thing without adding a caution that the Socialist declaration were intended in a non-natural sense.

Mr. Bax has no scheme for the taking possession or for the common owning, or for the equal participation, and he frankly says that he neither knows nor cares what will be the detailed results. Yet he demands that this kind of Socialism be put before the people of the world. I believe that Mr. Bax has been too much impressed by the specious, commonplace, nakedly fraudulent appearance of an accuracy which they can only possess in a very few superficial cases.

In his first paper Mr. Bax said: "The small capitalist is continually being thrown upon the labour-market by inability to hold his own in the competitive arena. Capital tends to become concentrated in fewer and fewer hands."

In paragraph 18 of my first paper I challenged this, and at last Mr. Bax gives a statement which he considers proof: (1) There are fewer bakers who bake as well as sell; (2) that in glass-bottle manufacturing a few large manufacturers swallow up the small ones; (3) that Netthe- fold's have nearly crushed out all other screw-makers; (4) that the carrying trade passes into the hands of large companies; (5) that a friend of Mr. Bax says that the facts (admittedly not reduced to tabular form by anyone) leave no doubt as to the truth of Mr. Bax's assertion; (6) that limited companies are on the increase.

1. If Mr. Bax's statement as to bakers were true, it would not show that there were not as many or more bakers vending with small capital or in small bakeries than the families which had on balance thrown small capitalists back on the labour-market. It might show that there had been economy in the manufacture of some classes of figures, and perhaps limits of competition.

2. The Census for 1881 (General Report, p. 42) alleges an increase in the purveyors of bread and vegetables of 12.5 per cent. since 1871. These include the fancy bakers and pastry- cooks.

3. Mr. Bax gives nothing beyond his mere statement, and therefore furnishes no means of testing it. The Census for 1881 (General Report, p. 45) states that the glass manufacturing machinery in London, &c., was reduced 10 per cent. since 1871. It is, however, a small manufacturer, only employing 19,338 men and 1,692 women.

4. Of the 21,600 persons engaged in it, 5,894 were enumerated in Lancashire, 2,070 in Yorkshire, 1,847 in London, &c., 1,219 in Worcestershire, 1,722 in Warwickshire, 1,131 in Staffordshire, and only 1,410 in all the counties of England and Wales.

5. I am unable to test this statement, of which Mr. Bax offers no evidence, and which, if true as to one small industry, would have little weight.

6. The makers of bolts, nuts, rivets, screws, and staples numbered 3,807, and had also increased very greatly, the uncorrected total in 1871 having been 79,920. So far as it goes, this is directly the opposite of Mr. Bax's assertion.

7. The Census shows an enormous increase of persons engaged in the carrying trade, and as a railway or steamship company is made up of many very small shareholders of unequal holdings, Mr. Bax's present statement is without evidence as his original assertion that "small capitalists are being thrown on the labour-market.

8. I am unable to test the suggestions of Mr. Alexander Donald. I do know that a gentleman of that name did attend some lectures delivered by me, and advanced, as if facts some most extraordinary statements, which clashed with all accessible statistics. Without going into the question of whether he is the same gentle- man, and his anachronism against the bourgeoisie (as class to which he and Mr. Bax belong) weaken the value of his too general corroboration.

9. The increase of bond side limited liability companies for manufac- turing purposes is direct evidence against Mr. Bax. It proves the existence of a large number of persons with small capital clubbed together for enterprise too large to be usefully undertaken except by such association.

