do not represent a reasonable rate of interest on the money that has been expended on the buildings, etc. necessary to the working of the farm. A piece of average English land in prairie condition could not to-day be equipped as a farm and then let at a rent which would pay market interest on the capital expended in equipping it, even though no charge were made for the land itself. Landowners who sold their farms during the last few years were able after reinvestment to double and treble the income they had derived from them, and at the same time to relieve themselves of many of the calls upon the landlord's purse. Agricultural labourers, again, though they effected some improvement in their position during the war, are still the worst paid industrial class of any magnitude in the community. In the villages it is well recognised that a boy is likely to be better off if he can get on the railway, into the police, or any of the other occupations more or less available, rather than go upon the land.

The tenant-farming system, for all its advantages, appears to be breaking down, and Lord Bledisloe regards the landowners of the last generation or two

as in part responsible. From an abstract point of view the ordinary English tenant farm of 200 to 500 acres is no longer the economic unit it once was. At its inception it represented wholesale large scale production as compared with the generality of European farming, and as such it provided the food needed for the early industrial development of the country.

But with the enormous extension of wheat growing and meat production in the newer countries, the effect of which upon our markets began to become so apparent from the 'seventies of last century onwards, and with modern organisation of the import trade in food products from countries with a low wage standard, the English farmer no longer controls prices, and when he stands alone, he is selling as a retailer in a market dominated by much larger interests. It has become a terribly difficult market because Great Britain is now the one absolutely free emporium to which the surplus food products from every other food-producing country in the world are directed. With one or two minor exceptions (Denmark and Belgium are practically free-trade countries, but they are normally food exporters rather than buyers), the British farmer is met by a tariff wall whenever he has a surplus to export or a speciality to develop, and these difficulties are, at the moment, accentuated by the break in the Continental exchanges, which diverts to Britain even the limited quantities of food-stuffs the foreign industrialist had begun to purchase.

Some of these difficulties may be overcome by co-operation, never an easy matter to organise in a conservative community such as our farmers form, bred as they have been in an individualist organisation of business and imbued with the characteristic British tradition of standing alone. In any case, co-operation may be only a palliative; the economic flaw in the tenant-farming system probably is that the unit of management is too small. There is not work for a master in controlling the five to ten men employed on the ordinary English farm; as a managing head one man should be able to supervise the working of 1000 to 2000 acres, according to the class of land. Economic pressure would thus appear to be tending to move away from the present type of British farm in two directions, either towards the single-man holding, uneconomic as an instrument of production but in which compensation is found in the extra labour the occupier will give in exchange for his independence, or on the other hand, towards the really large farm which can take advantage of machinery and organisation.

Lord Bledisloe's main contention is that the landowner must either take the latter option and become the instructed business head of his estate treated as a single farm, or if he prefers not to take over the actual manage-

ment, he must at least be the leader and *entrepreneur* of the associated businesses of his tenants. Not only is the holding of land a bad investment, but in a modern State the mere rent receiver will eventually be eliminated. Landlords must give service or perish as such, and Lord Bledisloe appeals to a class which has a long and honourable tradition behind it of service to the State to return to the land and so render a necessary service to a State that is becoming overweighted on the industrial side. He points out the two directions in which the landowner can lead his tenants and benefit both his estate and the course of agriculture. In the first place, the farmer to-day is not getting his fair share of the prices the consumer pays for food. While all the producing interests connected with the land are unprosperous and are being forced to contract their activities, the trading organisations which deal in the produce of land are paying handsome dividends and individual middlemen are growing rich. The consumer reviles the farmer because of the scarcity of food; the farmer knows he must restrict his production in order to make it pay at present prices, while the slightest production above the normal demand cuts away not merely profits but often cash returns, as may be seen over plums and potatoes at the moment. The distributing trade has entrenched itself in order to retain its war scale of margin, and the building famine in the country hinders the growth of competition. Lord Bledisloe gives a series of tables to show the discrepancy between retail and farmers' prices and the increase of that discrepancy since the war; in most cases the distributing trades take more than half the price the public pays. Coarse 'middlings' cost more than wheat, and readers of the *Times* a few days ago may have noticed that on the same day the price of London flour was put up while wheat was, in another column, reported as cheaper.

It is to this state of things Lord Bledisloe recommends landowners to turn their attention; can they not organise the businesses of their farmers into something capable of keeping the middlemen in check? They should be able to see further than the farmer, who has to look after his own business of production. Co-operation has made but little headway among farmers themselves; would it not be in a very different position if it had been whole-heartedly and intelligently backed by the landowners? Here is one opening for intelligence and leadership on the part of owners of land.

