## CHAPTER IV.

Science and art have arrogated to themselves the right of idleness, and of the enjoyment of the labor of others, and have betrayed their calling. And their errors have arisen merely because their servants, having set forth a falsely conceived principle of the division of labor, have recognized their own right to make use of the labor of others, and have lost the significance of their vocation; having taken for their aim, not the profit of the people, but the mysterious profit of science and art, and delivered themselves over to idleness and vice--not so much of the senses as of the mind.

They say, "Science and art have bestowed a great deal on mankind."

Science and art have bestowed a great deal on mankind, not because the men of art and science, under the pretext of a division of labor, live on other people, but in spite of this.

The Roman Republic was powerful, not because her citizens had the power to live a vicious life, but because among their number there were heroic citizens. It is the same with art and science. Art and science have bestowed much on mankind, but not because their followers formerly possessed on rare occasions (and now possess on every occasion) the possibility of getting rid of labor; but because there have been men of genius, who, without making use of these rights, have led mankind forward.

The class of learned men and artists, which has advanced, on the fictitious basis of a division of labor, its demands to the right of using the labors of others, cannot co-operate in the success of true science and true art, because a lie cannot bring forth the truth.

We have become so accustomed to these, our tenderly reared or weakened representatives of mental labor, that it seems to us horrible that a man of science or an artist should plough or cart manure. It seems to us that every thing would go to destruction, and that all his wisdom would be rattled out of him in the cart, and that all those grand picturesque images which he bears about in his breast would be soiled in the manure; but we have become so inured to this, that it does not strike us as strange that our servitor of science--that is to say, the servant and teacher of the truth--by making other people do for him that which he might do for himself, passes half his time in dainty eating, in smoking, in talking, in free and easy gossip, in reading the newspapers and romances, and in visiting the theatres. It is not strange to us to see our philosopher in the tavern, in the theatre, and at the ball. It is not strange in our eyes to learn that those artists who sweeten and ennoble our souls have passed their lives in drunkenness, cards, and women, if not in something worse.

Art and science are very beautiful things; but just because they are so beautiful they should not be spoiled by the compulsory combination with

them of vice: that is to say, a man should not get rid of his obligation to serve his own life and that of other people by his own labor. Art and science have caused mankind to progress. Yes; but not because men of art and science, under the guise of division of labor, have rid themselves of the very first and most indisputable of human obligations,--to labor with their hands in the universal struggle of mankind with nature.

"But only the division of labor, the freedom of men of science and of art from the necessity of earning them living, has rendered possible that remarkable success of science which we behold in our day," is the answer to this. "If all were forced to till the soil, those vast results would not have been attained which have been attained in our day; there would have been none of those striking successes which have so greatly augmented man's power over nature, were it not for these astronomical discoveries which are so astounding to the mind of man, and which have added to the security of navigation; there would be no steamers, no railways, none of those wonderful bridges, tunnels, steam-engines and telegraphs, photography, telephones, sewing-machines, phonographs, electricity, telescopes, spectroscopes, microscopes, chloroform, Lister's bandages, and carbolic acid."

I will not enumerate every thing on which our age thus prides itself. This enumeration and pride of enthusiasm over ourselves and our exploits can be found in almost any newspaper and popular pamphlet. This enthusiasm over ourselves is often repeated to such a degree that none of us can sufficiently rejoice over ourselves, that we are seriously convinced that art and science have never made such progress as in our own time. And, as we are indebted for all this marvellous progress to the division of labor, why not acknowledge it?

Let us admit that the progress made in our day is noteworthy, marvellous, unusual; let us admit that we are fortunate mortals to live in such a remarkable epoch: but let us endeavor to appraise this progress, not on the basis of our self-satisfaction, but of that principle which defends itself with this progress,--the division of labor. All this progress is very amazing; but by a peculiarly unlucky chance, admitted even by the men of science, this progress has not so far improved, but it has rather rendered worse, the position of the majority, that is to say, of the workingman.

If the workingman can travel on the railway, instead of walking, still that same railway has burned down his forest, has carried off his grain under his very nose, and has brought his condition very near to slavery--to the capitalist. If, thanks to steam-engines and machines, the workingman can purchase inferior calico at a cheap rate, on the other hand these engines and machines have deprived him of work at home, and have brought him into a state of abject slavery to the manufacturer. If there are telephones and telescopes, poems, romances, theatres, ballets, symphonies, operas, picture-galleries, and so forth, on the other hand the life of the workingman has not been bettered by all this; for all of them, by the same unlucky chance, are inaccessible to him.

