The breed produces about 15 per cent. of black lambs, together with a number which are "pale blue" and very occasionally one which is pure white. Mr. F. W. Dry, from breeding experiments (Journ. Genet., Vol. 14 No. 2), concludes that the black is a simple recessive, since blacks bred together give only black offspring. The same is true of blacks in certain other breeds of sheep. The blue-faced sheep are found to be heterozygotes analogous to the Blue Andalusian fowl; in other words, a black sheep with a (dominant) white coat. On the otherhand, the Karakul sheep is a dominant black. When crossed with white breeds, the lambs are pure black. Such hybrids are now widely bred and their fleeces used as fur, but in the adult the colour becomes grey or dirty white. In black Welsh mountain sheep the colour of the coat and horns is also apparently dominant in crosses. Mr. J. A. Fraser Roberts (Journ. Genet., Vol. 14, No. 3) describes experiments with this breed. A pattern known as "badger face" also occurs, which is white with black markings on the face, belly, and legs. This appears to be recessive to both black & white. In crosses between black and badger-face a white lamb has been known to appear. Such cases of "reversed dominance" have been recorded in other breeds. Their further investigation is a matter of much genetical interest. The badgar-face marking has also been studied by Wriedt in a Norwegian breed of sheep. Individuals with reversed badger-face markings, i. e. black where white should appear and vice versa, are also known to occur.

(Nature). G. N. R.

EDITORIAL NOTES.

Indian Economic Conference. In his presidential address at the Benares session of the Conference held in January Mr. Lallubhai Samaldoss traversed a very wide field and his speech ranks as one of the best that have been delivered for a long time. It evinces a rare sense of responsibility and a correct grasp of public questions and his words are bound to carry weight not only with the audience before him then but also the larger public outside. Mr. Lallubhai rightly stressed the fact that the study of economics should be pursued without any personal, racial or political bias though it was difficult to draw a line dividing economics from politics.

In his opinion the economic condition of a country largely depends on its industrial development but an enquiry into the economic condition of a people like the Indians who lived mostly on agriculture must first deal with the question of agriculture. He examined the current theories of taxation of land and appealed to the Members of the Taxation Enquiry Committee who were present before him to approach their task with courage, in a scientific spirit, but never in a nervous mood.

He demolished the theory that Governments should not concern themselves in individual undertakings, by his forcible argument that "so long as land revenue formed a very large percentage of provincial resources it was the duty of the Governments to adopt a policy of improving the *Economic*, Social, and Intellectual condition of those who live on the land and pay out of its proceeds". He was of opinion that the establishment of land mortgage banks as in Germany and of conciliation boards to examine the accounts of sowcars would prove useful in reducing the crushing indebtedness of the ryot.

Mr. Samaldoss offers no satisfactory solution to the existing evils when he says "one of the results of the adoption of any policy aiming at the prevention of lands will be to reduce the number of persons dependent on the land and thus to increase unemployment in the villages. Two remedies suggest themselves viz., the development of cottage industries and the drawing of those in need of employment to industrial areas or to agricultural areas requiring more men."

How far these remedies have proved effective in driving misery from lands where they have been adopted is only a matter of opinion.

Mr. Lallubhai is certainly on safe ground when he says that "Protection, whether in the form of import duties or bounties and even State aid cannot and will not by themselves bring about the industrialism of the country. The first requisite is an enterprising spirit another, presence of trained and well qualified men". The first is not absent and the second is only a question of time. It is a product of the first, arising from the hearty co-operation of the Government and the people. Mr. Samaldoss laid a special emphais on other essential facts for industrial development viz., banking facilites, increase of capital, economy and retrenchment. We would earnestly invite the attention of our readers to the extracts of his speech appearing elsewhere which relate to agricultural matters.

New Economic Values. The birth of the Labour and Feminist movements during recent years has brought to the forefront the

question of revising our ideas regarding economics. Growth of population, development of machinery and facilities for easy locomotion have tended to disrupt the family. The school of thinkers who sprang up in the last century and who in spite of Ruskin and Morris successfully advocated the price and profit system as the fundamental basis of all economics gained a very large following. But the recent war and its attendant evils have, however, now forced the West to examine the fundamentals again in the light of the experience gained and efforts are being made to include the human element also as a necessary factor. One of the best exponents of this view is Prof. H. F. Ward of New York who gave a lucid expression to this doctrine to Madras audiences in November last. A short summary of his lectures is published elsewhere in this issue under the heading "A New Social Order." We would invite our readers to a careful perusal of it and especially of the learned professor's exhortation to the rich to fix a standard of living and rigidly limit themselves to it in furtherance of the interests of humanity.

