

The Scholar

401
FEBRUARY 1938

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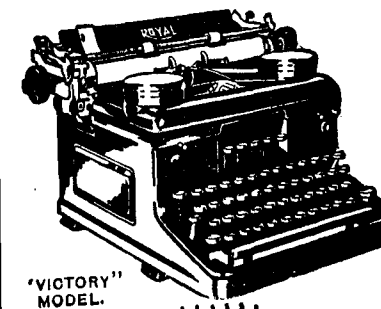
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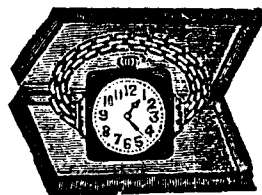
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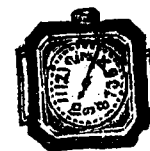
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Calls from Afar

(Diary Leaves)

BY NICHOLAS ROERICH



ANY people have known Lady Dean Paul, a talented composer and a very cordial and cultured person, but not many have known that all her life she has been in closest contact with the world beyond. Through some turn of destiny, by means of some particular qualities, she has constantly viewed the subtle world, invisible to others.

I shall never forget how, when returning from the opening of my exhibition at Brighton, in the railway coach Lady Paul had a heated argument with P. N. M. P. N., an incorrigible materialist, tried in every way to prove to her that all her visions were nothing else but hallucinations evoked by herself. To this Lady Paul, smiling sadly, retorted that she had no wish whatever to see them, that they were things that she could in no wise imagine, but that to her regret she continued to see many circumstances of events past in the subtlest reality.

Among her narratives we recall, for example, a characteristic episode in a newly rented villa. Lady Paul knowing that especially in long occupied places are there greater possibilities for all sorts of materializations, always tried to select new residences, preferably just built and where no one had yet lived. And so it was in this case. The villa had just been constructed, and according to the owner had never been occupied. The first night D. P.

suddenly felt that next to her in bed lay a dead body. Then she saw that from the room she was occupying there was being carried out a coffin which passed with difficulty through the doors and left a deep scratch on them. Upon arising the next morning after such an unpleasant night, D. P. examined the door the first thing and to her horror, found precisely that deeply incised scratch, the cause of which she had so realistically viewed in the night.

The owner was summoned and he admitted that a woman had actually died in this room after living there only two days in all.

In another case, D. P., also when removing to a new lodging, was expecting a new servant who had been recommended to her. She awakened very early and to her surprise she saw a neatly dressed affable old woman moving through the apartment. Naturally D. P. assumed that this was the new servant and she merely wondered how she could have entered her bed-room so early. At this point the old woman went to the mantle-piece upon which were placed some old portraits and began to gaze at them intently. Then to D. P.'s amazement she actually leaped up, and gradually rising to the ceiling, she disappeared. Only then did it occur to D. P. that this was not the servant at all.

Another time, being awakened at night as if by a push, D. P. saw seated near her on the bed a man, as she said, with a most unpleasant marauder's face. The visitor gazed fixedly at her for some time, then gradually vanished.

There were a great number of such manifestations, both by night and by day; sometimes they had the direct effect of driving D. P. into despair. In all sincerity she exclaimed: "Certainly I have no wish to see them. And why do all my other friends see nothing of the sort, and yet I have to encounter all these uninvited visitors?"

Moreover, it happened that her unbidden guests would move objects all about, and people calling upon her would see the movement of an object with the cause of it remaining invisible.

Especially have many similar accounts been disclosed in connection with the recent war. Thus for example, the son of V. J. Karentsov, who was killed on the British Front, appeared to his mother and communicated the place and circumstance of his death. The General Staff denied the possibility of this, giving out the information that in the indicated place there was an impassable swamp. But after several months a friend of the deceased arrived and established the facts in the case. It appeared that in order to shorten lines of communication a brushwood trail had been laid through this marsh.

Likewise one of our American friends related how at Verdun, going to changing the garrison they encountered on the way the platoon which was to have been replaced. The whole command not only saw this platoon in detail but unsuccessfully tried to hail it. Proceeding to the post they noticed a sentry standing silent and when they touched him they found him to be a corpse. The fact was later cleared up that the entire platoon had been annihilated by an unexpected raid by the Germans.

Entire books could be written about all such individual and mass manifestations. One hears about the same things in the Orient, in China, Mongolia, Afghanistan, where various traditions are connected with definite places. Concerning objects moving about without any visible cause, one can often hear about such from entirely trustworthy people.

We have before us some photographs of Mrs. F., with extraordinarily realistic images of the subtle world. Spirit photographs have been taken without any special wish for it. Rev. Solntsev in Serdobol has related several unusually clear visions which have appeared to him. Thus for example, a gravely ill midshipman promised to appear to him and bring him news of his death. Several months passed. One evening being occupied at his work-table, Solntsev heard behind him the sound of a door opening. Turning around, he saw his young friend but in a lieutenant's uniform at which he was surprised. He saluted him and then as it were went out through the door. Later on

Solntsev realized that actually at this time his friend had departed this life, but that his promotion to lieutenant had come after his death and, therefore, he had been buried in officer's uniform.

A similar instance was related by E. I.'s grandmother, when, according to an agreement with her, a student who was dying of tuberculosis appeared to her and she even conversed with him. Others in the room at the time heard this conversation. A man who died in Paris last year, Rev. George Spassky, likewise experienced more than once the most extraordinary manifestations.

Especially valuable are the accounts of perfectly balanced people, who can calmly and consciously appraise the circumstances beheld by them. Indeed, it is possible to hear a great number of authentic narratives, but such communications will, of course, be of a completely different order. As in everything else, what is needed is simplicity, directness, preciseness, in a word, everything that is included in the concept, honesty. It is especially valuable when those who have viewed something do not try first off to attribute this to some extraordinary peculiarities of their own, but simply determine and establish the fact in all its surrounding circumstances. If a crude photographic film can take impressions of subtle forms, so much the more, under known conditions, can the human consciousness perceive them.

The Industrial Utilisation of Molasses

By A. V. VARADARAJA IYENGAR, B. A., D. Sc., A. I. C., A. I. I. Sc.,
Department of Biochemistry, Indian Institute of Science, Bangalore.



MOLASSES originates from raw sugar juice and represents the residue resulting from the separation of cane sugar from the concentrated juice either from sugarcane grown throughout the country, or from beet in the Punjab, and from the palmyrah palm (*Borassus flabelliformis*) found on the Coasts. The quantity of molasses obtained is very large indeed, and with the cumulative production of sugar for the last few years, it has become an acute problem to find use for the same, nay even to dispose it of. According to a recent forecast, the production of molasses for the year 1936-37, has been unofficially reckoned at 600,000 tons, and the total for all the years will thus easily run up to a few million tons even according to official published figures.

Production of molasses in India. (In 1000 tons)

Year	From Cane	From Sugar Refinery	Total
1931-32	69	46	365
1932-33	130	56	461
1933-34	190	40	430
1934-35	234	22	406
1935-36	337	33	495
1936-37	406	19 ¹	550

The progressively high rate of production from sugarcane is worth recording. Further, these figures do not take count of molasses derived from other sources such as the cocoanut and other palms. The adequate utilisation of this commodity is thus a problem of prime importance to India even at this stage. Apart from the fact that a few thousand tons may find application in crude confectionery etc., the quantity still to be disposed of has reached an abnormal figure indeed.

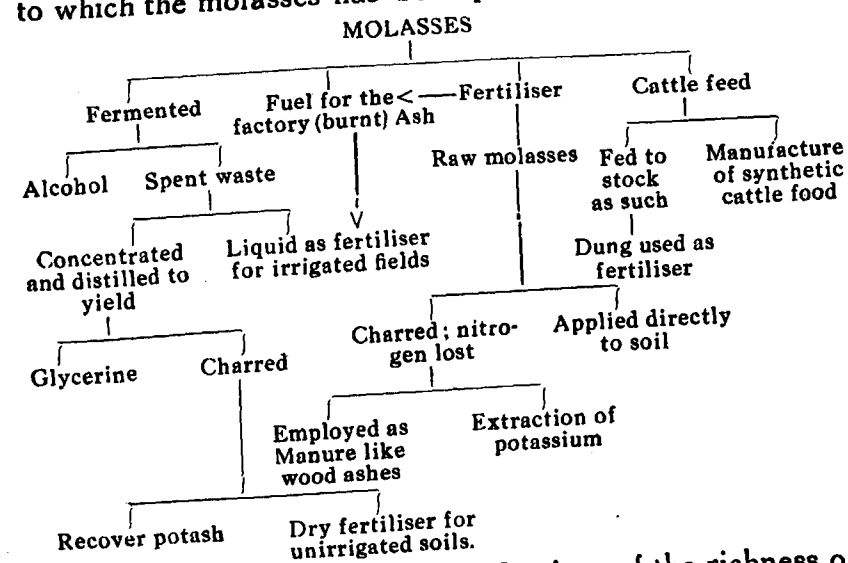
Molasses obtained from sugar factories and refineries is very highly viscous with the result that it presents

considerable difficulty in transferring it into barrels and other containers. The question of storage of this product, therefore presents such extraordinary features to the manufacturer that he is prepared to throw it away instead of incurring expenses for preserving the same. Lest he should render the surroundings insanitary by careless discards of this product, the manufacturer has stored it up under some hazard of explosion, in the hope that it would fetch him money some day. From the point of conveniently transporting molasses, attempts have been made to incorporate it with wheat *bhusa*, rice straw etc. in order to convert it into a solid product (condition), but have not been successful. Further investigations carried out recently in this Department were encouraging to the extent that the disturbing moisture has been completely eliminated. The difficulty experienced in transporting molasses has in a way been solved. While the combined molasses can be used as a good fertiliser, it possesses some unwholesome features for application as cattle-feed etc. Moreover, it does by no means solve the disposal of the immense quantity of molasses which has somehow to be got rid off.

The difficulty for this is not far to seek. It lies in our ignorance of the composition of the final product and arises partly also from a paucity of scientific information on those factors which influence the inhibition of sucrose crystallisation from molasses. It is well known that molasses contains about 15–20% moisture, 8–10% mineral matter, about 40% cane sugar, about 30% reducing sugars as glucose, and a very negligible amount of nitrogen. In the case of beets, the reducing sugars are small, while sucrose and potash contents are very high. There is practically no information on the quantity of nonsugars present in these. Besides, molasses has a highly astringent taste combined with some bitterness which is believed to be due to the potassium occurring in it. Nothing is known regarding the nature of the potassium compound which adds to this bitter taste. To what extent the sodium salts present in the molasses contribute to this disagreeable taste is still obscure. Again the highly unsatisfactory colour of molasses

is a feature which demands close study. Besides caramel which arises in the process of concentrating any sugar solution, the presence of saccharatin is chiefly responsible for this undesirable characteristic of the molasses. It is known that the colour of molasses becomes light and bright when treated with acids, while in the neutral or alkaline state, it assumes quite a dark tint. It is therefore essential that a more detailed examination of molasses should be made of the tannins, organic acids etc. present in it, since in the author's experiences these have been found to contribute largely to the defects noticed above.

The following scheme will represent the several uses to which the molasses has been put.