10. To roughly sum up the argument. The definition of a Socialist state now advanced by Mr. Bax in his three letters, is that state in which the basic fact is that end [the means of production, the organisation, and the character, duties, and responsibili- ties of the organising beings unstated] shall take over [that is seize and appropriate, and probably by force] the means of production, distribution, and consumption. Mr. Bax concedes that is a material point as to what it means to the present possessors in case they should not agree to or should resist this transfer. There is then to be "collective ownership of these means of production" [all details as to the manner of the exercise of this ownership being positively refused], and all working is to be "not for profit of individuals or classes, but for the use of society as a whole, both collectively and individually" all the necessities and conveniences of the wealth in its own control, and the armies are to be controlled. But, according to Mr. Bax, the foregoing does not mean, and no modern Socialist would admit that it means, that organised society should own all wealth, direct all labour, and control all science and institutions, of the present order. As a matter of course, Mr. Bax adds that if I can only construe words in their ordinary everyday meaning, and to express my regret that he should have been party to signing Socialist manifestations, which, as read in their natural sense, mean one SOCIALISM FROM THE ROOT UP.

CHAPTER XX.

MARX'S DEDUCTION OF THE HISTORICAL EVOLUTION OF MODERN INDUSTRY.

Capitalism cannot be said even to begin before a number of individual owners of money employ simultaneously a number of workmen on the same terms, that is to say before the development of a concert of action towards profit among the employers, and a concert of action towards production for the profit of the employers among the em- ployed.

A greater number of labourers working together at the same time in one place (or if you will, in the same field of labour) in order to produce their own sort of commodities under the leadership of one capitalist constitutes, both historically and logically the starting-point of capitalist production.

In modern industry, the capitalist employs in it, the guilds and their crafts, not only by the greater number of the workmen employed; but this change to a new form of organisation made at once considerable difference in the rate and manner of production; there was less comparative expense of the means of production, i.e., less losses in the production of commodities, and, etc.

A consequence of this concentration of workmen under one roof was the development of the function of direction in the master as indepen- dent of his qualities as a craftsman, and the forcing on the system of this function as a necessary part of production. The master of the guild craftsman period held his place because he was a better workman and more experienced than his fellows; he did not differ from them in kind but in degree only; he fell, for instance, his place would be taken by the best workman without any disturbance in the organisation of the workshop; but the master of even the earliest period of capitalism from the beginning unimportant as a work- man when he worked, as he often did at first) but all-important as a director of work.

Simpie co-operation, says Marx, is always the prevailing form, in those branches of production in which capital acts on a large scale, and division of labour and machinery play but a subordinate part.

This sentence leads to the next development of capitalism, that of the divi- sion of labour. In the 16th century, the beginning safeguard of the growth of the word is generally understood; though it has a final development, that of machinery and the factory. This period of the division of labour, more or less pure, extends from the middle of the 16th to the end of the 19th centuries, when it has ceased to be a development, and, in our days, we cannot understand that these systems overlapped one another considerably.

The division-of-labour or manufacturing system starts under two conditions. The first is where the employer collects into one workshop workmen of various crafts, the results of whose labour are finally combined into one article, as e.g., a carriage-maker's in which wheelwright, coach-builder, upholsterer, painter, etc., work each at his own occupa- tion, and their products are combined into the one article, a finished carriage.

The other is the system in which the employer collects his workmen under one roof, and employs the whole of them as one machine in the simultaneous production of one article which has to go through various processes, these processes being apportioned to various parts of the workshop-machine. This system is developed by means of survival of the fittest; sudden increase of production seems to have been called for, and the work accordingly had to be re-organised in apportioning to different individuals, etc.

Thus this system is the ultimate goal of that illustrated by the carriage-making, in which a number of crafts had to be combined into the manufacture of one article; whereas in this (pin or needle-making may be taken as an illustration) a system of manufacture which consis- ted of portions of one craft, now become each of them a separate craft in itself.

From this follows the complete independence of each human being forming a part of the workman machine, no one of whom can produce anything by himself. The unit of labour is now no longer an individual, but a group.

