

hoeing, wrapping, purchasing bamboos and oilcake manure at their cost and applying and pressing the juice and preparing jaggery ; of course, the landowner advances money and realises at harvest time about 12 per cent. interest. The produce is shared half and half, the landlord supplying mill and accessories, cattle, watchman and man feeding the oven while jaggery is being made.

The coolies are thus attached to the land. The landlord finds an easy and safe investment for his capital, without trouble gets about Rs. 150 to 200 an acre and the coolies employment and profits ranging from Rs. 50 to 150 an acre.

Ratooning is not very common. Jaggery is made not into small cubes as in Coimbatore nor in balls as in South Arcot but in slabs about $2\frac{1}{4}$ feet \times $1\frac{1}{4}$ ft. \times 4", weighing about 4 to 5 maunds. Certain tracts produce only one quality of jaggery while the others produce another. In the rainy season these slabs cut into six and bundled in palmyra baskets are arranged in an ill-ventilated room in layers of 2 and 3 and cowdung cakes and rice husk are slowly and gradually burnt on rainy or cloudy days when the smoke arising is considered to envelope and keep off moisture thus preventing the slabs from getting soft.

Notes.

The nourishing qualities and medicinal uses of sugar are so well known for India that the following may be of interest ;—

Sugar excites the secretions of the stomach, increases digestion of albuminous matters and of nutritives containing iron and lime, a fact which proves that under proper conditions sugar is a remedy against anaemia, chlorosis and in scropula. This explains the love of a great many children for sugar in the lump, who afterwards as they grow older avoid plain sugar or sugar by itself, almost entirely. It seems to be a sort of instinct with children

with weak bones and thin blood. * * * The idea that sugar causes bad teeth is an altogether mistaken one. The teeth of the Negroes in the tropics are dazzlingly white and sound. On sugar plantations in Cuba, Louisiana and elsewhere, all Negroes run down with labour or sickness grow sleek, fat and strong again on the return of the sugar harvest solely by chewing the cane. Englishmen and Americans eat more sugar than the French and the Germans and yet they have better teeth than the latter.

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Sugar seems to act as a digester and that heaviness often felt after a hearty meal is frequently relieved by drinking a glass of sugar water. It is better for lean persons than fat ones.

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In old times our confectioners, bakers, etc. did not employ sugar in their sweet wares, but honey, whose antiseptic properties were known even in remote antiquity, and the Egyptians, Greeks, etc. frequently used it as an application to serious wounds. For that matter, as late as the seventeenth century, our ancestors used sugar as an application to wounds. The practice, however, fell into neglect and was forgotten until only recently prominent surgeons are again bringing the substance into use. One doctor recommends it in gangrene and has used it with excellent results.

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Normal and healthy blood always contains sugar, which is derived from all nutritive foods and has absolutely nothing to do with the consumption of pure sugar. That a too great indulgence in sugar, by itself or mixed with other things, can have bad effect and cause sickness is not to be denied, but that its use, either in small quantities or large, can cause diabetes cannot be too strongly denied. Such an idea could be conceived or find defenders only from the fact that the original cause of that only too frequent disease has, up to the present, eluded investigation and remains a

mystery." Louisiana Planter. * * * Vol. LV. No. 3
(K. K. R.).

Common salt as manure:—Presence of common salt in a soil produces a hard impermeable crust and makes the soil moisture not available to plants. In rainy tracts these are but feebly felt. A solution of common salt is, however, a better solvent of mineral matter. Although salt is not generally considered to be a food substance to plants, it is always present in the ash, since it is capable of influencing certain oxidase actions it may also affect the respiration and growth of plants. (Journal of the Board of Agriculture).

Agricultural Department of North Wales recommends the use of salt in place of potash, in view of the fact that it is able to liberate some of the potash locked up in soils. For annual crops such as potatoes a dressing of 5 to 6 cwts. per acre is recommended to be broad casted some weeks before planting. The salt must not be mixed with superphosphate. (Tropical agriculturist).

K. U. K. M.

Sulphate of ammonia from peat:—The production of sulphate of ammonia from peat has now become a commercial success. The process adopted is the "Water gas", hot air and steam playing on an incandescent mass of peat. The red hot peat decomposes the water vapour, a part of the hydrogen of which combines with the Nitrogen of the peat forming ammonia. The gases thus produced are washed and conducted into a chamber where they come in contact with sulphuric acid, sulphate of ammonia being formed. It is said that sulphate of ammonia can be produced for from 4s. 10d. to 5s. 7d. per cwt as compared with 12s. (Australian sugar journal). K. K. R.

We are extremely glad to learn that Mr. B. Dwarakanath, L. Ag. has been gazetted as 2nd assistant to the Chemical Exami-

ner, United Provinces of Agra, Oudh and Central Provinces on Rs. 130 per mensem, in the grade Rs. 130 to Rs. 300. He has already entered on his duties and we wish him every success.

Estate Notes.

