

“Training and Research illustrated from the Agricultural view point.”

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A. J. PERKINS, THE DIRECTOR OF AGRICULTURE, ADELAIDE 1917).

(Continued from last issue.)

Present Lack of Competent Farm Laborers.

Hence, at the outset, I shall point to the common complaint that here in south Australia, whose national wealth is mainly drawn from rural enterprises, competent farm hands when called for are practically not to be had; and I shall add that the complaint is well grounded on fact. But under-present circumstances, how indeed could it be otherwise? It is only long practice, life's work, that can confer any satisfactory degree of manual efficiency; and how can we look for it among the lacklands, when ninety-nine hundredths of the farm work of the country is carried out by the landowners themselves? This is not the recital of a grievance, but a statement of fact, for which general economic conditions can all alone be held responsible.

But if ever, in days gone by, at harvest time and at other busy moments, farmers have had occasion to deplore both the scarcity and the unsuitability of available labor, unless in the interval radical change supervenes, their cry in the future is likely to be equally frequent and acute. We shall have to realise that intensive farming implies the concentration of capital on small areas, the bulk of which will be absorbed in labor; that high gross returns cannot be secured except by corresponding outgoing expenditure, chiefly in the shape of labor. And when large farms, on which at the present time little or no outside labor is being employed, come to be split up into smaller units, it will be found that several permanent hands will be absorbed by individual subdivisions, worked on more intensive principles.

How to Attract Labor to the Land.

How are we to secure this absolutely essential farm labor, without which there can be no great agricultural progress? We shall have to attract to rural occupations a reasonable proportion of the rising generation; we shall have to persuade the majority of those reared in the country that it is to their interest to continue there; we shall have to bring under the notice of those born in the cities but hankering after open spaces, that there are open to them in the country careers quite as attractive as those offered by city shops and factories and streets. Questions of this character admit of discussion at great length; but as they are only incidental to my subject matter, I shall confine myself to the enumeration of a few propositions bearing, as it appears to me, on the main issues at stake.

1. Future closer settlement and intensive farming operations should tend to cluster our rural population into important social groups, which should destroy the loneliness of empty spaces and help to neutralise the attraction of city centres.
2. Intensive farming should offer continuance of employment over the greater portion of the year.
3. Both wages and working hours would need to be based on equitable lines corresponding to those in force in other forms of employment.
4. Housing of farm hands and board, when provided, would need to be reasonably good.
5. Rural centres should be provided, with facilities for self-improvement and for general social relaxations.
6. The old custom of competitive tests of skill in rural manual operations should be revived in all country centres.
7. Both with a view to home creation, and as a means of tidying over temporary unemployment, the acquisition of small blocks of lands by rural workers should be encouraged in every way.

8. Thrift and industry should be promoted to the end that every rural worker of moderate attainments may, if he chooses become ultimately a farmer himself.

Means such as these, and others which I have properly overlooked, should serve to check the regrettable exodus of country youths towards the cities, and in many instances will perhaps set up a counter current countrywards.

Training of Farm Hands.

Now, as to the training in manual dexterity, I see absolutely no reason why youths wishing to qualify for rural occupations should not under suitable guarantees and the supervision of State authorities, indenture themselves as apprentices to approved farmers. Remuneration and conditions might be mutually agreed upon, or, preferably, be determined by law imposing effective guarantees on either side. Something in this direction I have already endeavoured to do on our Government farms, not with much success hitherto, it must be confessed; mainly, however, because of the disturbed condition of times; and I hope for better things as our affairs improve.

Finally, I am sufficiently sanguine to anticipate the times when attendance at High Schools or at technical classes will be compulsory upon farm apprentices, as it is intended that it should be for the trade apprentices of the cities.

Agricultural College Training.

But it must be clear that all the acquired cunning that the hand can command is of little avail unless under the direction of the well trained mind able effectively to register and analyse the daily happenings of life. If, therefore, we are ready to supply the skilled laborer, it behoves us to make equal provision for those who must map out and direct his activities. In this connection it is not vitally essential that the leader, the farmer, should have acquired the same degree of manual skill as the man whose special business it is to carry out the work: it is, however, of immense advantage to him to be intimately acquainted with all the minutes of the operations in which may be engaged those under his direction; indeed, hitherto

knowledge of this kind has frequently represented the deciding factor in success. And it is for reasons of this kind that we see all Australian Agricultural Colleges attaching paramount importance to farm manual operations, they have been looked upon as typifying the immediately practical side of the farmer's business; and such indeed they are, and will continue to be so long as with unaided hand the farmer carries on the great bulk of the farm work. It does not follow however, that this stage of affairs must continue indefinitely; indeed, already in our midst there are many exceptions to the general rule; and it seems likely that the "practical" man of the future will be the master mind who directs and instructs his men, and manages the business of the farm. Come what may, farm manual training cannot with safety be overlooked in any Agricultural College; in giving to it full weight, however, we are not necessarily bound down to the methods hitherto adopted in Australia.

From our present view point I shall now draw attention to two drawbacks, attaching to the type of training hitherto unvoidable in all Australian Agricultural Colleges. The fact that fully half the time of students is absorbed in direct manual operations curtails very seriously the time available for theoretical and professional training; and a three years' training in essential fundamental principles. Hence, if consideration be taken of the range of subjects—both auxiliary and technical—which must be covered during these mutilated three years, and of the inadequate early grounding of most of those attending Agricultural Colleges. I am compelled to admit as a matter of personal experience, that this three years' course is all too short; and unfortunately, in many cases it is even reduced to two.