Fermentation of molasses. In view of the richness of molasses particularly in carbohydrates, attempts have been made either to recover the sugars present or utilise them adequately. Thus for instance, the manufacture of alcohol from molasses has been recommended. It is indeed difficult to assert that the production of alcohol is the surest and most profitable way of utilising the molasses. The question of power alcohol in place of petrol is also a complicated one. While the petrol engine can be made to function with alcohol, the efficiency factor does not appear to have been adequately studied. Moreover, it is doubtful whether the excise duty from alcohol can make good

the loss in revenue to the Government due to decline in petrol consumption. The possibility of an admixture of petrol with alcohol to the extent of 20% as is practised in other countries has to be investigated under varying conditions of Indian climate. But from the general point of view, it does not solve the problem on hand completely, besides being attended with considerable danger (from the prohibition view point) and expense (from the excise control point of view). From the fermentation aspect, what is of more significance relates to the fact that sugars in molasses form the most suitable raw materials for several other useful products. If we consider an industry like that of glycerine production, one obtains in addition to glycerine, considerable proportion of alcohol and acetic acid. While it may be furiously contended that the soap lye is a more profitable source for this commodity, it should be remarked that the aim here is not to convert all the molasses into these products. On the other hand, whatever quantities may be employed for this purpose to a proportionate extent valuable by-products are also secured. Both glycerine and alcohol find wide application in medicine and industry. Indeed we require large amounts of alcohol too for the development of the indigenous drug industry. It cannot be said that we will have a large excess of glycerine for which there may not be use. If we realise that the availability of glycerine in large quantities, both cheap and pure at the same time, opens up a wide field for synthetic resin production and also for manufacturing cheap cosmetics and pharmaceuticals, the argument against this idea will not be pressed. It is rather unfortunate that the average scientist even today associates glycerine with dynamite and frowns upon this material which has immense possibilities in an industrially virgin country like India. Acetic acid also will be in great demand in resin and allied manufactures. It is to be regretted that the study of this problem has not so far been encouraged.

There are other fermentation industries (processes) for which molasses is eminently suited. India is lacking in gluconic acid, and calcium gluconate is such an important

chemical which fills a void in nutrition. In spite of the fact that it is a costly compound, it is best fitted for administering calcium into the system. Sufficient amount of research has been carried out in other countries. It remains only to adapt the same to our conditions. The utilisation of molasses for this purpose is thus a problem which can be tackled with considerable advantage. A useful beginning has been made at this Institute on this question. The fungus responsible for the production of gluconic acid has to be trained and acclimatised to this acid before it is made to produce the same.

One other product of industrial importance is that of butyl alcohol along with acetone. The glucose present lends itself to the formation of this substance under the action of certain specific micro-organisms. While starchy materials have formed cheap sources for the production of acetone, used as a solvent and in dynamite manufacture, its formation in the conversion of sugars to butyl alcohol can be advantageously utilised to secure both of them. It is therefore worth while to investigate the feasibility of employing molasses profitably for this purpose. The potentialities of molasses for the preparation of oxalic acid through the action of fungi such as *Aspergillus niger* have remained unexplored and offer a wide field for enquiry. Here again, although waste products such as sawdust may have formed suitable raw materials, the possibility of this cannot be minimised. The commercial production of this acid should therefore be examined.

But a more profitable use for the molasses from diverse sources lies in its serviceability for the manufacture of yeasts. Although this may not result directly from fermentation, this process is arrested suitably with a view to making the nutrients available for releasing sufficient energy for the rapid and high multiplication of a given type of yeast. Thus for instance, if the carbondioxide respired by yeasts in the process of fermentation be withdrawn through aeration, the production of yeast is considerably accelerated. A preliminary study in this direction carried out at this Institute has served to emphasise the

influence of "carbon:nitrogen" ratio in this reaction. While yeasts find application as cattle feed or as fertiliser, it has not somehow attracted the attention of the the investigators nor that of the industrialists in India. The particular use to which a type of yeast could be satisfactorily employed is largely determined by its composition. If yeast can be manufactured in sufficiently large quantities, there is a wide field for research and scope for the investor to profitably turn these to valuable products such as substitutes for bakelite, horn etc. Comparatively little is known of the composition of yeast as influenced by nutrition factors, the nature of which is under study.

Fertilisers from molasses. The usefulness of molasses as fertiliser is based again on its carbohydrate and potash contents. It stands to reason that the direct application of the same to alkali soils is of benefit, since the acids arising in the process of sugar fermentation neutralise the alkali thereby imparting more desirable characters to such soils, as has been demonstrated by the work at Allahabad. But it does not appear to have been established whether this is of a permanent or temporary nature. That different acids are released from application of molasses into soils has been proved in a series of researches conducted at Bangalore. The mechanism of toxic action induced in the soil through such application of this product to paddy growing has also been explained as being due to iron (ferrous) salt etc. If the soil be kept fallow following the treatment for a few weeks, beneficial results accrue to the crop. It does not matter whether the application is made with the solid product or with the viscous molasses.

Perhaps the most important procedure that calls for attention is the fact that molasses is burnt either completely in specially designed furnace or carbonised to yield the ash without much waste of fuel. In either case, the fertiliser value of the resulting ash is mainly due to its potash content. The above procedures lend themselves to easy extraction of potassium. What is of greater significance is to know whether the molasses should at all be burnt. A valuable commodity like the sugar which is necessary for

every organism should not be wasted because it has no other use or because no other use has so far been devised for the same. The attempts of Brazil coffee bean growers to burn off the berries to keep up the price level by such means is not worthy of imitation. Moreover, the argument has been advanced that molasses does not contain much nitrogen and can therefore be safely disposed of by this method. One is entitled to differ from this assertion. It is really commendable that in some places in Europe, molasses is first fermented to produce desirable products and subsequently concentrated, dried and burnt to recover the potassium from the residue.

There is one more possibility of utilising the molasses in the fertiliser process. It is well known that certain cellulosic materials such as corn stalk cannot be employed for composting in view of their resistance to attack by micro-organisms. Some years ago, some work was carried out on the feasibility of employing molasses as a biological starter in the disintegration of resistant cellulosic matter represented by bagasse. Some of the factors involved in the technique were varied and the experiment was also conducted on the laboratory scale. The results of this study revealed that molasses helps to break down the unattackable woody material, yielding a fine clean type of organic fertiliser, recognisable by its characteristic smell. The procedure has been systematically followed on the analytical side. Further investigation is under way to determine the other factors that contribute to the production of a high grade fertiliser. The production of this compost material on a large scale offers commercial possibilities, the potentialities of which cannot be assessed at the moment without elaborate studies.

Improvement of molasses through adequate treatments. It will be clear from the above that there is an inter-relation between the two important products realisable from molasses, namely sucrose and potash. The presence of large quantities of potash is assumed (believed) to inhibit the separation and recovery of cane sugar. On the other hand, the recovery of potassium in the pure state or even

admixed with other mineral matter is accomplished following the destruction of the organic matter present in the molasses as sugar.

Removal of potash from molasses. It appears that if the procedure adumbrated by previous investigators were reversed, several possibilities present themselves. Since adequate research has not yet been carried out, these must be indicated only with reserve. It is well established that plants including beet, sugarcane etc. derive potassium so necessary for their growth from soil. On a rough estimate, it has been ascertained that sugarcane alone extracts on the average 100—150 lbs. of potash per acre. Nearly three-quarters of this quantity are in soluble form being present in the juice. If the potassium taken up by the plant be not returned to the soil, the latter will soon be depleted of its readily available supply of this component, the lack of which leads to diseases on the one hand and to a poor development of the crop on the other. In the process of preparing cane sugar, cane juice is concentrated along with its contents chiefly potash following clarification. The removal of sugars is accomplished more than once from the concentrates, the residue from which is the final molasses. The entire potassium is found in predominant amounts in this final product. On the basis of 1935—36 production figure at 500,000 tons, one can compute readily the total output of potash at 16—20 thousand tons on dry matter thereof. Since 1932 the quantity of total molasses produced is quite high indeed, whereof the potassium in it can be safely estimated at 110—140 thousand tons. Allowing for nearly half the production of molasses for consumption in indigenous and cottage industries, the residual potash alone reveals an acute situation.

The problem of potash recovery cannot adequately be solved through burning of the molasses for fuel or even fertiliser purposes. The precipitation of potassium as potash alum directly from molasses through the addition of Aluminium sulphate has already been patented. Whether the same is feasible or not in India, cannot be easily assessed. On the other hand, removal of potassium as

cream of tartar in a highly acidulated medium has recently been critically studied at this Institute and appears to be capable of adoption either as a small scale industry or as a large scale factory operation. The technicalities of this operation can be found in a patent recently applied for.

The residual molasses can admirably serve for the manufacture of several useful products. It consists chiefly of sugars alone and quite a low percent of salts. It can now be suitably diluted for fermentation purposes such as production of alcohols and acids etc. and for production of yeasts on a manufacturing scale. The recovery of sucrose from this material is under investigation. But the diluted molasses can be inverted readily and clarified to yield a highly concentrated syrup which might form a ready substitute for honey. There is no doubt that such a syrup will also be a useful adjunct for table service. The most useful (and paying) procedure would relate to a preparation of cattle feed from such molasses. In view of the fact that most of the bitter principle (due to potassium salts?) has been removed by the method indicated above, the residue has an agreeable taste with the original flavour. It is possible to produce also cheap cattle feed in factories adopting the above technique. The nutritive value of such a feed would then be mainly due to the sugars present therein. If in the process of mixing it with wheat *bhusa* or rice straw, some nutritious material is incorporated, it will add to the value of the feed. Such a study is in progress. The stock will consume it more readily.

It will be clear from the above that for the proper utilisation of molasses, it is necessary to divert it into several channels indicated above. Whether it is worth while to have one large factory to collect all the molasses and dispose it of in one locality or whether a few concerns can divide their interests into zones and work out these as a cooperative concern is a matter for discussion by the financier. Sufficient scope has been indicated for the suitable utilisation of this at-present-wasteful product.

Based on a memorandum submitted before the Indian Tariff Board (Sugar) 1937.

The Rich Man in a Village

BY DUNCAN GREENLEES, M. A. (Oxon)



ONEY, they say, is the root of evils; yet we all enjoy it, and most of us seek more of it, even the most virtuous. I cannot hate or despise the rich, as certain very modern Europeans advise. I may envy their success and opportunities, but I cannot join with those who admire penury and fancy they see in it the crowning virtue.

Many are poor, but few are wealthy; the poor are always with us,—too much so,—pressing upon us as the world once pressed on Wordsworth. India is full of them. You can see them swarming in every slum and village, breeding like flies, and obtruding themselves even in the roads where dwell the rich. Every village is full of them, and the burden of India's poverty will puzzle Governments for many centuries yet. Clothed in rags, illiterate, the prey of every superstition, carried off like rabbits in every epidemic, impervious to radical suggestions on how to improve their lot,—they are the absolute block on the road to Swaraj.

Shall we go into one of the villages, anywhere in India? Then we shall see a group of squalid houses with untidy narrow lanes between them, many shanties fit only for the storage of wood, and in the centre one house or two where a man can live fairly decently. As we approach, we must walk gingerly, for we walk through the latrine, which is the open field, and we shall be lucky if we do not stumble into the privacy of one or more of the villagers who are to be our hosts.

