Are the Machines to be Masters?

ANOTHER VIEW OF THE WAGE QUESTION.

WRITTEN FOR THE

Australian Socialist League

AND THE

Benefit of its Propaganda Fund,

BY

GEORGE BLACK, M.P.

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ARE THE MACHINES TO BE MASTERS?

BY GEORGE BLACK, M.P.

PART I.

The Socialist of to-day accuses those who see in the
freeing of land a full solution of the social problem
of being economically one-eyed. He admits that in
primitive societies, where implements are rude and
processes barbarous, that unrestricted access to land
would practically mean industrial freedom. Now
that science has come to the aid of even the most
primary form of production—agriculture, and that implements
have become complex and expensive, he argues that even if land
could be freed the great bulk of humanity would remain enslaved.
It is perfectly true, as Henry George stated, that labor was
before capital, and that Adam, having labor-force, did not feel
the want of it. But then Adam had no competitors; his wants
were few, his mode of life little different from that of the
animals who surrounded him. His only clothing was the hair
of which sartorialism has almost denuded modern man; his
drink, water from the stream; his food, gormand roots or the
fruit and nuts that hung from every bough; his habitation, a
cave or the hollow of a tree. To-day it would be more merciful
to shoot a man than to turn him out to conquer the wilderness
armed with only his ten talons against competitors provided with
axes, forest-devils, steam-ploughs, dam-squirrels, harrows, reaping-machines, threshing machines, barns, fences, hired help,
horses, seeds, and bank balances. Not having these necessities of
civilised production and forced to borrow them from those
who possess them in superfluity, then, the land on which the
borrowed capital is used ceases to be free. The alleged
"freedom" of the land won't alter the situation. The land-user
will pay rent as now—the only difference being that it is called
interest. Can land really be nationalised while implements are
privately owned? Hardly!

* * * * * *

I read some time ago in an American paper an account of
how electricity is generated in a city of the Union whose name I
forget. The company who supplied the city with light had been
troubled greatly with strikes among their men, who demanded 25 cents per hour for their labor. The district was full of what is ignorantly termed "surplus labor." Therefore, reversing the "penny-in-the-slot" system, the company erected a number of crank-machines in the requisite positions, so constructed that when the handles had been given a certain number of revolutions, usually occupying an hour, ten cents (5d.) dropped out. By these means they succeeded in getting the same amount of work done at a wage-saving of three-fifths, which soon repaid them for the initial cost in machine erection. The story may be apocryphal, but the probabilities are such that, if the idea has not been as yet utilised, there is little doubt that it eventually will—that is, if conditions be not speedily altered. Doubtless some of my readers will feel disposed to applaud the notion, not recognising in it a potency for the enslavement of man and for the manufacture of bores who would have no pride in life and find no pleasure in honest toil, but would be content to keep the flame of existence burning, when food was not to be begged or stolen, by an hour's begrudged and pleasureless exertion at the light-generating crank. Science may yet even go further. Not content with reducing human beings to the level of cranks, rods, and pistons, she, if monopoly endures, may eventually succeed in almost wholly dispensing with them. It is not difficult to imagine an era when more men are occupied in thinking than in using machinery: an epoch when the manager of a vast manufactuary might, while lying in bed, by pulling out or pressing a few lettered stops like those of an organ, set in motion all the natural forces fettered by science for the performance of various industrial tasks without manual aid. Consider the subject from the newspaper man's point of view alone. Brains—that is, the best brains—will always be necessary, even if it be only to devise how brawn may be dispensed with, and so writers will continue to be essential to the dissemination of thought; but one may easily imagine how, through a development of the type-writer, the thinker will some day be enabled to translate his thought into leading characters without the intervention of the compositor. The "comp," annihilated, the writer-set type would go straight into the hands of the "reader," who might then pass it over to the "make-up," who would arrange it in columns, lock it up in the forms, and place it on the machine. At this stage, the man-created, man-devouring, mechanical monster would have full play. (In later years, Mary Shelley's "Frankenstein" will be read as an allegory of industrial import.) The printing-machine, charged with matter for the world's enlightenment, would then proceed to give practical proof of the verity of the assertion that the more mechanical power you put into an article the less manual force is necessary, by feeding itself with paper and transmitting the sheets it has printed over to another machine which, having finished the printing process, would then hand the papers on, without manual aid, to a folding-machine, which would in turn