But all these processes, however subdivided, and however combined,

1 The master worker of the guild system was not really a master at all, but he always had his position limited very closely, and they were all sure to become masters in their turn; the real employer of labour was the guild and the 'master' of that period was simply a foreman of the guild; and the great change consisted in the breaking down of the position of the guild as employer, and the turning of its foreman into a real master or capitalist.
were still acts of handicraft; the same necessity which forced the simple division of work into the capitalist period into division of labour, now forced the latter system to yet further development; though, indeed, other causes besides merely economic ones were at work, such as the growth of towns and cities, the division of division of labour in Society itself as to the occupations of its members. This final development was the substitu tion of the machine and the complete factory system. Thus the new system of the group of workmen, every member of which by the performance of a special piece of handicraft turns out some special part of the article made, gives the results of all these manoeuvres combined together; or to an association of machines acting in a group, as the workmen acted. The workman is no longer the principal factor in the work, the tools which he handled are now worked by a mechanism, and the mechanism, by the power, whatever it may be, which puts the whole in motion. This is the true machine of modern times, as contrasted with the mere tool-machine of the Middle Ages, a method intended only to aid to the service of the hands of the manufacturer, and not to replace the hand-stitute for him. Furthermore, the workshop gives place to the factory which is not a mere assemblage of machines under one roof, but rather a great machine itself, of which the machines are parts; as Marx says: "An organized system of machines to which motion is communicated by the transmitting mechanism from a central automaton is the most developed form of production by machinery. Here we have in place of the isolated machine a mechanical monster whose body fills whole factories, and whose demon power, at first velled under the slow and measured motion of his giant limbs, at last breaks out into the fast and furious whirl of his countless working organs."

The greatest historical event of the nineteenth century has been the revolution in pro duction of our epoch. The workman once a handicraftsman, having all control over the article he produced, next became a part of a human machine, and finally has become the servant and tender of a mechanical monster. By this the fully developed modern capitalist has come into existence.

E. Bellamy and William Morris.

**POSITIVISM AND SOCIALISM**

Although the number of those who profess Positivism as a social creed is yet small, yet, as the tendency is on the same ground, and who look for improvement in the condition of the workers to the spread of humane ideas amongst the employers, so that they may act in accordance with these ideas, it may be supposed that the social thinking of the present day is as much the same time as the smaller section, who have a more complete system of their own to propose. We will first then build up our straw man Positivism, and I will try and make him as much like the original as I can, then we will proceed to the pulling down process. The entire value of such argument, of course, depends upon whether the straw man resembles in essential points the real thing for which it stands.

If I misrepresent Positivism I shall be very glad to be corrected. As Comte says, Positivism, as I understand it, is an attempt to bring the whole field of man's knowledge and research within the range of a single system; this to some extent Science had done, and Comte calls Science merely in that sense the present system. It is with his statements and proposals about Sociology that we shall have to deal chiefly. The use of the word Positive I take to indicate the elimination out of the whole field of man's research of what Comte calls the dogmas of dogmatic sciences. He takes to mean any spiritual influence outside the laws of Nature. He does not absolutely deny the existence of any spirit, but having come to the conclusion that we can know the thing about it, he ignores it, and only deals with the relations of phenomena as they can be known and investigated by the intellect.

He arranges the sciences in order, beginning with the one he considers to be the least complex, and ending with the most complex about which we know the least. Thus Astronomy comes as one of the first and Sociology the last. He argues that Astronomy is the most simple, and that its physiological influences on the life of man, and that other govern ing elements of the heavenly bodies which are investigated by astronomy, are fewer and more simple than those which are dealt with by any other science. It is a science to which he assigns the highest place, because it is the most exact of the sciences. Physics comes next as being more complex than astronomy and less complex than chemistry, and so he ascends the scale through physiology which deals with the individual animal up to the sociology which deals with the organizations of individuals. This last, dealing as it does with the most complex organisations of the most complex animals, is the science about which he maintains least.

I have been obliged to give this short sketch of Comte's positive philosophy, as otherwise we should not have been able to understand where some of his ideas as to the practical organisation of society come from. His particularly his great division of power into the spiritual and temporal.