We enter the village by one of its narrow lanes, and see here and there decaying heaps of dirty paper, of mango stones, and vegetable peelings, rotting among the flies. We pass a little open space, a rubbish dumping-place, that might have been a garden or a smooth play-ground for the innumerable children. Some of these little ones we find altogether naked; the rest wear a loincloth innocent of washing since it was torn down from their father's worn-out dhotis.

We pass the village school, and see two men, their hearts not in the work because of their miserable salaries, managing four classes which yell in discordant rivalry,—one repeating the alphabet, another multiplication tables or the like. Or we may meet the teacher, truant from his classes, enjoying pan and bidi over a game of cards.

We glance at the village post-office, and perhaps find it closed, even in the hours advertised for opening; and the same slovenliness prevails in the village shops. Even the weekly market is a haphazard affair, for the art of salesmanship is quite unknown.

Now we are tired of squalid poverty, and turn our steps to the big whitewashed house that dominates the village, as the oldtime baron's castle dominated it in Europe. What do we find? In the court there are farmyard beasts which have freely sprinkled their filth on every side; the ground is littered with barley stalks, the refuse of their food, and the remains of fruits and vegetables eaten last week, flung out carelessly by the human occupants. It matters not at all if our host is a graduate in English poetry; he has rarely learnt the alphabet of cleanliness. If you think the picture overdrawn, look in such a house with eyes wide open, free from prejudice; the poor are often cleaner.

Inside the house, we shall probably find its owner. He is the soul of hospitality, and will at once invite us to take a seat. Perhaps his tiny daughter will pull the big cloth fan that hangs by cords above our heads. Having waved us to the dais with a big cushion at our backs, our host will exchange a few courtesies, offer pan and then resume his business.

What is he doing? Is he planning to make his village a model one, a joy for the eye to behold, inviting passers-by to turn aside and rest awhile? Is he calculating how much he can give for a well near the Harijan quarters, or a cemented place for the people to wash their clothes? Is he arranging a magic-lantern show, a library or boy scout troop, a better building for the school, or a lecture by the doctor from the nearest town on hygiene or sanitation?

Oh dear, no! He is playing cards, with the postmaster, the teacher, and some one of countless relations. It is to this that his education, which cost the Nation so much, has led,—that he may score Grand Slam in bridge!

He has acres on acres of fields, more than he can cultivate, but he cares little for them, so long as they give him yearly the same return. He leaves his work to servants, and never thinks to improve his produce, to plant some more paying crop, such as fruit-trees instead of the uneconomic wheat. If he did, he would set an example to his neighbours who on their own little fields, instead of growing superfluous corn which they must sell at a loss, might grow all the requisites of a perfect diet for themselves. That would improve their health, but it would not gain any points in bridge or buy a dancing-girl. So the rich man lets it go, and the villagers go on in the same silly rut of needless poverty.

There is so much he could do if he liked. The little patches of waste land, where houses tumbled down five years ago and no one has thought of tidying up, he could level and plant with papaya trees surrounded by a bed of flowers, whose brilliant blossoms would bring a touch of beauty in the grey life of the peasants. The well he could make sanitary by lining it with sloping stones, that the foul water might not seep in and bring cholera to the people. He might open a co-operative bank that will save the village from the money-lender, and persuade a few to re-divide their lands, much-fragmented to the great saving of time and money. By keeping his own house and yard spotlessly clean and tidy, he might set an example which would slowly sink in and be copied, to the general good. If he himself looked to the fields, manures them well,—how can crops thrive without food?—learns how to graft and cultivate a bigger grain within the ear of corn, experiments with various fruits and vegetables, there is no limit to the benefit which would slowly come as his neighbours followed his example. By seeing that his own children were perfectly clean, both in person and in clothing, with no filthy discharge oozing from eyes or nose about which the

flies gather, he would earn the right and power to improve the cleanliness, and so the health, of the children who may everywhere be seen, a shame to our common humanity.

Instead of selfishly enjoying his pleasures apart in his own private room he can share them with the others. After all they live together as on a desert island, surrounded by great seas of lonely fields, where the jackal and hyena howl at night. Surely he can look upon his neighbours as comrades, fellow-travellers in the great adventure of life. He can call them to his courtyard in the evening, and enjoy bhajans with them; he can read Ramayana or the stories of the Prophet to them (for India may well be proud of both her main religions and all should share their riches), or he can tell them of his experiments in his own fields, and discuss with them their troubles and their needs.

After all, his is a poor way to spend money gathered by his own or his fathers' efforts. It would be better if he would buy some books, read them himself and then pass them on to the village as a nucleus of the library. He could use his knowledge of English by summarising his own books in the vernacular, and sharing them with the village, both by reading them aloud and by filing them in the library.

If he can start a village club—it will not cost more than a single room in any one of his several houses—village games can easily be arranged, and then both boys and girls may learn to play, instead of loafing about in the evil-smelling lanes or the dark and stuffy houses. In this way their lungs and limbs will grow strong, their minds clean, and their hearts full of the buoyant joy which only healthy folk can know.

In nearly every village you will find a stinking pond, covered with green slime, the breeding-ground for malaria and fifty other diseases. It is not the prohibition of carrying arms that emasculates the race, but over-breeding and the fevers which lurk in these stagnant ponds and sap the strength of everyone. It would not cost much to cut a channel and drain this water into a field, where the

decaying matter would be excellent manure, or to take the help of Government and by pouring kerosene or introducing fish that eat their eggs destroy the mosquitos that plague us all so cruelly. There are limits to *ahimsa*; we must be non-violent to our own bodies before we can consider the parental affections of bereaved mosquitos.

I could extend this little article to pages of the *Scholar*, and still not exhaust all the rich man could do to benefit his village and make it an object of pride, a pattern for the countryside. But I have said enough. The profits from improvement of his own agricultural methods would more than pay for all of the reforms that I have mentioned here.

In this way the rich man can prove himself a real brother to the poor, not by flinging unneeded and degrading charity at his head, but by showing him how to overcome his poverty and bring brightness into his life. Then the Bolsheviks, and the wicked and envious man might rage furiously together, the storm would pass over his head, and India would eternally be safe from revolution. Rich and poor together would co-operate for the greater health, happiness and beauty of their Motherland, and India would be truly great again.

Some Essays of Jawaharlal Nehru

By P. NARAYANACHAR, M. A., L. T.



PANDIT Jawaharlal Nehru is one of the very few Indians who are effective writers of English Prose. In recent years he has brought out several books in English the most important of which are—"The Autobiography," "India and the World," and "Glimpses of World History". Only five essays from "India and the World," have been chosen here for special treatment.

In "Whither India," we have a very clear analysis of the situation in India as it existed in 1933. Pandit Nehru, with true historical perspective, pictures the Indian Freedom Movement as a part and parcel of the struggle going on throughout the world for the emancipation of the oppressed peoples. The world situation is always kept in the background and the economic and political conditions of the world are very vividly presented. The world-wide economic depression is styled an 'amazing paradox' of modern times—a paradox, where plenty and poverty exist side by side. He ascribes the reason for this extraordinary economic disease, where the balance between the "Law of Production" and the allied "Law of distribution" is most tragically upset, to the fundamentally defective capitalist system. This system to his mind has outgrown the need for its existence and it should go. The tremendous hiatus between the material advancement and moral progress of our race should be bridged up; and this, says Pandit Nehru, can be accomplished only through Socialism.

This unhappy world situation is only a larger replica of the situation in our country. India's disease is more economic and social than political. "Swaraj for the Indian masses is not a fine paper constitution, or a problem of the hereafter. It is a question of the here and now, of immediate relief." As regards the ultimate goal of the Indian struggle the Pandit's mind is clear. Whither India? "Surely to the great human goal of social and economic equality, to the ending of all exploitation of nation by nation and

class by class, to national freedom within the framework of an international socialist world federation."

The two essays "Prison-Land," and "The mind of a Judge," throw welcome light on the problem of Prison Reform and the Reformation of the Prisoner in our country. The social gap that now exists between the judge and the miserable offender who stands before him in the dock is tremendous. The result is an utter absence of any human element in the whole proceedings gone through by a judge. He never seems to realise that "The dumb frightened creature" who takes his trial in the court is after all a human being with wife and children and parents and friends. The fierce mental conflict that should have raged within the mind of the offender before he committed the offence is not taken into account. "Does the judge," asks Pandit Nehru, "ever for a moment realise that society of which he considers himself a pillar and ornament might be partly responsible for the crime he is judging." The result of callously ignoring the psychological background is that the criminal type, instead of decreasing, increases and the 'Lifter' or the hardened criminal becomes a sort of a square peg in a round hole. He does not fit in anywhere and "suspicious of everybody and being suspected everywhere, he comes back to his only true resting place, the prison."

The two letters written to his school-girl daughter from jail reveal the parent in Mr. Nehru and show that even an uncompromising politician can be a true and loving father. His advice to his daughter in the "First Letter"—"Be brave and all the rest follows"—is very characteristic of the man. A heroic ideal of service to the country and humanity is set by the parent to the child and she is exhorted "to grow up a child of the light, unafraid, serene and unruffled". In the last letter the vivid account of the pageant of world history from the dawn of civilization to the present day is brought to an appropriate close by a sort of flourish. It is here that we have the remarkable self-analysis of Mr. Nehru—"I am not a man of letters and I am not prepared to say that the many years I have spent in jail have been the sweetest in my life; but I must

say that reading and writing have helped me wonderfully to get through them. I am not a literary man and I am not a historian; and what indeed am I? I find it difficult to answer this question. I have been a dabbler in many things; I began with science at College and then took to the Law and after developing various other interests in life finally adopted the popular and widely practised profession of Jail-going in India."

The essays referred to in the foregoing paragraphs give a clear insight into the workings of Mr. Nehru's mind. Throughout 'the style is the Man'—clear, dynamic, persuasive. Some of his sentences are extraordinarily arresting. No reader of these essays can ever forget a sentence like—"The day for palace intrigues and parlour politics and pacts and compromises passes when the masses enter politics." Nor can anyone miss the true poetry of these words:—"All of us have our choice of living in the valleys below with their unhealthy mists and fogs, but giving a measure of bodily security; or of climbing the high mountains with risk and danger for companions to breathe the pure air above and take joy in the distant views and welcome the rising sun." The grim humour of Mr. Nehru sometimes grips our mind, and the picture haunts us long after we have closed the book. Witness, for instance, the effect of an interesting comparison like the following, where the Indian masses are compared to the 'roast lamb' and the classes to those who eat the roast lamb with the mint sauce. "Roast Lamb and mint sauce may be a tasty dish to those who eat it; but the poor lamb is not likely to appreciate the force of the best of arguments which point out the beauty of sacrifice for the good of the elect and joys of close communion, even though dead, with mint sauce."

Mr. Nehru's command over the English language is superb. He writes more like a native Englishman than an Indian. But every word has the stamp of the master's towering and dynamic personality and truly has it been said: "We often hear of the wisdom of the ancient East; but here in Mr. Nehru's writings we have the wisdom of the modern East."