We welcome to our midst Mrs. C. A. Barber who arrived on the 8th instant from England after a long lapse of 3½ years. We are glad to see her in excellent health.

Students of Class II were on a short tour of agricultural excursion with the Principal and the Special Assistant in the Trichinopoly District from the 7th to 12th instant.

On the 12th of July last—the closing day of the College Day and Conference—it was announced by Mr. D. Ananada Rao the Vice-President that the Munagala prize medal offered by Mr. K. Ramasastrulu Naidu B. S. was won by Mr. K. Raghavachari L. Ag. for his essay on “Village Economics and How to improve it” adjudged first by the judges and that a prize of Rupees ten would be given by Dr. C. A. Barber to Mr. M. Mangesha Rao Dip : Agri : for his essay on Sugarcane. In the afternoon there was a business meeting and social gathering amongst the Union Members. At night an English drama “Chendrasahasa” and a Tamil drama “Siddhesena” were enacted by the Student Members. The success of the dramas was entirely due to the indefatigable energy and willing help of Messrs. B. V. Nath of the Chemical Section and K. Rajagopala Iyer our popular postmaster. The dramas were appreciated and the best enactors were recipients of prizes at the hands of the audience.

We regret that this portion of the function which brought the Conference to a close was omitted in page 314 of the September issue.

Hockey match. A. C. & R. I. vs. Stanes.—The return match between the above teams was played on the 1st instant on the Stanes grounds, before a fairly large number of spectators. Though we were handicapped in our defence by the absence of Mr. Parnell and Venkatachelam yet our backs and half backs made good their absence by supplying balls to the forwards. The forwards in the wings Sanjiva Rao and Samuel promptly took the balls and put in two goals one each. The game was very much contested and our team won the match by 2 to 1.

Foot-ball match. A. C. & R. I. vs. London Mission High School: There was an interesting foot-ball match played on the 9th evening between the above teams on Mission grounds. The play began a bit late and had to be finished within 45 minutes after commencement. The absence of Venkatachelam, the best defence of our team and that of Dharmalingam a good forward was keenly felt. None the less our forwards pressed very hard and in spite of many shots, the opponents' goal keeper defended very well. The match ended in nil to one.

Cricket match A. C. & R. I. vs. Stanes.—This was played in the A. C. & R. I. cricket field on the 13th instant, with the following result.

A. C. & R. I.		Stanes.	
1. Vital Rao ...	31	1. Dawson ...	0
2. Ramana Rai ...	2	2. Timmins ...	13
3. R. C. Wood	17	3. Dally ...	6
4. Dr. C. A. Barber	11	4. Eling ...	0
5. Sanjiva Rao ...	2	5. Bern ...	13
6. Vital Punja ...	0	6. Hargreave ...	8
7. Appayyah ...	26	7. Bean ...	0
8. Dharmalingam...	0	8. Bamford ...	2
9. Swami Rao ...	5	9. Hamsted ...	7

10. Anantarama Iyer	10	10. Brown ...	4
11. B. S. Tolar ...	2	11. Mcfarlane ...	3
	<hr/>		<hr/>
	106		56
Byes ...	27	Byes ...	3
	<hr/>		<hr/>
Total	133	Total	59

Bowling analysis.

	M.	R.	W.	Balls.
Dharmalingam ...	2	39	8	72
Swami Rao ...	4	19	2	78

Stanes.

Beny ...	1	29	1	54
Dawson ...	0	26	2	56
Bean ...	0	3	0	42
Brown ...	0	94	0	36
Bawford ..	0	22	0	24
Elling ...	0	5	0	12

Departmental Notes.

Appointments etc.—Mr. H. C. Sampson B. Sc. having availed himself of the furlough granted to him, Mr. R. Thomas B. Sc. acts for him as the Deputy Director of Agriculture, Southern Division.

Mr. K. V. Ramakrishna Iyer, 2nd clerk of the Govt: Economic Botanist's Office is appointed as a temporary fieldman in that section.

Notices.

We beg to draw the special attention of our subscribers to the Manager's notice in the advertisement columns regarding the enhancement of the Annual Subscription of the Journal from January 1916 to Rs. 2/ only. This was arrived at at the General

body meeting of the M. A. S. U held in July last, owing to the loss sustained in running the Journal at the very low subscription of Rupee one per annum. We earnestly request our subscribers to continue to subscribe for the Journal.

As the Journal year is coming to a close by the end of next month, the subscribers are requested to remit the subscription of Rs. 2/- for 1916, in advance, to the Manager, before the 31st idem or to accept the January number by V. P. P.

The Students' Club is entirely self supporting, and depends for its funds on the subscriptions of the students themselves, and playing members, and the donations of well wishers. Donations will be thankfully received by the Secretary and will be acknowledged in the pages of this Journal.

Proposals are on foot to start a Students' Library and the matter is being investigated by a committee of students. It is hoped to get the assistance of the Govt. in the erection of a Combined Reading Room and Library. We shall make our needs known to our many friends and well wishers when the scheme is floated.

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