The other great opening is in connexion with education and research. The old race of landlords numbered among them great improvers of farming, such as Weston, Townshend, Coke, and Lawes. Even the much-abused farming covenants represented, to begin

with, better systems imposed upon their tenants by landlords. To-day, if English farming practice is in many respects still ahead of its competitors, it has become, comparatively speaking, not so alive to the applications of science. Farmers themselves are not quite what they were; the great industrial development of the last sixty years has been drawing away the brains from the more slowly moving pursuit of agriculture, and, speaking broadly, the present race of farmers are not educated up to their needs or their opportunities.

Here again the landowners have not been, but can be, leaders; they can become intelligence centres, they can stimulate the education of their tenants and of their tenants' sons, they can even insist on education in selecting their tenants. It is the lack of appreciation of science among landowners that has made it a plant of slow growth among their tenants.

The address is really a powerfully worded appeal from Lord Bledisloe to the landowning class to treat landowning as a vocation and to educate themselves for it. It is a far-sighted call for service, and coming from one who has so notably put into practice what he preaches, carries with it an authority which no ordinary admonition to progress can possess.

### Bergson and Einstein.

*Durée et Simultanéité: À propos de la théorie d'Einstein.* Par Henri Bergson. Pp. viii + 245. (Paris: Felix Alcan, 1922.) 8 francs net.

EINSTEIN in his theory of relativity may be said to have thrown down a challenge in the scientific world of the same kind as that which Bergson in his theory of duration has thrown down in the philosophic world. Both theories are primarily concerned with a certain fundamental character in the experience of time. Both recognise a difference of nature, that is, a qualitative difference, between the time which enters into our equations of measurement and the time which is lived. At one point, however, Bergson seems to come into direct conflict with the Minkowski-Einstein scheme of a space-time continuum. This is in his conception of creative evolution. Creation means that the reality of the physical universe is of the nature of life or consciousness, a conception which implies the continued existence of the past in the present, and a universal moving forward into an open future. How is this consistent with the view that there is not one single universal time but as many different times as there are systems, and that there is no absolute simultaneity between events which take place at any two points if they are separate from one another in space?

Bergson has evidently been of opinion that for his own sake he must clear up his position on this crucial point. To do so has been no slight undertaking, for he has not been content to accept the principle of relativity from the physicists or to assume that its mathematics is correct. He has, therefore, deferred the resumption of his own philosophical work, interrupted by the war, and has set himself to study at first hand the mathematical equations of Lorentz and Einstein. It may interest readers of NATURE to know that Bergson specialised in mathematics in his student days to the extent of hesitating between it and philosophy when he had to choose a profession. The argument in his new work deals almost exclusively with the restricted theory, for it is that which affects directly the question of the reality of time. The relevance of the generalised theory is only touched upon. It is the subject of a "Final Remark," in which the nature of its importance for philosophy is indicated, but general relativity does not seem to Bergson to challenge, as the restricted relativity does, his theory that time as a universal flux or change is an intuited reality, while successive states are a spatialised time due to the intellectual mode of apprehending it.

Descartes in the Principles (ii. 29) declares that in movement there is complete reciprocity; either of two objects changing their relative position may be considered as having moved or as having remained at rest. To this Sir Henry More replied (March 5, 1649): "When I am sitting still, and someone moving away a mile from me is red with fatigue, it is he who moves and I who am still." Nothing science can affirm concerning the relativity of perceived movement, measured by foot-rules and clocks, can disturb the inward feeling we have that we ourselves can effect movements and that the efforts we put forth in doing so are under our control. Here we have, then, in the most striking manner, the contrast between the intuitive mode and the intellectual mode of apprehending reality. Is there anything in the principle of relativity which conflicts with the conception of reality as fundamentally a duration which is intuited or lived? *Prima facie*, yes. The denial of absolute simultaneity seems completely inconsistent with it. This comes out most clearly in Einstein's paradox. "Suppose a traveller to be enclosed in a cannon-ball and projected from the earth with a velocity amounting to a twenty-thousandth of the velocity of light; suppose him to meet a star and be returned to earth; he will find when he leaves the cannon-ball that if he has been absent two years, the world in his absence has aged two hundred years." Any one who applies the mathematics of relativity and makes the simple calculation for the two systems, earth and cannon-ball, will find that the conclusion