The Maha Kumbha Mela

By SWAMI SIVANANDA



THE Maha Kumbha Mela is held once in 12 years at Hardwar, Allahabad, Ujjain and Nasik. This year the Kumbha Mela at Hardwar commences on 1st March 1938 and will last till the end of May. There are some fixed days during this period and a bath in the Ganges on those days is considered very sacred. Millions of people assemble here during these months.

In olden days Kumbha Melas were started for the moral and spiritual uplift of the people. Many Mahatmas, Sages, Yogins and Sanyasins who were practising Tapas and silent deep meditation in the caves of the Himalayas and forests assembled in these places during the Kumbha Mela days for imparting spiritual instructions to the thirsty aspirants and householders. There was not much noise in those days. People went with Sradha and Bhav to have Darshan of these Mahatmas and to imbibe the teaching of those highly elevated souls. Religious classes were held, Kathas and discourses were conducted and lectures were delivered by great men of practical experience. Real, sincere aspirants were initiated into the mysteries of Yoga and Kaivalya.

What do you find in these days? There will be Bandara (feasts) everywhere. People are attempting to amass wealth in a variety of ways. They are trying their level best to become rich within these three months. The sanctity of the function has vanished. The real spirit is gone. It has become a mere fair. Real, silent Mahatmas do not wish to attend the Mela. The Kumbha Mela or the All-India Religious Conference of a magnanimous sublime nature of yore wherein Rishis, sages and Yogins assembled to exchange their thoughts and spiritual experiences and to disseminate spiritual knowledge to the aspirants and householders at large has now degenerated into a big Tamasha or a big fair with tumultuous noise,

uproar and merry-go-rounds. Nowadays there is not much in the Kumbha Mela except some crowd, noise, hits, dirt, filth, quarrels and fights. The Government have built a separate Police station with a Reserve Police for this purpose. No religious propaganda can be done. People's minds are restless and agitated in the enormous crowd. They have to wander amidst all sorts of people and spend sleepless nights with poor accommodation. They undergo a lot of troubles through infectious diseases that are common in all the crowded places. People enjoy some show, colour, sound, blows and then return home with nothing substantial after spending all the money in useless directions. Yet millions of people are in anticipation of getting joy, bliss and spiritual benefits by attending the Melas. This is Maya. This is the trick of Maya through the force of curiosity to delude people who have lost their power of discrimination.

As there is abundant free food for Sadhus and Sannyasins, beggars in orange robe (Gerrua cloth) flock in countless numbers to have an easy comfortable living for six months. Money is simply wasted. Worldly people are deceived. They are not able to find out real spiritual souls. Systematic, organised religious preaching must be done. Then the Kumbha Mela will become a blessing to humanity at large.

Worldly people nowadays entertain foolish ideas about a Mahatma. To deceive them and amass wealth, many persons put on Gerrua cloth, grow Jada and beards, and young boys and men throw away their clothes and Kowpeen and walk naked in the midst of householders and pose for big Yogins. Many learned men by unnecessary discussions and fights over sects waste their precious time and pass for Jivanmuktas. Physical nudity is not a symptom of spiritual attainments. People should not be carried away by external appearance. They take a physically nude Sadhu for a great Mahatma in the beginning. After a close contact, they lose their faith in them. What is wanted is mental nudity i. e., complete eradication

of Vasanas, egoism, etc. Oh dear friends, do not be deceived by appearance. You cannot study a Mahatma by a simple casual talk for a day or two. You must closely live with him if you want to have a correct inference.

Though the place may be filled with many sorts of people, yet there are some highly spiritual souls, Mandale-swars and learned Pundits of Sanatana Dharma Sabhas, who untiringly work and clear the doubts of all aspirants and guide them in the spiritual path. They work for the spiritual good of the public. Again in some silent corners you will find some great Vairagis, Tyagis. You must hunt out such great souls among the Sadhus, Sanyasins, Yogins, Naga Babas. They will guide you in the right path. Have Darshan of such Mahatmas and get spiritual instructions. Then you will be spiritually benefited.

When you come to Hardwar for the Mela, make it a point to finish some lacs of Japa during these days (Anushtan). Japa done in holy places on such occasion will have marvellous influence and bestow on you spiritual benefits. For 15 or 30 days observe Anushtan. Take milk and fruits only. Do plenty of Japa. Study Gita, Bhagawat and Ramayan. Have Sat Sang and hear the words of great men. Observe Mowna. Do not wander hither and thither. Charity covereth multitude of sins. Serve the Sadhus, Mahatmas. Approach them with Bhakti. Pray for spiritual instructions. Serve and help the sick persons. This is a very good opportunity for you to do Nishkamya Karma Yoga. Such kind of spiritual Sadhan must be practised when you come to this sacred Mela which comes once in every twelve years.

May God guide you and bless you with more energy to do real, sustained, solid Sadhan !!!

*Hari Om Tat Sat !
Om Santi ! Santi !! Santi !!!*

The Fight against Tuberculosis

BY K. GANAPATHI.



UBERCULOSIS is one of the major causes of mortality and morbidity in India. It is far more deadly than most, if not all, of the Tropical diseases. In being a menace to the health of the general public, it is ranked next only to malaria: but in considering the awfully infectious nature of the disease as also the dreadful way in which it affects the economic and social status of the individual, it is far more dreadful than malaria. As Muir has remarked, while leprosy is the most dreadful and malaria the most prevalent and perhaps fatal in the country districts, tuberculosis is undoubtedly the most fatal disease in the larger towns. The ravages for which this disease is responsible, are indeed incalculable. Young infants and children due to the unhealthy surroundings and lack of sufficient precaution, school boys and university students who in addition to their naturally weak constitution, are further burdened with heavy routinary work, young mothers very much weakened by frequent child births and prolonged lactation, promising adults who bear upon their shoulders the responsibility of maintaining their families, the ignorant and ill fed villager working hard for his daily bread—all fall victims to this dangerous disease. It is indeed very surprising that in spite of all these ravages, the general public in India which grows very nervous at the major epidemic diseases, does not at all seem to be alarmed at tuberculosis which takes a far greater toll than all the major epidemics put together; it is probably because phthisis is not so spectacular and dramatic in its ravages till the last stage is reached.

To find out the exact figures regarding the incidence and mortality due to this disease in this country is rather very difficult, because the relevant records are kept in a hopeless condition. Most of those in charge of these registers cannot at all diagnose a death as due to typhoid

or tuberculosis: as a matter of fact they do not even appreciate the importance of these records but feel relieved of the burden by disposing of a death under the large and vague heading, fever. It is not surprising, therefore, that many of the deaths, actually due to tuberculosis, are entered as due to fever. The Director of Indian Medical Service, Sir John Megaw, in 1933, estimated the number of people suffering from this disease in British India to be *over two million*. It is widely prevalent in 176 districts, rare in 36 and unknown in none: it is specially serious in Bengal, Madras, the Punjab, Bihar and Orissa. Pulmonary tuberculosis is the commoner form while bovine tuberculosis which is transmitted mainly through the milk and is prevalent in the West, is almost unknown in India. The mortality due to this disease per year is about half a million and it can be pointed out for comparison that the total number of deaths in the whole of British India in 1935 is about $6\frac{3}{4}$ millions. The highest percentages of deaths due to tuberculosis are naturally found in the busiest cities, Bombay, Calcutta, Madras and Delhi.

Tuberculosis is a disease which is the result of the infection due to the tubercle bacilli. These bacilli are omnipotent organisms resistant to natural environment and distributed far and wide in the air either by the drying up of tubercular sputum blown away by dirt, or by droplets of coughing or phlegm of the tubercular patients. The contracting of the actual disease by a person is dependent upon the degree of infection and also on the susceptibility of the victims to infection, the latter being mainly determined by the general living conditions prevalent. To evaluate these factors, general nutrition, environmental conditions, habits and customs must be considered to be of prime importance. We find in India, wherein poverty, illiteracy and defective methods of living with peculiar social customs are prevalent almost everywhere, a soil very conducive to the luxuriant growth of this disease even by a mild infection. In the towns and cities, cause of infection is mostly congestion, want of fresh air and sunshine, adulterated food stuff, ill-balanced diet and too busy life, each

being in a state of competition to earn his bread and maintain himself. The economic depression in the country does not permit everyone to live hygienically. In the villages, there is prevalent, besides these, the ignorance of the disease and hard labour in a semi-starved condition. Many of them not being exposed to infection, are virgin soils so that once they are infected the disease takes a very virulent form. In many cases the tuberculosis patients die due to the exhaustion of their resources, moral and material, rather than by the disease itself. The root cause of all these lies deep in our economic and social sides. So tuberculosis is an economic and a social problem; it affects the individual, the family and the community. It is only too true that the mortality and prevalence of tuberculosis constitutes a reliable index of the advancement and the standard of life prevalent in the country. Whereas the mortality from this disease is fast decreasing in the West, as a result of active and vigorous campaign against it, in India it is spreading on like wild-fire and many have not even recognised the scourges of this disease. Strangely enough this disease is not even classed as a dangerous disease in the Public Health Act.

The neglect of this important problem by the authorities and the general public is sure to lead to consequences of gravest urgency and what is needed to avoid this is a well planned and vigorous campaign against this disease as is going on in the other countries, notably in England and America. Since each country has its own problems the methods adopted in other places cannot be utilised here *in toto*. As it will seem evident, any effective and determined crusade against this disease to be of maximum benefit, should, as far as possible, try to put into force three broad and important schemes:— (1) check and control of the disease by the introduction of preventive and prophylactic methods, which should be of importance to the community; (2) giving medical relief to those already infected and diseased and (3) carrying on of organised research in the field and the laboratory. Each of the three factors individually is as important as the other and

in a comprehensive scheme to root out this disease, a perfect co-ordination of all these three factors is absolutely essential.

The institution of preventive and prophylactic measures is of utmost importance not out of respect to the slogan, *prevention is better than cure*, but because of the experience that a perfect cure of this disease, especially if it takes a virulent form, is very difficult to effect (let alone the lot of expenditure it entails), and the diseased person is a terrible source of contagion. What is imperative is that the entire population must be educated in the tuberculosis problem by vigorous propaganda. Every one in the rural and urban areas must be made to understand and appreciate the outstanding discovery of the age due to Pasteur that the germs carry the disease. If each one learns to think and live bacteriologically, then undoubtedly, a notable advance is made and indirectly a good deal regarding the problem of cure has also been solved. Since there are more than two million who have fallen victims to this disease, it is not possible to treat them all in sanatoria. In the whole of India there are only 20 sanatoria—some of them badly kept and others not even working all the year round—with about 850 beds and 58 clinics. As a matter of fact it has been calculated that only about three in a thousand of the diseased receive medical aid. It may be of interest to note that in England and Wales alone there are available about 13,275 beds. The financial position of our country will not enable us to repeat this performance here. But by proper education of the masses we can try to tackle it in a way. For, tuberculosis, in its early stages, can be treated in the houses without elaborate and costly measures, only if each and everyone is aware of the methods of infection and how to guard against it. So an adjunct of great importance to this preventive measure is early diagnosis, the responsibility of which falls on the medical profession. For this, the clinics or dispensaries with expert medical men must necessarily be increased to such a number that almost each and everyone suspected must have a chance to be

examined and advised. It is only too well known that for want of this expert diagnosis, many cases of tuberculosis masquerade under other names and work incalculable harm by infecting thousands who come in contact. It is said that one undiagnosed person is ten times as dangerous as a diagnosed individual. In addition to the above, the other important factor to be considered is the tuberculosis register which is the corner stone of the tuberculosis scheme, because, if kept in any ideal way, it enables a supervision of individual cases, discovery of newer ones and also to understand the real causes of the incidence and spread of this disease.

