

individuality. This instinct for variation must have play, or progress ceases. Civilization proceeds by trial and error in work, and not by the conscious plans of statesmen.

Monotony in life, of course, is the price that men pay for living together in groups in order and security, but it intensifies labor-strain tremendously, I think; and, unless relief comes in the minutiae of the job, men are pretty apt to find the social order oppressive. Emotional repression imposed through modern toil is responsible for many industrial flare-ups. That, at least is the testimony of Mr. Muehlenbach, of Hart, Schafner & Marx, whom I heard talk on that subject a while ago. That blind resentment, of course, will continue no matter who owns the machines. It is a great question with the psychologist and the biologist how long the innovating tendencies may be repressed without dulling the human mind. The carpenter year in and year out on the job, for instance, is pretty apt to emerge more clumsy in other craft efforts. He may be able to lay the floors faster than before, but he cannot build the stairs and the roof as fast; and he becomes, consequently, somewhat less adapted to the ordinary all-around work of the community and perhaps less useful as a citizen.

Hoover seems to think a little about everything, and he expressed himself as follows on the devolution of the individual in the large scale machine process industry. He says, "The vast repetitive processes are dulling the human mind." And again: "We must take into account tendencies of our present repetitive industries to eliminate the creative instinct in their workers, to narrow their fields of craftsmanship, to disregard the contributions which could be had from their minds as well as their hands. Indeed, if we are to secure the development of our people, we cannot permit the dulling of these sensibilities." The scope of that dulling, if the minute division of labor and automatic processes work out that way, is unequalled in extent. I do not think that there ever has been any organization of society which has presented that dulling feature to the extent ours does at present. You see, industrial efficiency calls for close concentration upon the unvarying task, for rigid control of work environment, for the elimination of excitement and thrills, for the subordination of personalities; and the obvious result of all this is to reduce the common man eventually to an automaton.

Now who is this common man? The Army intelligence tests showed that he has a mental age of thirteen

to fifteen years; is fairly adaptable, loyal, conservative; accepting leadership, he shakes down into a plodding citizen after the first flush of youth is over; more prone to become excited over little things than to give thought to big things, he is nevertheless, in the last analysis, the common sense of the world; without him as a brake, we people of imagination would run away with ourselves. The poet Lowell has this to say on the subject of people of this sort and their conservative influence on social development:

What countless years and wealth of brain were spent  
To bring us hither from our caves and huts,  
And trace through pathless wilds the deep-worn ruts  
Of faith and habit, by whose deep indent  
Prudence may guide if genius be not lent?  
Genius, not always happy when it shuts  
Its ears against the plodder's ifs and buts,  
Hopping in one rash leap to snatch the event.  
The coursers of the sun, whose hoofs of flame  
Consume morn's misty threshold, are exact  
As bankers' clerks, and all this star-poised frame  
One swerve allowed, were with convulsion racked;  
This world were doomed, should Dullness fail—to tame  
Wit's feathered heels in the stern stocks of fact.

That seems to be quite significant. Now I have here a little human document. This was written to me by an I. W. W. from Los Angeles and gives one man's reaction to the monotony of modern industry. This fellow addresses his letter "Dear Reverend":

Dec. 16, '21.

Dear Rev.:

I tore this article of yours out of the Los Angeles record simply to let you know your theory is the only real truth I've read for some time.

I am too like a lion in a cage and monotony drives me mad. That is what has made a wanderer out of me.

My habits are good and so are my desires and ambition, but I have a craving for something new.

I started bumming when I was 16 and have had 6 years of hard grind.

I don't want to wander, but I grow staled in one place and unhappy, my imagination gets ahead of what I can really do. And I am only one of the 10,000,000 drifters from 1 place to the other. I am dissatisfied with a common place job and yet I am filled for nough.

I am one of the fastest riding hoboos on a railroad train, but I feel myself slipping on the wrough train.

My machine has got automotic on the wrough road.

And how you going to stop it? Some time when your mind is not working a double shift on anything write a line if it will help things.

I am with you for the best of luck for the coming year.