transfer them to a packing-machine, which would fasten the finished papers up in bundles, label these and, all the most expensive processes being completed, would deliver them with the publisher for transmission to the public. Thus, several hundred men, whose labors in making the machinery so used, would be absolutely shut out from employment. Imagine this process carried out by every department of human industry. Imagine the hordes of discharged workers dependent on public and private charity. Imagine further that the lessening of consumption consequent on the vast reduction in the total of wages paid has caused a contingent reduction in the ranks of distributors, and then picture the state of Society. Land being free, would it not be possible to mitigate the evil, but even then much, if not all, of the monoply, which was so inequitably monopolised, what could be expected, but the greatest social upheaval that the world ever saw. The monopolists even would revolt against a social condition which compelled them to produce wealth that almost no one could afford to purchase, because past wealth had been so inequitably and unequally distributed that, though wants and population were yearly increasing, the means of satisfying needs were yearly diminishing. If all, employer and employed, would only read the handwriting on the wall, they might see that the heart is being eaten out of Society, not only by the monoply of land, but by the monoply of capital. Master and man, the machines are mastering us. Piston, lever, wheel, crank and boiler, are pressing us daily to the edge of an abyss whose name is Chaos!

PART II.

WHEN I was a school-boy, my reading-books were filled with denunciations of the unreasonable stupidity of the British workman, who, on the introduction of machinery into industrial processes, went by night in lawless mobs (sometime styled "Luddites") to destroy it. But the instincts of the ignorant workers were correct; the reasons of their cultured critics were based on the parochial character of their investigations. It is perfectly true that the introduction of machinery into Britain resulted in a marvellous increase of her wealth production: it is not true that this increase was followed by its distribution among British landlords, landowners, wage-earners, and wage-earners, in the proportions previously observed. That being so, the demand for the services of workers slackened when Britain had, through the first Great Exhibition of the World, curtailed her markets for the wealth she could not internally consume, by apprising the other nations of the advantages that arise from the use of machinery. To-day, every civilised nation is also a manufacturing community, and Britain, at the dictation of her merchants, is forced to open, at the point of the bayonet, markets for the dissemination of cheap goods and strange diseases among semi-civilised and barbarous peoples.
To-day, some peoples have a surplus of raw material which they can afford to exchange for the surplus manufactured goods of other countries. But when all countries have a surplus of manufactured goods and indigenous growths of the soil which could be locally consumed if all men had all the things they desired, but which they can’t exchange with other lands at any sacrifice, prompted by the alleged law of “final utilities,” for either raw material or finished products, then the world will begin to understand that a nation’s best market is among her own sons and daughters, and that an inequitable and artificial division of wealth, leading to an excess of production over consumption, eventually means national ruin. I imagine that at this stage I hear some bog-witted person rant at the necessity thus a sin for cheaper production, a yearly-increasing number of inventors and skilled workmen is devoted to the manufacture of wage-saving machinery. All these forces tend to minimize the number of hours daily necessary to perform the world’s work. Machinery being privately owned, this does not mean a reduction of hours to each man, but a reduction of men to each hour. It is true that our wants continually increase like our capabilities for producing economically, but as new wants cannot, and the means of supplying old wants do not, increase in direct proportion to the improved methods of turning out necessaries, it follows that each new invention has a tendency, direct and indirect, to diminish the numbers of those who work.