Just as control of the disease is of interest to the community, cure of this is of great importance to the individual. We cannot afford to overlook the millions who are suffering while trying to save others from infection. Unlike many other diseases, perfect cure of this disease, as has been previously mentioned, is not at all easy to achieve. While the mild and early cases can be cured comparatively easily by the aid of the dispensaries, the advanced cases should undergo elaborate treatment in the sanatorium to obtain a complete cure so that after discharge they may not be sources of infection. The cure of the disease in the advanced stages is indeed very costly: but India is too poor to imitate what is going on in the West. Emphasis is therefore laid on early diagnosis, and the number of people to be treated in the sanatoria should be adjusted to a minimum. The after-care of the patient, just let out from the sanatoria, is also important because he must be given leisure and time to have perfect healing of the lesions. If he is immediately thrown into the whirlwind of competition and hard work, it is only to invite a relapse. So it is a perfect combination of economical and medical services which will enable us to obtain the most satisfactory results.

The importance of organised research work can scarcely be overestimated. It should not be argued that we can take the benefit of the results obtained in the other countries because each country has its own problems and what may be true in one place may not be applicable in

the other. The economic status of India is not all comparable to that in the other countries: we cannot, like England, afford to spend about $3\frac{1}{2}$ million pounds per annum in tuberculosis work. India is a poor country but tuberculosis is a costly disease. It is spreading on like wild fire and we cannot afford to overlook it. We have therefore to devise our own methods making the best of our resources, economical and natural. Effective therapeutic and preventive methods are dependent on the correct knowledge of causal factors of this disease: to understand these perfectly, research work is of great importance. Far from this, even in the technical methods of treatment, special modifications have to be introduced to adapt to our conditions. It is well known that, in spite of so much of research work, no specific cure for tuberculosis is known, just as quinine, atebine or plasmoquin for malaria. Many of the drugs introduced are even prohibitive in their cost for a poor man to afford. So pharmacological and chemotherapeutic research in this direction is also essential. A good central chemical laboratory, preferably attached to a big sanatorium, will be quite ideal to concentrate on the discovery of an efficient and cheap drug for this disease. The above given facts emphasise that well co-ordinated research is as essential as the other schemes for an efficient working of the tuberculosis scheme.

Tuberculosis is a disease requiring to be combated on every front—social, economical and medical. It is a very dangerous and easily communicable disease. It can be reduced to a low level: this cannot be done by a single measure or a single individual but only by sustained and considerable effort. In a crusade against this disease, the public, the profession and the politician should join hands. Its control gives the best test of our methods and also the efficiency of our Health Service. Its scourges are also well known and yet till recently there was no All-India organisation to combat it, though the necessity of such an one has been pointed out from time to time by the specialists. It was in 1931 that the first step was taken. After deep consideration by a special committee as to which of

the steps will be of maximum benefit to India, the King George V-Thanksgiving Fund was earmarked for anti-tuberculosis work. Since the fund amounts only to $9\frac{1}{2}$ lakhs with an annual income of Rs. 53,000 the society has to restrict its activities to the training of medical men for anti-tuberculosis work and carrying on of propaganda work in the press and platform. Within its limited sphere it is doing excellent work but we want more than this. The inauguration now of the King Emperor's Anti-Tuberculosis Fund by Her Excellency Lady Linlithgow to fight this disease in India should undoubtedly receive the full-hearted support from the entire public, and the kind patronage it is receiving is of great satisfaction to all. We hope that this present campaign taken up by Her Excellency would be very comprehensive in all its activities and prove to be of great benefit to India, for, indeed, fewer things can do more of good to India than the banishment from this country of the Captain of the Hosts of Death!

Self-Analysis.

(Continued from our previous issue.)

INDEED the two master personalities that dominate his being, are Vivekananda and Hahnemann, and they took possession of him within a quarter of a century of interval between the two events. He has amalgamated them into one, and while he has great regard for them as pathfinders, he refuses to have any idolatry either for them or for any other great personalities. The aspirations of his heart are generally submitted by him to the judgment of his brain, and he claims to have solved for himself the problem of drawing wisdom from the thoughts and experiences of great ones, and paying the debt due to them by a renewed effort after nobler living, without cultivating a hero-worship which ends in loss of balance and servility of the spirit. He loathes advertisement and has studiously escaped the allurements of felicitation functions, being mocked by their unreality and insincerity. Though he is fundamentally humble in spirit, and ceaselessly strives to make love and good fellowship the basic factors in his relationship with those below him, as an individual and as part of a class group, he has a strong combative side to his intellect, and has an inveterate hate of those who desire to press down those below them, that he may often be seen pulling the legs of social and other tyrants and the strong flavour with which he makes his opposing statements gives room for the impression that he is violent, haughty and intemperate.

In religion, he has at present reached to the generalisation that in a certain class of life, a great hunger after righteousness arises, and those who appease that hunger in them in any permanent manner, by increasingly coming under the dominion of principle, are going the right way. He understands only this religion now and is anxious to study the lives of such in all times and climes, and draw lessons from them. He has ceased to have interest in religious institutions of any kind, although as a student of

History he would return again and again to the study of such institutions to get the correct perspective about them. Prayer had given him sustenance more than a decade ago, but during the last decade, he has found himself in a state of revolt against prayer, and by a process of introspection, he has accepted the value of prayer in a certain limited sense alone, and he thinks that in the sense of an intense search after reality, the permanent sustenance of our being, prayer may be good or the processes involving the very search may themselves be the prayer. It is true that man has several limitations to bind his spirit, and that prayer is resorted to for invoking Divine grace against the limitations. But he prefers now the direct method of rousing the will into action to subdue ignobleness, as against the supplications for Divine grace. He has an uneasy feeling about prayer now looking upon it as a sort of disease of the heart.

But the absence of prayer has not led to any watering down of his conceptions as to the aims of life. He still thinks that the highest points in evolution are accessible only to them who have nothing of the lusts of the flesh in their character. Continence, he regards as a sovereign virtue of life, and the medical and other grounds that have been urged against it he considers valueless. He cannot imagine a real hunger after righteousness to be present in any life without an overmastering hold on continence. But he does not mean by it any savage asceticism nor the mere fact of non-marriedness, although he thinks that a man who remains a celibate from conviction could have a greater hold on continence.

This brings us again to the question of his views on marriage. He accepts fully the implications of the statement "against marriage, in order to go beyond marriage, I have nothing to say." He thinks that few people fulfil life through marriage, because few people are prepared to propagate understanding. He believes that to the healthy minded, marriage may be the hygiene of the sex-glands, although he knows that the only deliverance of

marriage to most people is that it combines the "maximum of temptation with the maximum of opportunity". In the ultimate analysis, if the married man would not realise that that part of it which "constituted the Devil's own game", was to be transcended he would be no wiser for his marriage. He has made heroic efforts for acquiring continence, but is still in pursuit of the holy grail. The truth is that he is still in the grip of unchaste imaginations for one thing and the lusts of the flesh for another thing. He has constant rises and falls. The efforts he makes to subdue the flesh and to release the spirit are endless and he hopes to season himself into a truly continent man. He has exalted this quality above all other qualities and believes that when this is well-secured, all the rest "will be added unto it."

Truth is the next quality he dearly cherishes. He has had to make great sacrifices to uphold the truth as he sees it, but he has had grievous falls here too. He deeply feels the guilt of violating truth on certain special occasions and struggles hard to make amends for it by a purer devotion. The next great quality he is wedded to is love in the heart. By love he means that emotion in us which exalts us above the earth, but links us with creation, and fulfils our life through service. His impurity in this matter is a painful realisation to him. He suffers from a certain defect of nature, which makes him feel unpleasantly of those who have injured him. But he does not want to retaliate. Though the passion for service and continual performance of it refine the dross in him, he is conscious of far too much of self-regarding activities to be satisfied with his achievements. He believes that domestic obligations have yet to be performed by him, before he can release himself for universal service. But he does not think that any code enjoins on him the caretaking of a home by violation of truth and principle. Indeed, he struggles hard to make a model home through all his poverty, and once summed up his political belief by saying that building up a good home was no less important a task than bringing down a bad government.

He then thinks of courage as a great quality and would believe it to be capable of cultivation like any other. He has often found himself ranged against odds, in several situations, and exhibited unusual coolness and courage in facing them. The might of authority and its insolent challenge in any form are dreadful to him, and he thinks that rightminded men should speak out their minds fearlessly and make bad government impossible. It is one of the great regrets of his life that in the second non-co-operation struggle in 1930, when India made history, he was not able to take a share, nor help one of his household to do it; the humiliation of it depresses him. There were very strong, chiefly domestic, circumstances which militated against his taking a share. He had no illusions as to the ultimate issue of it, and strongly believed that once in the struggle, the rest of his life was to be devoted to it. Again while he appreciated the fact that it was a great occasion for the exhibition of true courage, as a lawyer, he thought that encouraging a mentality in favour of the breach of law was a matter of risk to social order and peace. He also thought that the Government's treatment of the civil resisters was savagely vindictive, and that to be victimised by such ill-treatment meant often permanent disablement, and sometimes death. Several times during the struggle he felt like plunging headlong, but an indefinable something held him back from the forward step. He now feels that while he might have redeemed family honour by joining the struggle, he would after all have to return to the family to take up the duties concerning bread winning and get cut off again from the active struggle. But he cannot by temperament engage himself in those enterprises familiar to active politicians, like taking part in elections, being in representative bodies, and so on. He believes that a great deal of intriguing has to be done in it, and that any pure service a man may do as a citizen lies outside this sphere of intrigue.

As to the ideal of a progressive government, which may be evolved in the coming time he thinks that Socialism is going to be experimented with in most countries, that it

represents the next useful stage in political evolution, that the evils that mark its present transition in Russia will disappear, that it would go far to rid the world of the cursed institution of property and the large percentage of laws that have been enacted in its interests, and that it will help better than any other force the ending of imperialism in the world.

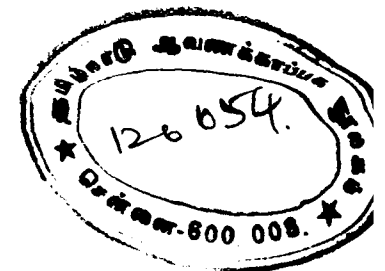
Above all, as a student of higher religious experience he believes that peace, born of struggle should reign in the human heart, and that it is reflected fully only in the life of him whose hunger after righteousness has been fully appeased. Finally, he has strong aspirations after voluntary poverty. In his view, the men who have had the highest evolution, have scorned riches. But he does not believe it to be right, to force the ideal of poverty on a home, whose members rebel against it or are not evolved up to it, and while he thinks he has an obligation—to struggle for material betterment in their behalf, he has none to share in it. He hopes to divest himself of all property relationships and die voluntarily poor, a state of existence which has looked very pleasing to him. Again, while he loves voluntary poverty, he hates the poverty imposed by an iniquitous economic system and would take sides with those forces which would end it.