So that, on the whole (and even men of science admit this), up to the present time, all these remarkable discoveries and products of science and art have certainly not ameliorated the condition of the workingman, if, indeed, they have not made it worse. So that, if we set against the question as to the reality of the progress attained by the arts and sciences, not our own rapture, but that standard upon the basis of which the division of labor is defended,--the good of the laboring man,--we shall see that we have no firm foundations for that self-satisfaction in which we are so fond of indulging.

The peasant travels on the railway, the woman buys calico, in the isba (cottage) there will be a lamp instead of a pine-knot, and the peasant will light his pipe with a match,--this is convenient; but what right have I to say that the railway and the factory have proved advantageous to the people?

If the peasant rides on the railway, and buys calico, a lamp, and matches, it is only because it is impossible to forbid the peasant's buying them; but surely we are all aware that the construction of railways and factories has never been carried out for the benefit of the lower classes: so why should a casual convenience which the workingman enjoys lead to a proof of the utility of all these institutions for the people?

There is something useful in every injurious thing. After a conflagration, one can warm one's self, and light one's pipe with a

firebrand; but why declare that the conflagration is beneficial?

Men of art and science might say that their pursuits are beneficial to the people, only when men of art and science have assigned to themselves the object of serving the people, as they now assign themselves the object of serving the authorities and the capitalists. We might say this if men of art and science had taken as their aim the needs of the people; but there are none such. All scientists are busy with their priestly avocations, out of which proceed investigations into protoplasm, the spectral analyses of stars, and so on. But science has never once thought of what axe or what hatchet is the most profitable to chop with, what saw is the most handy, what is the best way to mix bread, from what flour, how to set it, how to build and heat an oven, what food and drink, and what utensils, are the most convenient and advantageous under certain conditions, what mushrooms may be eaten, how to propagate them, and how to prepare them in the most suitable manner. And yet all this is the province of science.

I am aware, that, according to its own definition, science ought to be useless, i.e., science for the sake of science; but surely this is an obvious evasion. The province of science is to serve the people. We have invented telegraphs, telephones, phonographs; but what advances have we effected in the life, in the labor, of the people? We have reckoned up two millions of beetles! And we have not tamed a single animal since biblical times, when all our animals were already domesticated; but the reindeer, the stag, the partridge, the heath-cock, all remain wild.

Our botanists have discovered the cell, and in the cell protoplasm, and in that protoplasm still something more, and in that atom yet another thing. It is evident that these occupations will not end for a long time to come, because it is obvious that there can be no end to them, and therefore the scientist has no time to devote to those things which are necessary to the people. And therefore, again, from the time of Egyptian and Hebrew antiquity, when wheat and lentils had already been cultivated, down to our own times, not a single plant has been added to the food of the people, with the exception of the potato, and that was not obtained by science.

Torpedoes have been invented, and apparatus for taxation, and so forth. But the spinning-whined, the woman's weaving-loom, the plough, the hatchet, the chain, the rake, the bucket, the well-sweep, are exactly the same as they were in the days of Rurik; and if there has been any change, then that change has not been effected by scientific people.

And it is the same with the arts. We have elevated a lot of people to the rank of great writers; we have picked these writers to pieces, and have written mountains of criticism, and criticism on the critics, and criticism on the critics of the critics. And we have collected picturegalleries, and have studied different schools of art in detail; and we have so many symphonies and orchestras and operas, that it is becoming difficult even for us to listen to them. But what have we added to the popular bylini [the epic songs], legends, tales, songs? What music, what pictures, have we given to the people?

On the Nikolskaya books are manufactured for the people, and harmonicas in Tula; and in neither have we taken any part. The falsity of the whole direction of our arts and sciences is more striking and more apparent in precisely those very branches, which, it would seem, should, from their very nature, be of use to the people, and which, in consequence of their false attitude, seem rather injurious than useful. The technologist, the physician, the teacher, the artist, the author, should, in virtue of their very callings, it would seem, serve the people. And, what then? Under the present regime, they can do nothing but harm to the people.

The technologist or the mechanic has to work with capital. Without capital he is good for nothing. All his acquirements are such that for their display he requires capital, and the exploitation of the laboringman on the largest scale; and--not to mention that he is trained to live, at the lowest, on from fifteen hundred to two thousand a year, and that, therefore, he cannot go to the country, where no one can give him such wages,--he is, by virtue of his very occupation, unfitted for serving the people. He knows how to calculate the highest mathematical arch of a bridge, how to calculate the force and transfer of the motive power, and so on; but he is confounded by the simplest questions of a peasant: how to improve a plough or a cart, or how to make irrigating canals. All this in the conditions of life in which the laboring man finds himself. Of this, he neither knows nor understands any thing,--less, indeed, than the very stupidest peasant. Give him workshops, all sorts of workmen at his desire, an order for a machine from abroad, and he will get along. But how to devise means of lightening toil, under the conditions of labor of millions of men,--this is what he does not and can not know; and because of his knowledge, his habits, and his demands on life, he is unfitted for this business.

