Man and Machine Power in War and Reconstruction. By CAPTAIN J. W. PETAVEL, R.E. (Retired). (Published by the University of Calcutta.)

THE volume contains five lectures delivered in Calcutta. The first four deal, with much repetition and in a somewhat disjointed fashion, with plans for industrial reform on co-operative lines, while the last contains Captain Petavel's ideas on the housing problem in towns. The assumption underlying all the proposals made is that, in consequence of the immense rise in productive power, it is a perfectly simple thing for people, working together in co-operative organisations and content to be paid mainly by receiving a share of the goods they themselves produce, to support themselves in comfort, and, if they wish to start later independent businesses of their own, to accumulate capital for the purpose. So far, the author says, the advance of productive power has only benefited the capitalist. "All it has done hitherto for us has been to multiply luxuries for a small class, while poverty has remained about as common as it ever was." A reformer should be careful to make his indictment square with facts if he wishes to obtain a hearing.

Notwithstanding his view as to the fruits of individualism. the author does not contemplate any sweeping measures for the socialisation of industry or anything in the nature of confisca-He believes his proposed co-operative organisations will tion. by direct and indirect action abolish unemployment and poverty. and by setting "the pace in the matter of remuneration" ensure that everybody, wherever employed, shall get good wages. The organisation is to consist of numerous agricultural and industrial colonies, in which children and disabled soldiers, unemployed workers, and workers dissatisfied with the conditions of employment in factories, will be trained and enabled to produce for themselves the principal necessaries of life. The boys will spend only half their time in industrial work, and education will become largely self-supporting. A scheme is sketched in which even the Army is to fall under the same category. Captain Petavel

pleads that at least a beginning should be made by starting numerous farm colonies for boys.

There is much vagueness about details, and no attempt is made to frame a balance-sheet. Admittedly some capital will be required, but apparently the people who advance it or who supply machinery are to be content to be paid by certificates entitling them to receive goods produced by the co-operative establishment. The expectation that they will do business on these terms seems highly optimistic. It is granted that a manager will be required, but his qualifications need not be high. The author thinks that "this is a kind of industry in which we can standardise the management and dispense with individual managing skill." The necessity of employing a proportion of skilled workmen drawing money wages is allowed. If income and expenditure did not balance, "people would be prepared to run [the establishments] at a loss at first for their enormous social and educational value." Philanthropy may support a farm school here and there, but it will not start hundreds and thousands of such institutions.

In the absence of any financial data we are referred to the success of one or more self-supporting Swiss establishments, in which vagrants are compelled to work. The establishment of "a considerable proportion of good paid workers" is necessary, for the labour of the tramps themselves "does not increase in value." It seems possible that many of Captain Petavel's voluntary recruits, who, he admits, will not at first be the most enterprising and capable workers, would not, in fact, earn their keep. His ideas of the saving to be effected by getting rid of "trade expenses" and middlemen's profits are probably extremely exaggerated, and it seems most unlikely that his schemes would work out in the way he expects or have the extraordinary effect on industrial conditions which he anticipates. Co-operative production on a large scale has not hitherto been a conspicuous success.

The last lecture is a sketch of a grandiose scheme of town reconstruction, which is to prevent unemployment on the return of men from the Army, and obviate any risk of its future recurrence. Apparently half the urban working-class dwellings in England would disappear. Towns would become lines of factories strung out along the railways with groups of artisans' houses built farther out in the country. Incidentally, half the agricultural land of England would enormously increase in value, because brought into immediate proximity to a town area. The workers "might spend a short time in the factory (working in shifts), and part of their time cultivating a small plot of land to grow some of their own food." No confiscation of existing site values is contemplated. The unearned increment of the land, whose value would be enhanced, would not only compensate the landlords whose sites would be cleared of houses, but would provide large sums to build new dwellings. Admitting the physical and moral evils due to the vast agglomerations of houses of which many English towns consist, it is impossible to believe that any scheme of this sort is practicable.

It is hardly necessary to discuss a still more curious plan for a "national work department." It is not clear whether this is to be a public or a private organisation. Its success depends on the issue of cheques, called also paper currency, entitling its creditors and the workmen they employ to receive goods purchased by the organisation with these very cheques. Captain Petavel is sanguine enough to believe that manufacturers could employ this paper for the purchase of raw material and payment of freights.

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