He has known poverty at its worst and has endured it heroically. Synchronising with his lean years were the crisis-making sicknesses of his wife and children. He bravely faced the situation, put into use the medical art which is to him dearer than life, and scored its first triumphs in his own home. If no man can advise himself as a physician or lawyer, our friend has proved the exception, for he has doctored to himself and to his household successfully, and he has advocated his own causes in court. With all his poverty, he has hated being under obligations to others, and the greatest unhappiness he has suffered relates to such obligations. His head would not bow low to riches and he merely bottles his rage and makes war on what the world calls fate. But the illuses of him by fortune have not soured his life; no cynicism, or callousness has entered

into it. His sympathy with human suffering has increased with his poverty, and he welcomes all opportunity for service to man, to alleviate suffering, though he quaintly realises ignobleness in the lives of some of those touched by his sympathy, as that is the only way, he thinks, left to him to educate life through experience, and it has afforded him the greatest satisfaction to know that during the period he was asking for bread and receiving stones, it came to him in increasing measure to do service to one section of the human race through the exercise of the healing art; and a circumstance that brings out in bold relief the true character of the man, is that many a time his ministry of healing was performed amidst hostile and alien environments and against savage attacks. The more opposition, the braver fight.

Aghoram Aiyer.

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Current Comments

BY AN OBSERVER

Underground Water Supplies: In a recent lecture before the All-India Khadi and Swadeshi Exhibition Mr. N. M. Adyanthayya, Industrial Engineer to Government, dwelt on the imperative necessity to tap the latent water resources available in the Presidency in subterranean levels in order to satisfy the needs of sanitation and of cultivation. The District Collectors, he pointed out, are doing something to tap the underground supplies, and the Sanitary Department is interesting itself in the question of urban supplies. The Electricity Department too is doing something in the line, though its aim is professedly commercial. But much more of systematic work, he pointed out, has to be done, in order to tap the subterranean sources of large supplies. "The process of concentration of people in towns and cities, due to economic and other causes, has gone on unhindered, and the problem of preventing contamination and providing adequate supply of water from rivers and surface wells has become a very important one." Subterranean sources have to be studied in association with geological, hydrological and engineering factors. "The problem for investigation is to find out what the total quantity of water that enters the ground is; what quantity is drained out of it by natural processes, and what quantity should be artificially pumped out and utilised. A detailed geological survey of each district will pave the way for a satisfactory location and estimate of the subterranean waters. As far as I can make out such a study has not yet been made. There is one way in which a preliminary survey and estimate can be carried out, and that is through the cooperation and coordination of the Geology Department of the Presidency College. The Department of Industries has up till now put down nearly 16500 borings throughout the Presidency. Records of each boring together with particulars of the strata passed through are carefully maintained. What remains to be done now is the sorting of the data and the building up of a geological map. This can be best done by the research scholars of the Presidency College, who may be deputed to go with the boring parties of the Department of Industries and prepare geological maps with the help of the existing and future boring records". Mr. Adyanthayya concluded that the quantity of water at present utilised is only a fraction of what is possible, and that further experiments are necessary to make the water-supply of the province permanent.

The Esoteric Meaning of Tyagaraja's Kritis: Before the Fifth South Indian Music Conference Dr. T. Srinivasaraghavachari made a clear analysis of the esoteric teachings of St. Tyagaraja as he embodied them in his songs. The human soul can become one with Parabrahma only after a process of evolution or ascent

through different rungs by means of *Nadopasan*. *Nadim*, he pointed out, may be *Sthula* or expressed, or *Sukshma* or unexpressed; that is, to use the common words, *ahita* and *unahata*. The former, as expressed by the music of different savants, leads to the latter. In every human being there should be, for the purpose of sublime merging, the *samyoga* between *Prani* and *anala*. The *agni* or fire of the *Muladhara* represents the *Ra bija*, and it rises to meet the *Prana* from the *Murdha* which represents the *Ma bija*. The combination *Ri-mi* is the *Taraki-bija*, by which the soul is transported to the divine bliss. Tyagaraja's songs ethereally blend devotion with the *Nadopasana*. The 7, 12, 22 notes of music are the approach to the *Sukshma-nada*, and eventually to divine communion.

Indian Rules of Deportment: In a very interesting note in the *Times of India* Mr. R. R. shows how many Indian rules of deportment can be scientifically explained. The children, for example, are asked not to clasp their hands against the knees. Apart from the fact that such a posture is associated with bereavement, there is a physiological objection.

"Sitting down and bending the knees helps to remove an appreciable quantity of the blood supply from the abdominal region and to transfer it to the brain. This, in turn, leads to continued mental reflection regardless of bodily discomfort. The physical discomfort arises from the great strain to the hands locked around the folded lower limbs which exert a strong pull on the hands. The circulation of the lower limbs is also somewhat impeded and if the pose is prolonged the limbs become numb."

Similarly, the injunction against squatting with both the legs in one direction can be explained by the fact that it holds up circulation in the lower limbs, especially the ankles and feet, as these are farthest away from the heart. A third injunction is to the effect that the chin should not be made to rest on the palm 'even if a ship should sink'. The usual explanation is that it is associated with grief. But R. R. gives this rational explanation:

"To put the palm against the chin and cheek and rest the weight of the head on the elbow posed on something hard below has more than one harmful consequence. The weight is too much for the elbow, especially if the posture is persisted in for a long time, because Nature hasn't 'cushioned' the elbow to carry or endure burdens. And, physiologically speaking, this posture is also one which particularly favours a reflective turn of mind even without giving heed to bodily pain. (Hence, perhaps, it was the most common posture among philosophers and high-brow aspirants to that status). Circulation of blood and lymph in the lower arm is impeded. At best, this posture is one that can be recommended for a 'reflective' pose in the photographic studio and not elsewhere."

The writer therefore concludes that the Indian injunctions, though mixed up with religion, really aim at giving correct habits in youth.

Science and Practical Problems: In the course of his recent address to the Seventh Biennial Physics Exhibition of the Maharaja's College, Ernakulam, the Diwan, Sir R. K. Shanmukham Chettiyar, advised the professors and students of Science to make a practical application of their knowledge to the problems of everyday life. He pointed out in this connection to a curious fact.

"I was told by some scientists, that in Willingdon Island, which has been formed by the dredging of the back-water, there have grown species of plants, totally unknown to this part of the world. In fact, to the whole of the Asian Continent. It will be interesting to investigate whether these seeds found their way from underneath the water in the course of the dredging operations and, if so, how the seeds came there; whether they accidentally fell into the water from ships, or whether they are the remnants of some prehistoric upheaval of millions of years ago. We have Botany Professors here. It is only about a mile across and yet I have not heard that any students or professor of this college has taken interest to go round the Island and investigate."

The German attempts on the Kinchinjunga: An English translation of the *Himalayan Campaign* of the great German explorer, Paul Baurer, who attempted in 1929 and 1931 to ascend to the top of Kinchinjunga, places before Indian readers the epic story of the great adventures. Paul Baurer, accompanied by 8 men from Munich and with resources of a purely private character, undertook the first German visit after the war on this grand mission in 1929. The party hoped to get permission for surveying Kinchinjunga and, if it was not possible, to undertake the less exacting conquests of Kamet or Nanga Parbat, or to have at least a pleasure trip across the Himalayan foot-hills. The generosity of the Indian Government enabled them to enter Sikkim and attempt the conquest of Kinchinjunga itself. Helped cordially by Lt. Col. Tobin of the Himalayan Club and by the official world, English and Indian, Mr. Baurer 'General Sahib' and his colleagues made a magnificent achievement, and reached the height of 23000 feet. Prevented by severe snow-storms from proceeding further, they gave up the attempt and returned to Germany. Two years later, in 1931, the explorers, who were now helped largely by the public, returned and began the work of completion. They encountered greater difficulties on this occasion. At the height of 20000 feet they were detained for a space of two months by the unwelcome showers of stones displaced by the melting snow. The situation was indeed perilous. The precipice echoed and re-echoed with the ceaseless thunders of the falling masses of rock which rebounded and smashed into a thousand pieces like stone bullets. One of the avalanches killed Hermann Schaller, a member of the party. Three other members fell sick, and the porters showed a tendency to mutiny. Still

the heroes struggled on. More than 6000 feet of ice and rock were mounted, and on 15 September, a party of six climbers and 3 porters reached the height of 23000 feet. A final assault was made on the summit. But at this stage Baurer was driven back by a heart attack. A few crawled up and were almost within sight of victory when they were baffled by the ruthless treachery of the snow-slabs. Mr. Sumner Austin's translation of the epic story of the two German attempts is a valuable addition to the literature of knowledge and adventure.

Cattle and Dairy Industries: The Report, recently issued, of Dr. Wright on Indian cattle-rearing and the development of dairy industries, is an important document. Dr. Wright places the value of the Indian dairy products at about 300 crores, that is, in the same level as the annual production of rice, even excluding the return from draught cattle and the value of cattle manure. The sum total of the value of all animal products is fixed by him at about 1000 crores of rupees. And yet, the *per capita* consumption of those products in India is less than that of most countries. The consumption of milk is far below the necessity level, and Dr. Wright advocates at least twice the amount consumed. The establishment of a department of animal husbandry and of a central dairy institute, he points out, is a pressing necessity. The livestock has to be considerably improved in physique by the provision of better veterinary aid and by the endeavour to improve breeds.

Col. Younghusband's Early Travels: In the republication, of *The Heart of a Continent* which Sir Francis Younghusband wrote more than 50 years ago, for commemorating the 50th anniversary of Dr. Sven Hedin's expedition in China and Turkistan, the great soldier and savant has done a distinct service to the cause of history. In 1887 the Director of Military Intelligence at the Indian Army Headquarters, Col. Mark Bell, undertook a journey from Pekin to India by way of the more frequented areas, in order to ascertain how far the Chinese could be induced to resist the growing Russian menace. Lt. Younghusband was then deputed to go by way of the ancient caravan route across the Gobi desert to Hami, at the eastern end of Chinese Turkistan, so that the two could meet there and then proceeded to India. Col. Bell missed his Lieutenant and proceeded to Simla earlier; but Younghusband had an eventful and interesting journey of seven months across the Gobi desert, Chinese Turkistan and the Mustagh Pass of the Himalayas before he reached Simla in November. Younghusband traversed thousands of miles across difficult and as yet incompletely known country, and published an account of the journey soon after. It gives a clue to the vague and undefined

character of the Chinese control over the outlying provinces. The later accounts of Sven Hedin, Owen Lattimore (1926), the Citroen expedition (1931), Peter Fleming and Ella Maillart (1935) and Sir Eric Trichmann (1936), have thrown the initial travels of Younghusband into obscurity; but as the work of the second European to traverse a route now well-known, it possesses a unique interest.

