

gogu fibre rope. Here again, the lever is weighted at one end and worked usually by a single cooly. Here and there one may occasionally find iron buckets also just coming into use.

North of Vizianagaram the most noticeable feature is irrigation by splashing water with an irrigation spoon (*siri gooda* or *cheti guda* in Telugu and *seedo* in Uriya). This is a small bamboo basket attached to a hand stick and worked by drawing a rope for scattering water on to the fields. For growing garden crops trenches are formed 10 to 12 feet apart and water led into them from wells or tanks. A cooly, walking in the trench with a spoon in his hand splashes water over the beds to economise irrigation water. This is something like the hand watering of plants with a rose-can.

Near Chicacole a double picotah is a novelty. It has buckets at both ends of the lever. The downward pull at one end combined with the simultaneous upward push at the other by the coolies working at either end enables bigger buckets being used than otherwise. Such *yetams* are used along the margins of the Langulya.

D. BALAKRISHNA MURTHY.

Notes.

The Ongole cattle show was held this year on 16th, 17th and 18th March. The Committee are to be congratulated on the success of it. When the show is held after harvesting is finished more entries are usually obtained and this year there were about 800, which is well up to the average. In addition the quality of the exhibits was on the whole good, and better than last year. In the classes for 4 teeth, 2 teeth and milk teeth bulls, and in all the female classes there was an average of well over 50 exhibits, of a very level type. His Excellency the Governor visited the

show on the last day and presented the prizes to the winners. The crowd on the last day, in consequence, was enormous and severely taxed the small force of Police on duty. It was estimated that 10,000 people were present. The Honourable Mr. Buckley, Commissioner of Agriculture was present throughout the show, as were also several members of the Agricultural and Veterinary departments.

Three students' debates were held during March on 10, 17 and 31st respectively as follow :—

Subject :—The means at the disposal of the farmer at present for the conservation of moisture are insufficient.

Opened by K. R. Narayana Rao. x M. Balakrishna Ayyar.

Seconded by K. Achuthan Nambiar. x A. Ahamed Hussain.

Subject :—It is better to be lucky than rich.

Opener Duraiswami Ayyangar. x Araza Gopalakrishnayya.

Seconded by Anantharama Ayyar. x Arulanandam Pillai.

Subject :—That in the progress and development of education quantity is to be considered before quality.

Opened by Jeevanadas. x K. M. Jacob.

Seconded by Chakrapani Marar x Dharmalinga Mudaliar.

The motion in each case was carried by a large majority.

Peacock-Guinea Fowl Hybrids :—The cross between pea fowl and guinea fowl is a very 'wide' one that has been made a number of times. In general appearance the hybrids most closely resemble the peacock, their form being slender, particularly in the head and neck although there was a noticeable absence of all the

characteristic appendages of the head, and the great train of feathers which is the peacock's pride was very much reduced. The plumage exhibited striping, which is perhaps a primitive pattern in the peacock. It was of a dark fawn with Clock stripes in the lower part of the neck, becoming paler fawn with Clock specks in the region of the thorax, abdomen and flanks. Such hybrids are usually sterile and so it is impossible to breed them through several generations. The Journal of Heredity. K. C. J.

In the death of Sir William Turner, Vice Chancellor and Principal of the University of Edinburgh on the 5th February 1916, the University has lost a brilliant professor and the city a great man. He died at the ripe old age of 84 having served his University for well nigh fifty years. As an expositor of Anatomy as professor for 36 years he was matchless; he was known among his students to make the dry bones speak: He was created a knight in 1886, and a K. C. B., in 1901. He was the recipient of many honorary degrees from one or other of the important Universities of Great Britain. His writings in Anthropology and Craniology are known all over the world and he was held as a great authority on the anatomy of the whale which was his favourite subject.

Molasses—a cattle food:—Molasses in itself is practically of no value as a cattle food, but like mustard with beef, forms an excellent condiment. So two or three pounds of molasses assist the digestion of other foods and act as a mild laxative in cattle. The Journal of the Department of Agriculture of S. Australia.