In case some of my readers may imagine that I am inventing men in buckram in order that I may knock them down, let me quote the statement of Inventor Edison that “the machinery of the United States represents the labor of one thousand million men, or fifty times as much labor as that of all the men in this country.” It is also true that Edison also says that owing to the introduction of machinery, “each worker can now buy four times as much with ten hours’ work as his father could fifty years ago,” but if wealth has increased five-fold, while the worker’s share has only been increased fourfold, then, although absolutely better paid, he is nevertheless relatively worse off—his quota in proportion to the national aggregate being smaller than that of his father. If we were not that we are confused by allowing “the medium of exchange” to veil these economic truths, such suggestive figures would have long ago revealed the true cause of our social sorrows. An American writer of little note got to the bottom of things in 1885 when he omitted money figures and pointed out that “it takes 75 bushels of the Western farmer’s corn to buy one ton of Ohio coal, and the Ohio miner has to dig out twelve tons of coal to buy one bushel of Western corn.” The extraordinary discrepancy on both sides cannot be accounted for by the cost of transit, and might well cause those who find in Jevonianism the equilibrium which the latter has disturbed. That task ended for the time, and consumption having overtaken production, Society reverts to its old methods of distribution, and the process of increased production, accumulation, decreased consumption, deadlock, depression, and commercial crisis, has to be gone through once more. It always will be so, while the good things which should benefit all are devoted to the benefit of the few—and even to their undoing in the end.

The man who enters business nowadays can only get customers by taking them from some one else. Consequently, he must either sell cheaper or better goods than his long-established rival. The former is the necessity thus a sin for cheaper production, a yearly-increasing number of inventors and skilled workmen is devoted to the manufacture of wage-saving machinery. All these forces tend to minimize the number of hours daily necessary to perform the world’s work. Machinery being privately owned, this does not mean a reduction of hours to each man, but a reduction of men to each hour. It is true that our wants continually increase like our capabilities for producing economically, but as new wants cannot, and the means of supplying old wants do not, increase in direct proportion to the improved methods of turning out necessaries, it follows that each new invention has a tendency, direct and indirect, to diminish the numbers of those who work.

The process is endless. Cycle of depression follows cycle of prosperity; the former vainly endeavoring to right the economic
true source of surplus value to think the matter over again.
It is evident that the miner and farmer might exchange commodities at little over the cost of production were it not that the landlords with their royalties and rents, the landlords with their mortgages and interest, the middlemen with their percentages and commissions, and the trusts or isolated employers with their profits, stand between the two producers. Civilization is now asked to consider if it advantages human beings and makes life happier and sweeter to erect toll-houses at the entrance of every avenue of production in order that the drones may have a chance to squeeze the honey-bag of every workingbee that goes in and out. The erection of barriers cannot facilitate production, distribution and exchange. It cannot benefit every group of five men so circumstance one of their number that he is dependent on their exertions and they dependent on his caprice for a livelihood.

I might multiply instances to show that machinery is almost everywhere displacing human beings. For instance, to make by hand all the yarn spun in England by the use of the self-acting mule in one year would require one hundred millions of men. One man, driving a reaping and binding machine drawn by three horses, can daily cut and bind twelve acres of grain—an amount of work which formerly required twenty persons. Sir Joseph Whitworth some time ago stated that a lace-machine can do the work formerly performed by 8,000 Nottingham lace-makers. Before 1872, the greatest average carrying capacity of steam-cargo boats was 1,000 tons. Such vessels carried a crew of not less than 18 men. In 1894, a vessel with a carrying capacity of 9,000 tons only requires a crew of 35 men. Which is to say that one vessel now does the work which formerly employed nine ships and that 35 seamen can perform the duties that previously occupied 162 navigators. Fewer shipbuilders and engineers in proportion are also required. What is to become of the men thus displaced? If they go on the wharves, it is only to find that, through the introduction of steam-cranes and other improved appliances, fewer men are wanted for loading and unloading ships. Therefore, all over the world, there is a yearly increase in the numbers of those who must either steal, live on public and private charity, or leave the world hurriedly. It is also obvious that with an immutable continuation of the circumstances that deprive men of the opportunities to work, the unemployment will continue to increase. What is to be done with them? "They will be gradually absorbed by other trades," says some wiseacre, but if every trade has its surplus laborers, even the trade that furnishes the machines that manufacture most of the compulsionly idle, there evidently can be no room for absorption in any. The only outlets are to be found in the prison, the asylum, the hospital, and the premature grave.

PART III.