Fig Cultivation and Village Economy: In opening recently a Fig cultivation scheme at Ganjam, Seringapatam in Mysore, Sir Mirza Ismail, the Dewan, showed how such schemes are necessary for the economic and social improvement of the villages. The fig industry once prevailed there, but had languished. Its revival, pointed out the Dewan, meant much in terms of money.

"It is estimated that, on an average, about 120 plants yielding from 150 to 250 fruits can be grown in the backyard of each house, bringing in an annual income of about Rs. 200. On this basis, the income accruing to the 725 houses in Ganjam would be in the neighbourhood of Rs. 1½ lakhs. I will not be satisfied until you reach that figure in as short a time as possible. Already 106 persons have been provided with the necessary facilities for the cultivation of this profitable plant, and in a short time they and their families will have at their doors a new source of income. Thus you will see that by a little expenditure of money on the supply of the much-needed water for the cultivation of the fig, Government have been enabled to revive an ancient industry of this village, and thereby considerably increase the earning capacity of its inhabitants."

The Paradise of the Common Man. The account which the very Rev. M. Johnson, Dean of Canterbury, has given of the common man's lot in Russia as the result of years of observation, in *The Hindu*, shows how in Russia more than any other land, justice is done to the common man. Russia, he says, supplies all the physical necessities which are the pre-requisites of the higher spiritual and cultural activities.

"Russia views the common man with active sympathy. She does justice to the common man. She models her economic plans with primary regard for the common man, beginning her care for him when he is very young, nay, before his birth, pensioning the mother who is to bear him two months before and two months after his arrival. Once a week throughout his baby-hood she takes him to the doctor for skilled medical advice. She keeps him beneath the doctor's eye throughout his youth, and indeed for the whole of his after-life. If he is sick she ministers to him free of charge and pays him his full wages whilst he is absent from work. Not only does she tend his body; she tends his mind. His schooling is free."

She accommodates and teaches 33 million boys, the bulk of the urban children, up to 18 years and has similar plans for rural children. After the 18th year every one, if he or she is desirous, has ample facility for University training, thanks to the stipend of 200 or 250 roubles and the provision of room-rent, laundry and travelling. Unemployment has been practically eradicated since

1931, and 'wages steadily rise while prices steadily fall.' The standard of life becomes better year by year and at sixty, one is 'honourably and adequately pensioned'. There is no distinction of race or colour. The Soviet Union embraces 150 nationalities, and there is no difference in their treatment. 'Girls have equal opportunities with the boys and, more than in any other part of the world, women have 'equal rights with men in all spheres of economic, state, cultural, social, and political life.' No doubt there is no religion or orthodoxy of the conventional type; but there is ample play of the spiritual element in the solicitude for the gift of medicine, education, employment and material security for all. "In short, Russia ceases to have common men. She builds up a brother-hood of men".

Lottery and Municipal Finance. The financial bankruptcy of most of our Municipalities and Local Bodies reminds one of the easy way in which money was raised by them or their predecessors in the past for public purposes. One of the commonest methods of financing public works in the days of John Company was the organization of lotteries with the active countenance of the government itself. Many of the costly and historical structures of Calcutta came into existence in that manner. In 1784 was organised the first public lottery to finance St. John's Church, Calcutta. The councillors of Fort William themselves were the commissioners. They issued 10000 tickets at Rs. 32 each, and in order to attract Indians offered ten per cent. of their takings to the financing of an Indian hospital. The refusal of Indians to take part in it made the commissioners issue a pressing appeal to every Englishman and Scotsman, whether he was a church-goer or not, to take at least one ticket. The prices offered were substantial, and the popularity of the scheme led to the construction of the church.

The success of the Bengal lottery of 1784 made this method of financing public and private undertakings very popular in the coming years. Many schemes were launched. The Calcutta Town Hall which was completed in 1813, was benefitted by a lottery organized in 1805 for a sum total of five lakhs of rupees. In 1817 a Bengal Lottery Committee took over a balance of above five lakhs of rupees which had accrued from previous public lotteries, and carried out many public works of utility till 1836 as it was practically in charge of the tasks usually undertaken by corporations in later times. Many conspicuous monuments had the benefit of the earnings of the committee of lottery. The Calcutta maidan, the Shurtibagan and other tanks, the Strand Road from Prinsep Ghat to Hastings Street, the Cornwallis Street, the College Street, the Wellesley Street, the Cornwallis Square, the

Wellington Square, the Rawdon Street, and all the chief roads for about a mile round the Park Street, were the amenities which became possible with lottery money. Similarly, several rows and roads near the Government House, the Respondentia avenue which was destroyed by cyclone in 1864, were the works of the Lottery Committee. A dangerous and unhealthy creek which ran from the Salt Lake to Colvin's Ghat was filled up, and the metalling of the roads was systematically financed. This wonderful work of the committee ceased in 1836 on account of a wave of religious puritanism in England at that time which condemned the lottery system altogether and which made the company's government discountenance lotteries in future. The Board of Justices took over the functions of the committee and this gave place in the time of Sir Richard Temple, to the organization of the Calcutta Corporation in 1876. But it is remarkable to note that a substantial portion of the beautification of Calcutta was done not by the usual method of direct municipal taxation but by the attractiveness of the Lotteries ; and it can hardly be doubted that it can be adopted even more serviceably in the present day.

Book Reviews.

Shri Krishnaryasataka श्रीकृष्णार्यशतकम् By M. D. Subramania Ayyar, with a translation in Malayalam by S. V. Venkitasubramania Ayyar. Published by M. S. Devesa Ayyar, Vakil, Calicut. Price As. 4.

This garland of Sanskrit verses on Guruvathapuresa (Lord Krishna of Guruvayur) comprising 108 slokas in Arya metre, was sung by the poet in the holy atmosphere of the Guruvayur temple. Opinion cannot be divided on this that this little composition, the fruit of a matchless union of sincere devotion to Lord Krishna, deep learning and rare scholarship in Sanskrit added to the originality of the author and his innate poetic instinct, deserves the unstinted praise of all true votaries of art and learning.

Each sloka outwardly comprises but one idea, but owing to the profundity of *Sabdarthalankaras* employed and the variety of meanings that they import, the reader is automatically carried away and compelled to bestow greater attention, devote more thought and give vent to greater praise. The symphonic melody in

कंकण किंकिणि कलकलमंकुरितसितसुधाद्रमुखचद्रम् ।
पंकिलितमदनरूपं पंकेरुहलोचनं प्रपन्नोऽसि ॥

and

कमलानुवादिबदनः कचविजितघनः करेणुवरगमनः ।
कनक कनदनघवसनः कालियदमनोऽस्तु कलिरुजःशमनः ॥

and the newness of the *Ullakhas* in such slokas as

हतसकललोकतापो धृतहाटकवेनुविद्युदमिरामः ।
ममगुरुदुरितावग्रहशमकारीभवतु कोपिजीमूतः ॥

the several meninges that can plainly be read in

विलसच्चन्द्रकमौलिर्धिनयकप्रीतिदो गजामिनुतः ।
विजये हितार्थदायी विषमाक्ष इवापरो हरिः पातु ॥

and the *Ojas*, the *Prasada* and the *Madhurya*, the three chief *Gunas* according to Mammata in poetic compositions, found throughout in this Sthothra Kavya, make it possible to describe this work only by an *Ananwayalankara* (a figure of speech in which a thing is comparable to itself, the object being to show that it is matchless and can have no other thing to be compared with).

Some slokas remind us of the great Sanskrit poets as Muka and Durvasa who have composed devotional poems in Giti metre. Of the Sthothras on Guruvathapuresa, the work under notice may stand second only to Meppathur Bhattachari's *Narayanesyam*. It may in short be said that this poem is so full of beauty that it amply satisfies the need of all pious souls who desire to have something ennobling for their daily *parayana* (reading) and chant. It engenders and enhances *Bhakti* (devotion) and brings home sound knowledge of *Vibhakti* (case endings).

The translator, too, has done his work well, though one feels that the notes could have been more detailed.

Sakuntala by Kalidasa, prepared for the English stage by Kedar Nath Das Gupta in a new version written by Laurence Binyon. With an introductory essay by Rabindranath Tagore. Macmillan and Co. Price Rs. 2.

This is a new version of Kalidasa's *Sakuntala*. The original is considerably abridged so as to make it presentable to the English stage. For this reason, many figures of speech and many scenes and situations, familiar and appealing only to the Indian mind, have naturally been omitted also. In spite of these, what is universal in Kalidasa has not been lost sight of and the spirit of the whole work is there. Any page shows the pains the present editor has taken to portray the essential features of the original. It is well known that Kalidasa's genius is nowhere more beautifully and enrapturingly displayed than in Act IV where out of common clay the poet builds up a matchless mansion of marble and gold. The present version admirably preserves the enthralling picturesqueness of the original and gives the reader the same exhilaration. That is sufficient commendation of the present work, whatever other lapses it may have.

In an enchanting and thought-provoking introduction to the book, Rabindranath Tagore explains the inner meaning of *Sakuntala* which Goethe has envisaged long before in his immortal lines:—

"Would'st thou the young year's blossoms and the fruits of its decline,
And all by which the soul is charmed, enraptured, feasted, fed,
Would'st thou the Earth and Heaven itself in one sole name combine?
I name thee, O *Sakuntala*, and all at once is said."

Tagore continues:—"We are apt to pass over this eulogy lightly as a mere poetical outburst. We are apt to consider that it only means in effect that Goethe regarded *Sakuntala* as fine poetry. But it is not really so. His Stanza breathes not the exaggeration of rapture, but the deliberate judgment of a true critic. There is a special point in his words. Goethe says expressly that *Sakuntala* contains the history of a development of flower into fruit, of earth into heaven, of matter into spirit."

The printing and get up of the book are excellent.

M. S. K.

The Holiday Trip. By S. V. V. Published by Messrs. P. R. Rama Iyar & Co., Ltd., Madras.

The name of S. V. V. is an invitation to read for all who love to laugh, and this a book with the true S. V. V.-ian flavour. A husband and wife, with their servant, go on a holiday trip and in the treatment of this not very important incident, there grow up under the author's hands characters we shall feel sorry to forget. A country-lawyer—he himself narrates the story—has Jaya for his wife. Rather it would be truer to say that Jaya has a country-lawyer for her husband. She suggests a holiday trip and the gentleman assents. Here he sows the wind to reap the whirlwind very soon. The lawyer can think of the world only in terms of Jaya and he is her husband, servant and pet, all rolled into one. When admonished by his wife—and that is not unoften—he disarms her by his astounding remark: "You are more adorable when you are petulant". His wife is his High Court and there he loses all his suits—rather gains a doubtful success by turning informant.

His wife, a colourful butterfly, is a first class coquette and would see the heavens come crashing down her ears rather than walk with head erect before a man or deviate an inch from 'feminine propriety.'

Uncle Nanu with his heaps of rejected manuscripts, Bhashyam the quixotic rural reconstructionist who goes about teaching the law of Diminishing Returns to every passing villager, Jambu with his perverse motor car (was it one?)—are characters indeed who leave us wondering at the author's almost impish observation of actual life.