Death duties. The inquiries set afoot by the Taxation Enquiry Committee have given an opportunity to a few witnesses to suggest that death duties as in England might as well be introduced into this country. They honestly believe that this form of taxation is equitable and will augment the present slender revenues of India. It is true that the amounts collected in the shape of death duties would really be considerable as land in this country has been parcelled out amongst several thousands of owners. Our friends seem to forget that the case is different in Western countries where all land is concentrated in the hands of a few people and properties descend intact to the eldest male member. It would be seen that the law of proportion is in-applicable in the case of India and the succession duty say of 15 to 25 per cent, which would not be felt as a hardship in the West woulds ruin many a family with moderate income and with no other rescurces to augment it.

The Missing Link. We all know that Scotland is the most literate portion of the British Empire. Her ideals always find ready acceptance elsewhere. This is no less true of Agricultural Education. It is the proud boast of the Edinburgh University to have sent to India a larger number of workers in Agriculture than any other University and thus her ideals are sure to command the respect and be followed by her alumni here. In India and especially in our own province of Madras, Agricultural Education has not yet been broad based to the same extent that it ought to be. There are a few agricultural schools of the lower grade and there is a fully equipped and up-to-date Agricultural College at Coimbatore. Real scientific agricultural education has not permeated all strata of society and for a

the S. S. L. C. system has been productive of at least one great disadvantage. It has tended to segregate pupils in different compartments to the detriment of their acquiring a working knowledge of several subjects required in every day life. This is evident in the colossal ignorance which boys now- a-days display when references are made to chief towns in other countries, important articles of merchandise etc., in illustration of principles that are under discussion. Educationists, we believe, have now realised this defect. We hope they would try to remedy it by including at least in the school curriculum, outlines of general geography, etc. This is in our view-a great help to students acquiring in their impressionable age knowledge which will stand them in good stead, in later life.

The Economic eye. The pure scientist with an eye to discover fundamentals finds reward for his work in the discovery of something which an applied scientist utilises for the benefit of the community and of himself. The methods employed by each are necessarily different and the public estimation which is based almost always on the immediate utilitarian ends often acts as a deterrent to weak souls in the pursuit of their quest. Health and competence, however, are to be assured before any man, much less a scientist, can devote his time and energies to his work. When these are wanting no progress is possible and the advance of a nation during a particular epoch depends upon the facilities available for men to make researches. Nations fare differently in this respect. Often research has been made the plaything of legislators and financiers and subsidised research degenerates into a dry routine with the result that pseudosicientists spring up and successfully adopt methods which satisfy the gallery but can never advance the cause of science which is truth-Entrenched behind authority and mailed with the armour of prestige. these get through where real scientists often fail. They may propound theories and publish opinions which may do duty for a time but cannot stand the rigorous test. The right man having been chosen, the public should with discerning care devote sums of money for research and leave details for the workers themselves. for, it is the man that counts in research and not the mechanism and especiallay in a country like India where a corps of well trained millionares and scientists is not yet available, it is necessary that the legislators should interfere as little as possible with the scientific workers, safeguarding of course the interest of the public in the expenditure of the monies. The day-to-day scrutiny and interruptions while work is proceeding often tend to little progress and sufficient time should be allowed to lapse before the results are assessed at their true value. Perhaps it may be a few seasons in some cases and it may take several years in others. No the S. S. L. C. system has been productive of at least one great disadvantage. It has tended to segregate pupils in different compartments to the detriment of their acquiring a working knowledge of several subjects required in every day life. This is evident in the colossal ignorance which boys now- a-days display when references are made to chief towns in other countries, important articles of merchandise etc., in illustration of principles that are under discussion. Educationists, we believe, have now realised this defect. We hope they would try to remedy it by including at least in the school curriculum, outlines of general geography, etc. This is in our view-a great help to students acquiring in their impressionable age knowledge which will stand them in good stead, in later life.

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DEPARTMENTAL NOTES.

Leave .-

- Mr. K. Rama Rao, Farm Manager. Nandyal, leave on average pay for one month from 16-1-25,
- 2. Mr. M. Gopala Chetty, Agricultural Demonstrator, Salem, leave on average pay for 4 weeks from 6-1-25 with permission to prefix the holidays on the 4th and 5th.
- Mr. A. K. Ganesha Ayyar, Assistant Farm Manager, Millets Breeding Station, leave on average pay for two months from 25-1-25.
- Mr. P. Krishna Rao, Farm Manager, Millets Breeding Station, leave on average pay for 25 days from 27-1-25.
- 5. Mr. C. Subba Rao, Assistant Agricultural Demonstrator, Allagadda. leave on average pay for 5 days from 3-1-25 with permission to prefix Christmas holidays.
- Mr. B. Abisheganatham Pillai, Farm Manager, Nanjanad, leave on average pay from 3rd to 15th January 1925 with permission to avail himself of the Christmas and New year holidays.
- Mr. K. Govindan Nambiyar, Assistant Farm Manager, Govt. Botanic Gardens, Ootacamund, leave on average pay for one month with effect from 5-1-25.
- Mr, T. P. Sankaran Nambiyar, 2nd Agricultural Teacher, Agricultural Middle School. Taliparamba, extension of leave on average pay for one month on medical certificate.

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