SPEAKING at the Protestant Hall lately, Mr. McMillan asserted that: "During the last fifty years, in all English-speaking communities, it might be safely asserted that the wages of the working-man, including mechanics and others, had advanced 50 per cent., the prices of food and other commodities as a whole had been reduced 25 per cent., and the hours of labor had been reduced 20 per cent."

It was artful of Mr. McMillan, so far as New South Wales was concerned, to select the wages prevailing 50 years ago for his comparison, for, as Coghlan shows, the worst series of South years known since 1821 was that prevailing from 1813 to '51, when money wages were really half the present rate, and the purchasing power of money but little greater than now. It is easy to understand why Mr. McMillan did not select the years between 1851 and 1857 in his attempt to give the monopolists a statistical excuse for saying that the people are not so badly off as they state. Those were the days of the gold rush when wages rose in most cases 200 per cent., and were at least 50 per cent. higher than those now prevailing. Certainly the purchasing power of money was less then than it has been since or was before. It was perfectly fair to say that wages were, up to recently, twice what they were fifty years ago; it was just as dishonest to induce people to believe that comparison with that of any intervening period would be to the advantage of the wage-rate of to-day. Wages are infinitely lower now than in the years between 1871 and 1886.

I would like Mr. McMillan's authority for stating that the prices of food and other commodities has been reduced 25 per cent. during the last 50 years. Things that were then considered luxuries are now cheaper, but on the other hand necessities are dearer. Clothing is cheaper: tools, furniture, and wares are certainly lower in price, but food, despite the low prices prevailing during the last six months, is now dearer all round. Mr. McMillan also forget to mention that, owing to the borrowing of our unpaid Parliaments of £76,118,565 in the 50 years lying between 1842 and 1892, the value of lands owned by Mr. P. M's, L.C., and others have so enormously increased by means of public expenditure that, according to the Government statistician, the average deduction from wages for rent is 25 per cent. Assuming that, as Mr. Coghlan puts it, the wage of the average male adult is £96 per annum, if the landlord is allowed to deduct £21 from that sum, and then the Colonial Treasurer permitted to abstract £3.3s. 9d. per head, or in the case of a family of five, £15 18s. 9d., there is just £56 left to provide the daily bread, clothing, boots, schooling, lodge-fees, fire and lighting, newspapers, books, and other simple pleasures, including drugs and doctor bills, during the twelve months. And how many do not earn £56? How many do not earn the half of
that sum in a year? How many men, women, and children have been slowly crushed out of existence during the last five years, because there was for them neither high nor low wage and no opportunity of living except through charity, prostitution, or crime?

As for Mr. McMillan's last statement that the hours of labor have been reduced 20 per cent during the past 50 years, he cannot produce figures in support of his verity, and its only foundation is to be found in the fact that trades-unionism has reduced hours from ten to eight daily in a number of trades where skilled labor is employed. Possibly Mr. McMillan was not aware that, though hours may have been reduced to that extent in some trades, nevertheless, through the introduction of more rapid machinery, the intensity of labor has been so increased that more work is got out of men in less time, with a consequent greater loss to each man of nerve-force. The workers, slaves of their own products, are not only worked more closely but actually, through the division of labor, the laborer merely making a part of some to-be-complete article, he rarely shows anything that he can definitely claim as his own product. But beyond that Mr. McMillan's statement is only true of skilled trades. He dared not assert that there has been a 20 per cent. reduction in the hours of 58,933 hotel and domestic servants; or in the hours of 136,575 primary producers, chiefly agriculturists and oatmeal producers; or in the hours of the vast horde of white slaves who stand behind the counters of stores or bend over the sewing-machines in the sweater's den. Hours in all these occupations are to-day from 13 to 18, and not one whit lower than they were 50 years ago. But, even if wages had increased as well as their purchasing power, and hours diminished in the proportion Mr. McMillan indicated, nevertheless, the increase of wages in no country under the sun has been in direct ratio to the increase of natural wealth. The annual wealth-product per head of Britain has much more than doubled during the last 50 years, while wages, even to the optimistic and not-over-earnest ex-Treasurer, have only advanced 50 per cent. Therefore, when compared with the national income, it is evident that wages are really not 50 per cent higher, but 50 per cent lower, than 50 years ago. Wealth per head has increased 100 per cent., and wages, according to McMillan, only 50 per cent.; therefore, on his own showing, wages have proportionately declined. The declension is really much greater.