In a still worse predicament is the physician. His fancied science is all so arranged, that he only knows how to heal those persons who do nothing. He requires an incalculable quantity of expensive preparations, instruments, drugs, and hygienic apparatus.

He has studied with celebrities in the capitals, who only retain patients who can be cured in the hospital, or who, in the course of their cure, can purchase the appliances requisite for healing, and even go at once from the North to the South, to some baths or other. Science is of such a nature, that every rural physic-man laments because there are no means of curing working-men, because he is so poor that he has not the means to place the sick man in the proper hygienic conditions; and at the same time this physician complains that there are no hospitals, and that he cannot get through with his work, that he needs assistants, more doctors and practitioners.

What is the inference? This: that the people's principal lack, from which diseases arise, and spread abroad, and refuse to be healed, is the lack of means of subsistence. And here Science, under the banner of the division of labor, summons her warriors to the aid of the people. Science is entirely arranged for the wealthy classes, and it has adopted for its task the healing of the people who can obtain every thing for themselves; and it attempts to heal those who possess no superfluity, by the same means.

But there are no means, and therefore it is necessary to take them from the people who are ailing, and pest-stricken, and who cannot recover for lack of means. And now the defenders of medicine for the people say that this matter has been, as yet, but little developed. Evidently it has been but little developed, because if (which God forbid!) it had been developed, and that through oppressing the people,--instead of two doctors, midwives, and practitioners in a district, twenty would have settled down, since they desire this, and half the people would have died through the difficulty of supporting this medical staff, and soon there would be no one to heal.

Scientific co-operation with the people, of which the defenders of science talk, must be something quite different. And this co-operation which should exist has not yet begun. It will begin when the man of science, technologist or physician, will not consider it legal to take from people--I will not say a hundred thousand, but even a modest ten thousand, or five hundred rubles for assisting them; but when he will live among the toiling people, under the same conditions, and exactly as they do, then he will be able to apply his knowledge to the questions of mechanics, technics, hygiene, and the healing of the laboring people. But now science, supporting itself at the expense of the working-people, has entirely forgotten the conditions of life among these people, ignores (as it puts it) these conditions, and takes very grave offence because its fancied knowledge finds no adherents among the people.

The domain of medicine, like the domain of technical science, still lies untouched. All questions as to how the time of labor is best divided, what is the best method of nourishment, with what, in what shape, and when it is best to clothe one's self, to shoe one's self, to counteract dampness and cold, how best to wash one's self, to feed the children, to swaddle them, and so on, in just those conditions in which the workingpeople find themselves,--all these questions have not yet been propounded.

The same is the case with the activity of the teachers of science,--pedagogical teachers. Exactly in the same manner science has so arranged this matter, that only wealthy people are able to study science, and teachers, like technologists and physicians, cling to money.

And this cannot be otherwise, because a school built on a model plan (as a general rule, the more scientifically built the school, the more costly it is), with pivot chains, and globes, and maps, and library, and petty text-books for teachers and scholars and pedagogues, is a sort of thing for which it would be necessary to double the taxes in every village. This science demands. The people need money for their work; and the more there is needed, the poorer they are. Defenders of science say: "Pedagogy is even now proving of advantage to the people, but give it a chance to develop, and then it will do still better." Yes, if it does develop, and instead of twenty schools in a district there are a hundred, and all scientific, and if the people support these schools, they will grow poorer than ever, and they will more than ever need work for their children's sake. "What is to be done?" they say to this. The government will build the schools, and will make education obligatory, as it is in Europe; but again, surely, the money is taken from the people just the same, and it will be harder to work, and they will have less leisure for work, and there will be no education even by compulsion. Again the sole salvation is this: that the teacher should live under the conditions of the working-men, and should teach for that compensation which they give him freely and voluntarily.

Such is the false course of science, which deprives it of the power of fulfilling its obligation, which is, to serve the people.