S. V. V.'s humour is like the peppermint which readily dissolves in the mouth and leaves you wishing for more. He does not depend too much on verbal jugglery or harp upon any one favourite trick. It is very easy to ride a joke to death and a joke uttered once too much loses all its charm and is like 'chaff'. S. V. V.'s humour glides on from point to point, rises up here and there like 'soap bubbles' and bursts a moment later, only to rise again and reflect fresh colours from the light of his bright imagination.

S. V.

The Life and Message of Bhagavan Sri Kusum Haranath. By M. Sri Rama Murti, M. A., LL. B. Published by P. S. Giri of Sri Kusum Haranath Society, Perambur, Madras. Price Re. 1.

This book gives in simple English a brief sketch of the life of Prabhu Kusum Haranath. More attention has been devoted to His message than to His life or the development of His spiritual character. The author holds that Prabhu Haranath was not merely a Mahapurusha but an Avatar even more potent than Sree Krishna or Sree Rama because of his more recent life (1865–1927). This contention is established by the very many miracles that Prabhu worked, which have been recorded by eye-witnesses who became devotees of Prabhu. Prabhu's life was full of miracles from His very birth—the birth itself was a mystery—and this may be the reason for the preponderance, in the book, of His miracles over details of His life or spiritual development. The book is a source of stimulus—almost inspiration—to spiritual aspirants. So long as religion is a living power with us, and biographies serve any purpose, books like this will not be unwelcome.

The printing and get up are good; but the book certainly deserves better paper.

S. Vaidyanathan.

Tales of the Indian Cavaliers. By C. A. Kincaid, C. V. O., I. C. S. (Retd.) Published by Messrs. Macmillan & Co., Ltd. Price Re. 1.

This is a collection of interesting tales, most of which have already appeared in *The Illustrated Weekly of India*, from the facile pen of Mr. C. A. Kincaid. Mr. Kincaid has long been one of the favourite authors of school boys and this new book establishes his position. One feels however, that Sri Krishna ought not to have been classed with the other heroes. The rest of the stories deal with men who have given Indian history some of its brightest pages. The style is simple and elegant. The name of Messrs. Macmillan is, of course, a guarantee for good printing and get-up.

S. V.

New Study Readers 1–6. By H. Martin, M. A. Published by Messrs. K. & J. Cooper, Bombay.

That indefatigable writer, Mr. H. Martin, whenever he writes a book, has always done it in his own characteristic and educative manner. The

matter dealt with includes a variety of subjects very interesting and informative in their nature, and the lessons of the Readers include all the important varieties which a model text book should contain. Poems, stories of poems retold in prose, dialogues, descriptions and talks on modern and popular subjects have all been well provided. In writing out these lessons—the prose lessons—the author has rightly kept in view his aim to help Indian children to write and 'talk in an English way'. Word-groups with their meanings and construction of typical sentences are given their right prominence in the texts.

The questions added at the end of each lesson—grammatical and textual—are very apt and useful to masters and pupils. The grammar questions are carefully graded.

Printing and general get-up of the book are excellent and the name of Messrs. K. & J. Cooper is sufficient guarantee for the same.

The books can be safely recommended for use in classes 4 and 5 and in Forms I to IV. Any pupil who has a thorough course of lessons in English with these text books is sure to be able to write and speak English 'as she is spoke'.

N. R. P.

Sen's Insurance Manual, 1937. Price Rs. 1-8-0. Published by Messrs. Sen & Co., 10, Clive Row, Calcutta.

This valuable publication of Messrs. Sen & Co. has already proved its usefulness in its former issues. The publishers have taken great pains to collect facts and figures and they deserve our heartiest congratulations on this year's well got-up issue also. In five chapters, all the information required by the insurance official and the fieldworker is provided. The premium tables of almost all the Companies, with particulars regarding Female Lives, Surrender Values, Paid up policies etc. and the special features of all the companies, will be of especial help to the fieldworker. It may well be said that this Manual is a veritable mine of information and an invaluable companion to all insurance men.

S. V.

Story Poems, Compiled by K. Srinivasa Kini. Published by The Teachers' Publishing House, Madras. Price As. 12.

This is a welcome addition, very useful to High school pupils. The four sections together contain ninety-two poems which are carefully graded. The pieces have been so chosen that teachers using this as their text are enabled to create in their pupils a spirit of appreciation of real poetry and a desire to read poetry for themselves later in life. The hints given at the beginning for the reproduction of the story in the poem, the suggestive questions and the short notes subjoined to each lesson, and the very useful addition of appendices (fifteen in number) added at the end comprising useful information—which every High school pupil should know—are really a special and attractive feature of the book. A very brief introductory note giving the setting of the poem, if added at the end of each poem, would have been a real help to the pupils.

The printing and get-up of the book are satisfactory.

N. R. P.

Food, Clothing and Shelter Series. Books II, III & IV, Price As. 10, Re. 1 and Re. 1, Messrs. Macmillan & Co.

We have long known Messrs. Macmillan & Co., as publishers of excellent books for schools and these books are sure to prove the school boy's

delight. With the prime needs of man for their title, these books always keep before the student the *raison d'être* of the study of geography. The study of the subject, far from being purposive and practical, has long been a mere mastering of names. So much so, that the student is able to recognise phenomena only in print but has not even a nodding acquaintance with actual phenomena. In other words, students are being filled and not fed with facts. The author of these books has well realised the obvious, but ignored, danger of divorcing theory from practice. Each chapter has been divided into two sections. In the first, the student learns the principles and in the second he applies them to facts. The numerous illustrations, picturing everyday life, are instructive and inviting. These books make the study of geography a delight, instead of the ordeal that it now is. We would wish to see them used in every school instead of the heavy, forbidding volumes that are now used.

S. V.

Dharmamamargathil (ധർമ്മമാർഗ്ഗത്തിൽ) by Nalapat Balamani Amma. Published by Vanneri Book Depot, Punnayurkulam (Malabar). Price As. 12.

This booklet contains 12 poems by Sree Balamani Amma. The poems show remarkable skill in composition and highly commendable imagination.

The general awakening in Indian Womanhood finds an eloquent expression in ഇന്ദിയാമലിക്. But Sree Balamani Amma is not one of the ultra-modern butterflies. She is more a person of culture than an educated, modern woman. All the poems breathe this spirit. But special mention may be made of the pieces വധുവിനോട് and വസന്താത്സവം. In these days of violent birth-control movements, when women elbow us out of our way and rush past in a frantic march, it is refreshing to us men and flattering to real womanhood to be told by a woman: "മാനക്കല്പമേതിൻ നിത്യസപ്തം കേ വാസമിത്ഭൂമിയും സമ്മളിപ്പൂ" "കല്യാണവേദിയെപ്പോൽസമാഹൃതി കല്യാണമാലാപാശാലയാക്കി, മൃഗാവസ്ഥയെയാതോൽക്കുതിക്കുന്ന നന്മണി സോപാനം നമുക്കൊക്കെ....." Indian Womanhood has an able, if unconscious, advocate in Sree Balamani Amma. We wish her every success in her blessed mission.

An introductory note has been given at the beginning of every piece. This, and the explanatory notes given wherever necessary, make the pieces easily digestible to any one with a fair knowledge of the language.

S. Vaidyanathan.

Brahma Anubhava Upanishad and Essays on Yoga. By Swami Sivananda, "Anand Kutir" Rikhikesh, (Himalayas).

The first of these pamphlets gives a translation, verse by verse, of the said Upanishad. Notes and commentary are added after every verse, besides the free translation of each verse. These are good as far as they go; but they do not go far. Religious profundities are, to novices, no more than obscurities, and the Upanishads are often the despair of even cultured men. This pamphlet, therefore, is not likely to be of great use to beginners. But it may foster the desire to study, which is certainly a good thing at a time when the world is slowly coming to an appreciation of the real stuff in our glorious literature.

The second one contains five essays regarding the glories of Yoga and the dangers in the way of the student of Yoga.

S. Vaidyanathan.

Read Me Series Primers I & II, Reader I and Deccan English Readers Books V & VI. Published by The Deccan Publishing House, Huzur Road, Calicut.

The first three books are intended for young children, to help them to read English. The books are carefully graded and the lessons deal with the common objects the student sees around him. The Reader contains what is very palatable fare for young children—nursery stories, fairy tales etc. Illustrations are plenty. Books V and VI are for higher classes. The lessons have been selected with discretion and treat of subjects of current interest like village reconstruction and the wireless. The short introduction at the beginning of every lesson and notes and topics for composition at the end are of particular help to the student.

The Kalyana Kalpataru. (English) Divine Name Number. The Gita Press, Gorakhpur. Price Rs. 2—8—0.

The Editors of the Kalyanapataru deserve the warmest congratulation on their brilliant "Divine Name Number". The volume consists of 78 scholarly articles from the hands of Swamis and scholars. As the name implies, all the articles are devoted to the place of Nama Japa as a Sadhana and its glories. The articles show remarkable knowledge of our Vedas and Puranas. There is an almost painful earnestness in many of the authors, which is bound to have its effect on the readers. To people of some spiritual acquirement, this volume is a systematisation of ideas and a rationalisation of their faith; to initiates in the field, it is an eye-opener.

Three or four articles of the 78 treat of the place of the Name in Christianity. Sikhism and Zoroastrianism too find a place. This is a laudable attempt at a happy union of faiths that would be applauded by all who believe in cultural unity.

There are 15 very good illustrations,—4 silhouettes and 11 colour pictures. The printing is good and neat and the volume as a whole speaks as much for the editorial skill as for the extraordinarily high culture of the staff.

S. Vaidyanathan.

The New Health, Annual Number, 1938. Edited & Published by P. N. Sharma, Suchindram, Travancore.

We acknowledge with pleasure the annual number of the New Health. This journal, devoted to the spreading of sound knowledge of health and hygiene, contains very valuable articles on health principles and topics of medical importance. The articles are in three languages—English, Malayalam and Tamil, and this is sure to add to its usefulness because of its wider scope for readers. We wish our young contemporary a long and prosperous life of useful service.

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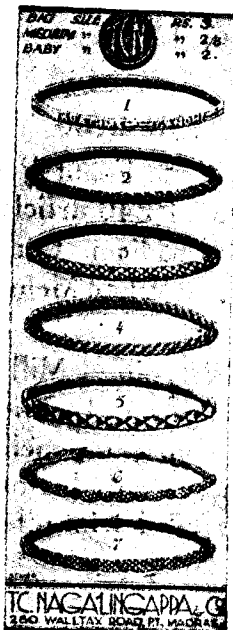
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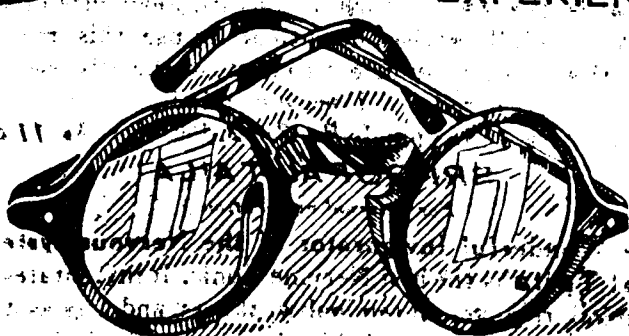
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