Another disadvantage of the present system, if conscientiously administered, is that it sets very rigid limits to the number of students whom it is possible to admit at any one time. If, in your training you are aiming at manual efficiency, it is clear that this efficiency cannot possibly be attained unless the number of students present is strictly proportional to the area of the farm on which it is proposed to train them, and should students be enrolled in excessive numbers,

the opportunity for acquiring manual efficiency must *ipso facto* disappear, and with it the foundation on which college training has hitherto been ostensibly based. On the other hand, it is easily understood that an indefinite extension of College Farm areas is one out of the question; hence it may be stated very definitely that no single college can pretend to offer adequate facilities for farm manual training, whose average enrolment exceeds 99 to 100 students in any one year; and even this number would prove difficult to handle in adequate manner.

It would seem, therefore, that if greater numbers than hitherto are to be attracted to our Agricultural colleges—and in the future there is likely, in my view, to be urgent need of it—drastic changes in policy and methods may prove unavoidable. It may even be possible, without detriment to the student's ultimate training, to eliminate ordinary farm work altogether from the College curriculum, and ensure professional training extending over not less than two complete years, equivalent to a four-years' course as at present conducted. It should be added that dispensation from the actual routine of farm work does not imply the doing away with all practical work. Instruction in the latter could still be imparted through the medium of the usual practical and field demonstrations.

I anticipate a chorus of disapproval to a proposal which will be said to sap the foundations of methods and practices which have proved eminently successful in the past; and, although this objection cannot be disputed, I am fain to reply that the dead must bury their dead, since no other means of throwing open to all comers the portals of agricultural training are financially feasible.

Let me not be misunderstood, however, I am far from undervaluing efficiency in manual operations. I believe that every farmer should possess of it as much as he can secure. But it does not follow that an Agricultural College is the best place in which to acquire it; rather the contrary, perhaps because of the artificial character of many operations in which a College may be involved. Let us take the case of a farmer's son, born and reared on a farm intimately acquainted from his earliest days with farm operations,

in which indeed, he will almost invariably have taken part. Is not such a youth more or less wasting his time when he assists in the routine of farm work on an Agricultural College farm? Would he not be better employed in acquiring additional technical and professional insight into matters pertaining to his future calling? It will perhaps be admitted that the omission of farm work from the course of training cannot seriously impair the future efficiency of the farmer's son. But what of the city-bred lad who wishes to go on the land? In his case, manual efficiency can be provided for in other ways than by absorbing half of his time in farm, at the expense of his professional training at an institution, the upkeep of which is always unavoidably costly.

It is true that a limited number of novices could always be accepted for manual training on the farm of the Agricultural College itself; and perhaps combining with it the while a certain amount of instruction in sciences. They should not, however, be admitted to technical training until reasonably imbued with the atmosphere of agricultural operations and versed in the routine of farm work. Some could be admitted for similar training on the various Government farms; others again could serve a period of apprenticeship with approved farmers. In short, none need enter upon a course of technical training without some preliminary acquaintance with farm operations and work. Nor should diploma of general proficiency be awarded except to the complete satisfaction of those best able to judge in the matter of general manual work. In Engineering degrees, it is, I believe, customary to suspend the issue of official diplomas until such time as evidence can be produced of practical work actually accomplished. From the view point of agricultural training, however, it would be a fatal error to make practical work a post-degree affair; half the value of the training would be lost unless the student can bring with him to college, as an essential part of himself, the atmosphere of the farm; and this, in my view, should at all times be insisted upon.

The elimination of compulsory farm work from an Agricultural College curriculum would open the door to-day to students, who could

find their board elsewhere, and in this manner immeasurably increase the number of those who could take advantage of the training offered, and this without great cost to the State.

In putting forth this proposal I can sympathise with the heathen Clovis when compelled to burn the gods he had once worshipped and to worship those whom erstwhile he had burnt. It has been no small surrender to make; but in our probable need, I see no alternative if, indeed, in the near future, we offer to the rising generation adequate facilities for acquiring technical agricultural training.

University Training.

The University of Adelaide, although conferring a degree in Agriculture, has hitherto abstained from imparting direct technical training in Agriculture itself; it has instead accepted the training given at the Roseworthy Agricultural College, and contented itself with insisting upon a higher degree of competency in the auxiliary sciences. This moderation has not been copied by the sister Universities of the neighbouring State, who have boldly established Chairs of Agriculture in their midst.

If the respective effort and achievements of the past were to be balanced up to-day, it is a moot point as to whether after all our past policy would not prove to have been the wiser course; but concerning the future orientation of our policy it would perhaps be rash to speculate. Nevertheless, in this connection it must be admitted that, in measure, fate has already been forestalled by private munificence. Mr. Fetter Wait's public-spiritedness has cut the Gordian knot and definitely committed the University to an Agricultural Experiment Station; and it seems almost inevitable that such an institution should eventually be followed by a Chair of Agriculture. I entertain no doubts as to the potential value of an Experiment Station, nor, given the soundness of its human material, as to its ultimate success. Of the prospects of lectures from the Chair, on the other hand, I am more dubious, particularly if for that purpose it were to be borne out of due season, in which case I fear it would be easier to found the Chair than to find the students.