But in nothing is this false course of science so obviously apparent, as in the vocation of art, which, from its very significance, ought to be accessible to the people. Science may fall back on its stupid excuse, that science acts for science, and that when it turns out learned men it is laboring for the people; but art, if it is art, should be accessible to all the people, and in particular to those in whose name it is executed. And our definition of art, in a striking manner, convicts those who busy themselves with art, of their lack of desire, lack of knowledge, and lack of power, to be useful to the people. The painter, for the production of his great works, must have a studio of at least such dimensions that a whole association of carpenters (forty in number) or shoemakers, now sickening or stifling in lairs, would be able to work in it. But this is not all; he must have a model, costumes, travels. Millions are expended on the encouragement of art, and the products of this art are both incomprehensible and useless to the people. Musicians, in order to express their grand ideas, must assemble two hundred men in white neckties, or in costumes, and spend hundreds of thousands of rubles for the equipment of an opera. And the products of this art cannot evoke from the people--even if the latter could at any time enjoy it--any thing except amazement and ennui.

Writers--authors--it appears, do not require surroundings, studios, models, orchestras, and actors; but it then appears that the author needs (not to mention comfort in his quarters) all the dainties of life for the preparation of his great works, travels, palaces, cabinets, libraries, the pleasures of art, visits to theatres, concerts, the baths, and so on. If he does not earn a fortune for himself, he is granted a pension, in order that he may compose the better. And again, these compositions, so prized by us, remain useless lumber for the people, and utterly unserviceable to them.

And if still more of these dealers in spiritual nourishment are developed further, as men of science desire, and a studio is erected in every village; if an orchestra is set up, and authors are supported in those conditions which artistic people regard as indispensable for themselves,--I imagine that the working-classes will sooner take an oath never to look at any pictures, never to listen to a symphony, never to read poetry or novels, than to feed all these persons.

And why, apparently, should art not be of service to the people? In every cottage there are images and pictures; every peasant man and woman sings; many own harmonicas; and all recite stories and verses, and many read. It is as if those two things which are made for each other--the lock and the key--had parted company; they have sprung so far apart, that not even the possibility of uniting them presents itself. Tell the artist that he should paint without a studio, model, or costumes, and that he should paint five-kopek pictures, and he will say that that is tantamount to abandoning his art, as he understands it. Tell the musician that he should play on the harmonica, and teach the women to sing songs; say to the poet, to the author, that he ought to cast aside his poems and romances, and compose song-books, tales, and stories, comprehensible to the uneducated people,--they will say that you are mad.

The service of the people by science and art will only be performed when people, dwelling in the midst of the common folk, and, like the common folk, putting forward no demands, claiming no rights, shall offer to the common folk their scientific and artistic services; the acceptance or rejection of which shall depend wholly on the will of the common folk.

It is said that the activity of science and art has aided in the forward

march of mankind,--meaning by this activity, that which is now called by that name; which is the same as saying that an unskilled banging of oars on a vessel that is floating with the tide, which merely hinders the progress of the vessel, is assisting the movement of the ship. It only retards it. The so-called division of labor, which has become in our day the condition of activity of men of science and art, was, and has remained, the chief cause of the tardy forward movement of mankind.

The proofs of this lie in that confession of all men of science, that the gains of science and art are inaccessible to the laboring masses, in consequence of the faulty distribution of riches. The irregularity of this distribution does not decrease in proportion to the progress of science and art, but only increases. Men of art and science assume an air of deep pity for this unfortunate circumstance which does not depend upon them. But this unfortunate circumstance is produced by themselves; for this irregular distribution of wealth flows solely from the theory of the division of labor.

Science maintains the division of labor as a unalterable law; it sees that the distribution of wealth, founded on the division of labor, is wrong and ruinous; and it affirms that its activity, which recognizes the division of labor, will lead people to bliss. The result is, that some people make use of the labor of others; but that, if they shall make use of the labor of others for a very long period of time, and in still larger measure, then this wrongful distribution of wealth, i.e., the use of the labor of others, will come to an end. Men stand beside a constantly swelling spring of water, and are occupied with the problem of diverting it to one side, away from the thirsty people, and they assert that they are producing this water, and that soon enough will be collected for all. But this water which has flowed, and which still flows unceasingly, and nourishes all mankind, not only is not the result of the activity of the men who, standing at its source, turn it aside, but this water flows and gushes out, in spite of the efforts of these men to obstruct its flow.

There have always existed a true science, and a true art; but true science and art are not such because they called themselves by that name. It always seems to those who claim at any given period to be the representatives of science and art, that they have performed, and are performing, and--most of all--that they will presently perform, the most amazing marvels, and that beside them there never has been and there is not any science or any art. Thus it seemed to the sophists, the scholastics, the alchemists, the cabalists, the talmudists; and thus it seems to our own scientific science, and to our art for the sake of art.