The introduction of any labour-saving machine producing articles in common use, depreciates the value of labor, by increasing wealth without raising wages. Thus, by an increase of surplus value, the monopolist can satisfy the wants of his competitive wage-earners with a smaller portion of their wage-earner's work than before. As Ingalls, borrowing from Rodbertus, puts it:—"The fundamental error of employers is in regarding laborers merely as producers, from whom the maximum of service is to be exacted at a minimum of cost, instead of consumers who furnish the market for more than three-fourths of our manufactured commodities. Wants are the measure of wages, and their standard is fixed by the cost of living. Higher wages and fewer hours of labor mean greater activity in all branches of business, increased consumption of products, better education of children, happier homes, purer politics. Firm guarantees for constitutional self-government. Lower wages and more hours of labor must be followed by stagnation, depression, and moral, intellectual, and physical deterioration. Products cheapened by low wages are bad, but men cheapened by degraded competition are worse."

PART IV.

The many are not poor because population increases faster than wealth. The population of England has increased about 25 per cent during the last fifty years while the national wealth has just about doubled during that period. In France, where population is almost at a standstill, the wealth increase has been similarly rapid. In America and Australia, where population has increased more swiftly, the aggregation of wealth has been quite as fleet. Further, the annual increase of capital is about one-sixth of the annual income in the countries mentioned. But, unwilling to acknowledge that wealth is unfairly distributed and capital inequitably monopolised, the half-thinker at this stage of the argument usually asserts that "over-production" is responsible for pauperism and lack of employment. This is about as sensible as if one should say that men are made hungry by over-feeding them. I heard the statement in the Newcastle district the other day where the idleness of various coal-pits was attributed to "over-production." Now, during the entire winter, I have noticed an entire absence of smoke throughout the day from many chimneys in the poorer quarters of Sydney. This abstinence from "firing" could only have arisen from the fact that the inmates had not the wherewithal to buy fuel. Had they been able to purchase all the coal, as well as all the other commodities they wanted, it would obviously have brought about not only such a great consumption of coal in their homes but also in the factories and steamships through the revival of trade, that every mine and coal-pit in the country would be put to full use. What is true of coal-mining is true in every other department of human industry. If every man who has a method of producing some commodity that he can exchange for the other commodities which are necessary to his existence, were allowed access to the necessary materials, it is indisputable that none but the incapable and incurably lazy would long remain a burden on public and private charity. Now a number of people are hungry for goods that others vainly try to sell, simply because their gorged masters have no appetite.
Every student of history must admit that the present social organism can be no more exempt from alteration than were those that preceded it. Professor Jowett, lately deceased, in his introduction to Plato's "Republic," acknowledged that the modern organisation, being unable to cope with the growing evils that have arisen from a complete change of industrial methods, demands reconstruction. As a matter of fact, the change is now going on, and the formation of every joint-stock company, every co-operative industry, every municipal gasworks or State railway, furnishes proof that "private enterprise" is not a necessity of progress and industrial processes. Just as suicides, bank suspensions and reconstructions, commercial bankruptcies, strikes and unemployed agitations, prove that present society is unable to govern itself.

It is surely time to end this continual class war. If Society will not end it, it will end Society. It can only be ended by making interests now antagonistic thoroughly sympathetic. As Dr. Ingram says, in "The History of Political Economy": "Industrial society will not permanently remain without systematic organisation. The mere conflict of private interests will never produce a well-ordered commonwealth." Man took possession of steam in order to transform it into the agent of his will; now we are in danger that steam may take possession of us. It may be, according to the whimsical idea of Samuel Butler in "Erewhon," that machines, like the mollusces of twenty million years back, may in time develop consciousness, and will eventually be entitled to the rights of conscious beings. Meanwhile, "seeing that they are gaining ground upon us," and that the number of those "bound down to them as slaves" is yearly increasing, it is necessary that we should, unlike Frankenstein, control our master by socialising it. When the machines, like the land, are common property, then men will have the unbridled ownership of their own bodies. Now the machines, and those who own them, rule civilization, and crush humanity to pulp. If we would "master" the machines instead of being mastered by them, we must substitute united collective capital for private competing capitals.