K. C. J.

Coconut Butter:—Most of the butter manufactured in Bohemia is from Indian Copra. Dried copra is sliced and fat extracted by oil presses. Powdered chalk is added to absorb the soap fats

the oil contains and is allowed to settle. The supernatant oil is pumped into a tank heated by steam pipes about 270° to 318° F. through four or five filters. The heating process is continued until the oil is clear as crystal and begins to bubble. It is then pumped into an automatic weighing apparatus and run into moulds when it is allowed to cool. The tablets or cubes are removed to the packing table. The soap fats combined with the chalk are treated with sulphuric acid which liberates the soap fats to float on the surface. These are drawn off into tubes and are sold to manufacturers of soap. The trimmings of the copra slices are made into powder for food for cattle or pigs. The coconut fat is white, but when manufactured into butter is coloured to resemble oleomargarine. Sesamum oil is added to make the product more pliant. Coconut butter keeps well either raw or refined and does not spoil for months even in warm weather. It is claimed that ordinary consumer cannot detect the difference between this butter and oleomargarine. Six or seven years ago the output of coconut butter in Austria was about 40 tons a day. It is now approximately 300 tons. The price has increased from £ 3 15 sh. to £ 5 8 sh. 6 d. for 200 lb. Queensland Agricultural Journal.

The toxic *principle* in cotton seed—Cotton seed meal, after expression of oil, is now used extensively as a feeding stuff for cattle in the United States. But if the animal has not been gradually accustomed to the food, poisoning and death may occur, and for this reason it is now generally avoided as a food for pigs. This toxic action has been distributed to various constituents of the seed, including the oil, the high protein content, and a salt of phosphoric acid; while decomposition products and a supposed toxic alkaloid have also been held responsible for the trouble. (Knowledge). K. U. K. M.

Departmental Notes.

1. Mr. M. R. Ramaswami Sivan, B. A., D. A. Chief assistant to be Senior assistant in Chemistry to the Government Agricultural Chemist.
2. Messrs. L. S. Natesa Iyer, D. A. and V. S. Narayanasami Iyer, D. A. Second grade Farm Managers have joined duty at the Central Farm.
3. Mr. M. K. Nambiar L. Ag. Central Farm has joined duty at the Samalkota Farm as Assistant Farm Manager in charge.
4. Mr K. Raghavachari L. Ag. Assistant Farm Manager, Central Farm has been taken into the teaching section as an additional Assistant to the Principal.

Amendments to the rules of the M. A. S. Union received by the General Secretary.

Rule No. 2. *Insert "how attained" after "objects."

(iv) *Include "to protect the interests of the past and present students."

3.

(iii) *In place of existing rule, insert "the registering of addresses of such past and present students that so desire."

(iv) *Insert "the publishing" in place of "the conducting."

(v) †Insert "by the holding of a meeting of old Students at the time of the College Day and by the submitting of memorials and deputations to the proper authorities."

4. *Insert after "membership" "eligibility" in place of "who are eligible."

6. †In place of existing rule insert "Students.....pay an advance of Rs. 2/- within 3 months of their joining the College and the balance according to the class of membership they choose to join at the end of the 2nd year or within the first three months of the third year's course."

7. *Patrons.*—*In place of "the Permanent Fund of the Union" insert "funds of Union."

10. †*The council.*—The following may be inserted :—

(a)ex-officio and “an Honorary President who shall be an old student.”

(b) “and five vice-presidents and fourteen members of whom “one vice-president shall be an officer member while all others shall “be old students and one vice-president and seven members shall be “resident old students.”

(c) from amongst the last, “the General Secretary and the Editor shall be elected” in place of “General Secretary, Treasurer and joint Secretary.”

(d) The following may be omitted :—
“Two resident.....students.”

11. †*Election of council.*—All members etc.....“The resident vice-president and the 7 resident members of council including “the General Secretary and Editor” in place of “the General Secretary, Joint Secretary etc.”

12. *The working committee.*—*The resident.....Committee “with four student members instead of three.....”

13. *Journal.*—†The conduct etc.....four members including “the vice President and the Editor”. The Sub-Editor and another member of the editorial board to be elected by the working committee from their members.”

15. *All proposal.....before “the 31st May” every year for being published.....meeting.

16. *In place of “the corrected list of addresses of old students.” “insert ” list of members.”

*Amendments discussed and approved by the Working Committee.

†Amendments brought forward by the members but neither discussed nor approved by the Working Committee.

A. C. & R. I., }
Coimbatore, }

K. KRISHNAMURTHI RAO,
General Secretary.