No doubt you think I have painted a bleak picture in black and white, but let us tone it down all we can. At the machine a man must stew in his own juice. If his life is a happy life, if his children are well and

strong and his wife does not treat him like this wife—you know there is a sort of a defense reaction now among wives. In *Life* the other day there was a picture of a wife lolling on a sofa when her husband came in from work. The husband said, "Well, is there any reason why we should not go out tonight?" The wife said, "No, not unless you want to stay in." Well, when a man's home life is not at all like that, when he is happy, he can get on very nicely on a machine; he can think things over with a mind more or less at rest; he is all at peace with the world; he can plan his holiday, think about his children and how well they are getting on in school and picture his little garden. While attending to his machine, he has short vacations from consciously directed thinking. But, on the other hand, if he is torn by fear and worry, if he feels himself the butt of titanic forces beyond his control, it seems to me self-evident that he is going to lead a sour and anti-social existence, particularly if he has no hobby, no avocation, nothing which lets him express his personality after his machine has stopped running.

That is why I have given a good deal of attention to this matter of education for leisure. It seems to me that our schools need to teach the things that the shop cannot teach. The shop can teach concentration and direction of effort, but it cannot teach delight in life, nor can it infuse men with the spirit of truth nor show people very well how to spend their leisure time ethically and profitably. The public schools for years have been teaching the philosophy of success to people who, by no stretch of the imagination, can possibly become eminent in wealth or position. Men who test thirteen years by the Binet scale can never become successful men; they are always in the led majority—they need leaders. Yet men of that stamp have been told, for twenty years at least, that they must succeed. And having failed, the conviction of failure is on them—what the psychologists call a failure complex oppresses millions in our society. I dare say there are millions of people in this country who have lived as well and as fully as they could, who have paid their debts and reared families, and who certainly deserve something better than the Scottish verdict on their lives. So, I say, it is time for the public schools to quit teaching the philosophy of success, and let them try to make a success of philosophy.

Of course all over this country, in the shops of the character I have been describing, efforts are being made by the employers to shift this burden of mental distress. Something has been done very successfully

out at Washington, Pa., on jobs, and something more is being done right along by fitting men to jobs for which they are mentally adapted. A good deal is going to be done, I feel sure, in making jobs interesting by showing the workers the whole process and by bracing up non-financial incentives as described in Mr. Robert Wolf's paper—a very able paper, as all of you know. Then, too, the team-play spirit can be roused through cooperation, and the possessive interest can also be aroused through such things as ownership of shares.

One of the things which most distresses industrial labor, I fancy, is its relative insecurity. The automatic machine and the whole process of transferring skill from the man to the machine has had a tendency to widen the circle of competition for each job. For instance, in our factories in Flint, a farm boy can make himself useful in the production cycle in from three to ten days' drilling. The result is that with respect to many of those jobs in our factories, the men on the job can go without the boss feeling any great distress about it; the men have only a slight hold on their jobs. Their insecurity has been increasing. And of course, when the job becomes insecure then the home becomes insecure, and you at once arouse a defense reaction in that man's mind.

We all know the application of psychology to work is very old indeed, but lately it has been done more scientifically. The good employment agent has always been a rough and ready psychologist, and the good foreman has always done his work with some insight into human nature. Of late a vast new body of knowledge has been developed under the head of psychology, with branches in sociology, psychiatry and psychoanalysis, and the laws of mentality have been worked out to such an extent that physicians are using them successfully in combating this 50 per cent of disease flowing from nervous origin. These sciences are being applied very zealously in many plants. A good many of you have read Mr. Boyd Fisher's paper recently, issued from Boston, in which he comes out flatfootedly for our acceptance of the doctrine of limited accountability for help. He says quite frankly that the majority must be led, and the only thing to do with them is to find out what they can do and then see that they do it, taking good care of them meanwhile. And perhaps some of you have read also of the work done by Miss Elizabeth Bigelow in the United States Rubber Company, appearing in *Mental Hygiene* for April of last year. Miss Bigelow took,