IN THE PRESS AND SHORTLY TO BE PUBLISHED.

LOW WAGES:
The Source of Depression, Commercial Crises, Pauperism, and Crime.

BY GEORGE BLACK, M.P.

PRICE—ONE PENNY. PER DOZEN, NINEPENCE.

"Workman," Print, 97 Bathurst St., Sydney.
The ASL position on 'the new technology' was clearly and cogently expressed in its twelve-page booklet, *Are the Machines to be Masters?*, written by George Black for the ASL and published by the ASL's General Propaganda Committee in 1893. (Geo. Black, *Are the Machines to be Masters? Another View of the Wage Question*, written for the Australian Socialist League and the Benefit of its Propaganda Fund, General Propaganda Committee, A S L, Castlereagh St, 1893, Workman Print, 7½ Bathurst St, 12pp, 1d) Black commenced with a remarkably prescient vision of the role of machines in future society, where the 'man-created, man-devouring, mechanical monster would have full play' and Mary Shelley's Frankenstein be read as 'an allegory of industrial import'. His technological imagination, though as mechanist in form as Flash Gordon's meccano-like conceptions of the future of the universe, was astonishingly correct as to the function of future technology. He predicted, for example, the annihilation of the compositor.

one may easily imagine how, through a development of the type-writer, the thinker will some day be enabled to translate his thought into leaden characters without the intervention of the compositor... The printing-machine, charged with matter for the world's enlightenment, would then proceed to give practical proof of the verity of the assertion that the more mechanical power you put into an article the less manual force is necessary, by feeding itself with paper and transmitting the sheets it had printed on one side over to another machine which, having finished the printing process, would then hand the papers on, without manual aid, to a folding-machine, which would in turn transfer them to a packing-machine, which would fasten the finished papers up in bundles, label these and, all the most expensive processes being completed, would deposit them with the public for transmission to the public. (pp.4-5)

The instincts of the Luddites had been correct, Black argued, as the increase in wealth production caused by machinery had not even been distributed 'in the proportions previously observed'. Wealth had increased proportionately more than wages, a process, Black observed, which had been taking place in Australia in the previous 50 years. (10) Moreover, the demand for employment had slackened, then as now. Black argued: 'The economic tendency of all improvements in privately-owned machinesthe economic tendency of all improvements in privately-owned machinesthe economic tendency of all improvements in privately-owned machines - when not accompanied by a shortening of hours and an increase of wages - is towards a reduction in the number of toilers'. (6) He predicted 'hordes of discharged workers dependent of public and private charity' and called on his readers to imagine the lessening of consumption consequent upon the vast reduction in the total of wages paid, which would cause a contingent reduction in the ranks of distributors.

The monopolists even would revolt against a social condition which compelled them to produce wealth that almost no one could afford to purchase, because past wealth had been so inequitably and unequally distributed that, though wants and population were yearly increasing, the means of satisfying needs were yearly diminishing.
Black maintained that if employers and employed would only read the writing on the wall they would see that heart was being eaten out of society, not only by the monopoly of land but by the monopoly of capital. 'Master and man, the machines are mastering us. Piston, lever, wheel, crank and boiler, are pressing us daily to the edge of an abyss whose name is Chaos!' (5) The only outlets for absorption of the compulsorily idle were the prison, the asylum, the hospital, and the premature grave. (8) Black's solution, the only means of averting the headlong rush towards the brink of barbarism was that machines must be made common property; people should, unlike Frankenstein, control their master by socialising it.

Now the machines, and those own them, rule civilization, and crush humanity to pulp. If we would "master" the machines instead of being mastered by them, we must substitute united collective capital for private competing capitals. (12)