

in a paper in *Nature* by E. P. Bamber. It is satisfactory to learn that this efficiency is not so low as Mr. Bamber asserted, for the figures you printed were undoubtedly his; and as the subject is of importance, it is worth while to compare them with the figures now furnished by "J. S. S." Mr. Bamber was understood to say that "a turbine directly employed, transmits 60 per cent of the energy of the head of water, and that any intervening electrical motors would cause a still further loss of nearly half of this energy." But according to your correspondent "a good turbine will go up to over 80 per cent, a good dynamo to 90 per cent., a good motor to over 90 per cent resulting in a net efficiency of over 58 per cent." Surely in this calculation "J.S.S." has omitted to deduct the 10 per cent he had allowed for loss in the wire. I take it also that by "friction" Mr. Bamber was referring to the bearings, &c., of the several intervening machines, and not to loss of electricity in the wires. If I rightly understand "J.S.S.," therefore, he claims a total net efficiency of 48 per cent of the fall's energy against Mr. Bamber's "over half of 60 per cent" or, say 35 per cent. The discrepancy is not very large and, as "J.S.S." remarks, its importance vanishes altogether "where the original power costs nothing." It becomes, however, of high importance where the original power has to be generated by the consumption of fuel. This question of Electrical Transmission of Power to Tea Factories is far from being dismissed, and I think "J.S.S." should use the knowledge he possesses to urge its adoption first in some district affording tempting facilities for such a plant, to his own advantage as well as that of the planting districts, many of which would doubtless soon follow the lead thus made.—I am, yours truly,

ONE INTERESTED.

"IBEA" AND "SMALL CAPITALISTS IN PROSPECTIVE."

June 3rd.

DEAR SIR,—Your most interesting and instructive notices and articles on "Ibea" have been read by me with great interest, and I am sure many more besides myself have done the same.

Clearly Ceylon is no place now-a-days for the planting young man with no capital at present realizable, and he must vacate it, I suppose, to those who can put their hands on the "available," no matter what his qualifications may be.

In pointing out where the former class of individual might advantageously go, and where he would not be ashamed to work with his hands, you deserve the thanks of many.

There are many I know in Ceylon, who at the present moment cannot command capital. These have now been out here for say 3 to 4 and 5 years, learning their "trade," and they look forward to the time when they will be able to invest. Some may even be in good positions, others working hard as S. D's, sticking into their hard work, but with the pleasurable thought and hope of being their own masters some day. By the time this day draws near, they are earnest planters, with a thorough practical knowledge say.

They have gained the experience at either another's cost or profit. When they are managing their own places, they can utilize this experience gained, and they think, of course, to their own advantage. But as days go on, a thoughtful man cannot but see the uselessness of investing in tea, which every one grants

is being overdone (vide the average last week 7ad). At present estate owners try to get rid of their small estates or join them with others into a Company.

Would it be wise of the small capitalist to go in for one of these cast-off small properties? He turns in disgust from tea to cacao, to find what good land there is for this product is all snapped up despite the assurances of those who have always land "suitable for cacao" for sale. To buy a "ready made" cacao estate is almost impossible unless for a sum much beyond the small capitalist. What other chance for this poor individual but to turn to pastures new. If he has not come into his capital, his course, he deems is to leave Ceylon and start afresh in a new country in the same way as he began in Ceylon.

But where, may I ask, is the employment to be found of a like nature to S.D. in "Ibea"? Must one work and wait here for capital to be realized, and when it is so, then start life afresh elsewhere with no experience?

What the "Small Capitalists in Prospective," if I may so style them wish to know is if such employment as a paid assistant or manager is to be found in "Ibea." Surely one's experience dearly gained in Ceylon is not to be thrown away, but can find remuneration in "Ibea"?

I am sure it would be a great satisfaction to the class of young planters of whom I write, were you, Mr. Editor to inform us if this is within your knowledge.

For the young planter I know you have every sympathy if one were only to judge it by the excellent publications for his help which you turn out, and the many articles you have written for his guidance.

If you can enlighten us on the subject, I am sure many more will be grateful to you besides

"SMALL CAPITALIST IN PROSPECTIVE."

ENEMIES OF TEA.

Bogawantalawa, 11th June.

DEAR SIR,—Can you find out what these Tea leaves are affected with? they were found by a neighbour of mine and I should be glad to know whether they are eggs of the *Helopeltis*. Any information will much oblige.—Yours truly,

F. M. L.

[We referred the leaves to Mr. E. E. Green who kindly replies:—

Punduloya, 14th June.

The leaves received have undoubtedly been punctured either by *Helopeltis* or some allied bug of similar habits. I could not determine the species without seeing the insect or finding its eggs. These latter are usually embedded in the stalk of the young flush. To find them I should require for examination a number of shoots from the affected trees packed so as to arrive in a fresh condition. After the shoots have once become dry it is difficult or impossible to locate the eggs.

COFFEE & C. IN JAVA.—The annual meeting of shareholders of the "Coffee and Cinchona-growing Company, Paligaran," of Java, was held in Amsterdam the other day. The directors' report, which was adopted, announced a loss on the trading during the year 1893 of 28,143 florins, the chief cause of this being the continued decline in the price of cinchona bark. The company, on December 31 last, owned 2,157,828 cinchona, and 310,820 coffee trees.—*Chemist and Druggist.*