Starting with his scale of sciences he says that in astronomy, the simplest and most easily understood of them all, the general public does not assume that they can know anything about it without special study, but accept the teaching of the specialists and believe it; how much more when the science is Sociology, the most difficult and com plex of them all, ought they to distrust their own uneducated opinions, and follow the teaching of those who have made the science their special study! Thus he seeks to demonstrate the fallacy of democratic government, and in his system erects what he calls the "central autocracy," which he calls the speculative classes, or those who deal with abstract knowledge as opposed to those who put it in practice. In the Positivist state the speculative is the master, and the executive the servant. He considers these the theories of sociology, etc., which the next class or the temporal authority is to carry out.

The temporal authority is to consist of those who have the most absolute and mercantile scope in the industrial world, the bankers, merchants, and manufacturers, in order as given. The spiritual authority is to educate the temporal authority, and show what to do, and the executive authority, to do it. Neither, it looks as if, the intellectual knowledge, and it is upon the efficacy of this education that the proper working of the system is to depend. The manufacturer and merchant are to be educated to use their powers to the greatest advantage, and, public opinion is to be educated to make them do it. The modern Positivists follow this system, though perhaps wording things rather differently. They believe that we are in the social product, and that the chief social problem is to get the best of the rest of the community, using it not for their own exclusive benefit but for the good of all; and they wish to educate public opinion to such a pitch that it shall force men so to use their wealth by means, if necessary, of a social boycott. They say that modern industrial enterprises are best managed by individuals, and that the workers must be subordinate to these. Moreover, the indus trial questions will be the order of the day, these being the free state, and the only way to get hold of labour in quantity for his own profit, is to be educated with public cooperation, and, with public cooperation in the hands of an individual or a community of individuals.

"There is the theory of the Positivists so far as I have been able to gather it. That larger class which I spoke of above, while not going in for any "government by the people," or "spiritual authority," still thinks that the manufacturers will become more humane to their employees through the influence of education, Christianity, and public opinion. It remains for us now to examine this theory critically, and compare it with what we call Socialism."

As Comte bases what I may call the aristocratic tendency of his government, using the word in its best sense, upon his order of the sciences, we may conclude that his political convictions are based on the pretension of science that its so-called laws of nature are repre sentations of the absolute facts of nature, so 'Modern Science,' by Edward Carpenter. He there shows very clearly what that science is one of calling laws of nature are nothing more than hypotheses, made to fit our present extent of observation, which have to be revised as our field of observation widens. It is not necessary for our argument to go further into that question than to give the criticism on the order in which we have to allude to.

Now we saw that Comte maintains that we know most about such sciences as astronomy and sociology. He tells us we know least about those which form the life of one of the least of the human beings.

But is this not rather an assumption which on the face of it is surprising? When we consider the comparatively few people who even make observations of the stars and their movements, and that every single person is engaged, or at least familiar with, those things relating to individual organisation and growth, and still more on the relations of different individuals, the way they influence each other and the complex social and economic system, we can see that we may quite well be correct. Moreover, we considered the little we can possibly know about bodies millions of miles away, and also the infinitesimal portion of time during which observations have been recorded, compared with the length of time which it takes the observer to know any one of the sciences.

But is it not right that because we know so very much more of men and society that we find it more difficult to form the hypotheses which shall fit so wide an extent of observed phenomena? And is it not more likely that the exactness which we boast of in astronomy is due to the comparative ease with which we can frame hypotheses, whereas the real life of the universe of stars may be infinitely more complex than our social system, and the power and the requisite time to make observations! As though, for example, the observer observes the sun, and sees the sun go to work for eight hours and then rest for eight hours, and proceeds to make a law that men work eight hours and rest eight hours, and he predicts their actions for the next day or two; the ob served condition is the true one. But in the real life of the towns and the real life of the people, which is really the life of the towns on the seventh day, all convinced of the truth of his law about the actions of these bodies, but on the seventh day the ship gets to port and all work is stopped for some days, when it is observed that the law Comte inferred from the observations of the movements of the stars on the seventh day of their lives! —Raymond Unwin.

(To be continued.)