Wallace, who are confident that the soil of India is not being exhausted, but Professor Wallace's conclusions were not always based on accurate data. For instance he greatly exaggerated the quantity of nitrogen which is given back to the soil in the rainfall, thereby of course magnifying its power of self-recuperation. Dr. Voelcker, on the other hand, a very cautious and competent observer, while hesitating to assert that there is a positive deterioration going on, declares that there is absolutely no evidence satisfactorily to establish the contrary. At the same time Sir W. Hunter in regard to the N.-W. P., Sir Charles Elliott in regard to the Nerbudha Valley, Mr. Robertson (formerly head of the Experimental Farm at Saidapet in Madras) and many others have expressed their opinion that the productive capacity of the soil is declining. Sir Edward Buck, again, in the Resolution which Dr. Watt quotes, remarks with satisfaction on the extension of double-cropping consequent on irrigation but it is far from clear that this extension is always an advantage. "Undoubtedly," writes Dr. Voelcker in his Report, with the introduction of a canal into a district comes also the tendency to force the land to bear more crops than it ought to, unless it be plentifully supplied with manure, which is seldom the case." Finally, though it is true that 100 million acres still await cultivation, it is also true that all the best land has already been taken up. The Famine Commissioners calculated that the culturable waste would on the average produce only one-tenth as much as the area already under cultivation. It follows that if cultivation extends, more labour and capital will be needed to bring back what will after all be a much smaller return. Dr. Watt's rose-coloured view of things might be justified were it clear how the ryot in the years to come is to get the manure without which he cannot put back what is taken from the soil in crops: were it certain that irrigation is always judiciously utilised: and were it possible to get the population to move on before the cultivated tracts are so overcrowded that fallow land has to be taken up and the land deprived of its necessary rest. All these are points which an energetic Agricultural Department *may* take up and settle satisfactorily, but in the meanwhile it is prudent to look on both sides of the shield.—*Pioneer.*

COCOA IN VENEZUELA.

The cocoa pods are carried to out-houses and spread in the shade, where they should be left for eight days in order that they may become mellow. They are then opened with a knife, the beans taken out and placed upon tables exposed to the sun until they become red.

To ferment or sweat the beans they should be placed in a cellar or in boxes and barrels in a cool place for 4 or 5 days, covering them with banana leaves with weights above, but must be stirred and aired every morning and evening, after which they are spread out in the sun and dried until they sound hollow on being stirred, when they are ready to be sacked for the market.

These beans, roasted or boiled for some time, will make and inferior kind of chocolate destitute of any fatty principle, but very agreeable to the taste; this process is resorted to amongst the poorer classes.

The ordinary class of cocoa comes from Rio Chico and Higuerote (Port Carenero) and the better class from Ocumare and Caracas. Prices range from £3 to £3 5s and from £5 to £6 per 100 lb. Much cocoa has been lost owing to the prevailing heavy rains.—*British Consular Report.*

FIVE GOOD POINTS IN A COW.

(From the *Australian Agriculturist.*)

Name some good points of the dairy cow?

If you can find these five points in a cow, she will usually have the power of paying for her board and saving a profit for her owner. We name them in the order of their value: 1. Long, large udder, broad and elastic. 2. Soft, mellow skin, covered with "mossy" silky hair. 3. A large barrel with broad ribs, wide apart, and very firm muscles in the abdomen. 4. Broad loins with long rumps and lean hips. 5. Long neck, clean cut face, and large eyes.

If possible, water should be kept in reach of the cow, also salt. Give as much food three times in the hours—at 6 a.m., 12 p.m. and 6 p.m.—as the cow will eat without waste and properly digest; effect, nutritious and wholesome milk will be produced if the cow is from good stock.

GRAFT, BUD, OR SEED.

The idea that in order to get good varieties of fruit we must bud or graft from existing trees that are known to be such prevails so extensively that no other system of propagation can be said to be in general practice. Yet it is true of the most of our fruits that the best as well as the poorest of the varieties we have originated are seedlings. Not a few fruit growers are suspecting that the practice of budding and grafting has a tendency to degeneration and is at a least a cause equally potent with climatic changes and soil exhaustion for loss of vigor and the want of the power to resist unfavourable influences, in which the fruit trees of the olden time were superior to those of the present. That gratifying or budding on stocks and roots is the only certain method of reproducing exactly the variety we wish to perpetuate is freely admitted, but may it not also be true that the practice should become more general of raising fruit trees from selected seeds? In case of the peach we may fairly expect trees from the best varieties to possess many of the good qualities of the parent stock, and if the vigor, productiveness and freedom from disease of old time orchards can to any considerable extent be regained, it is certainly worth trying for. That we can originate a variety of the apple which will reproduce itself from the seeds with the same uniformity as from its scions is scarcely to be expected. It seems reasonable, however, to believe that by planting young trees from seeds of our best apples, short distances apart in the rows, and leaving them to be tested in future and then cutting out the least desirable, we may secure orchards of excellent fruit and, at the same time, more prolific and longer lived than many of the grafted and budded kinds of the present time.—*Field and Farm.*

TEA CHESTS.

Mr Roberts, lately of Ceylon, showed me the model of an improved wooden Tea Chest he had patented. You know the success the Acmé tea chest has secured; but although these are an admitted great improvement upon the wooden chests of recent patterns, the dealers here—and, more especially, the warehousemen—do not like them, because they are of metal, and, if injured, cannot be patched up as the wooden chest can be. Mr. Roberts believes that his new patent wood chest will meet all the objections urged against those of old pattern. What is more, he tells me he can contract to deliver them in Colombo for two shillings each, as against the three shillings and fourpence charged for the Acme metal chest. The sides of Mr. Roberts boxes are hinged together and fold flat. When extended and the bottom piece placed in the grooves cut in the sides to receive it it shuts squarely and tightly, and the binding hoops also hinged to open out and finally secured in place by a single screw. The lid as at present designed, though Mr. Roberts tells me he is improving upon this. Slides in the grooves in the side, and when in and secured completes a remarkably firm and neat chest. The lead lining is put in while the box is opened out flat and so secures a perfect fit altogether I was much