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THE MACHINE PROCESS IN MODERN CIVILIZATION.

THE most striking feature in modern civilization, or rather, the civilization of to-day, is the machine process. It has invaded every department of activity, and dominates all in a mechanical sense. Its power is seen in the application of mechanical measurements to purposes, acts and the amenities of life. Of course the discipline falls more directly on the workmen engaged in mechanical industries; but only less so on the rest of the community. Wherever the machine process extends it shapes and determines the manner of life of the workmen, The individual has large and small. become, in truth, a factor in the me-The movements of chanical world. this world controls him. No doubt the furnace, the locomotive, the ship, are the work of his hands.; are inanimate, and he is the intelligence which gives order and symmetry to the whole design and fabric of the mechanism in which he is moving. Nevertheless, the process comprises him; and it is because he is obliged to take an intelligent, directing part in what is going forward, that the mechanical process has its chief effect upon him. This process compels him to adjust his standards in fixed and definite ways. He cannot do with the machine whatsoever he may wish. He must take

thought and act in terms given him by the process that is going forward. In other words his thinking in the premises is reduced to standards of gauge and grade. If he fails in the precise measure, the outcome of the process checks his aberration and drives home the sense of the need of absolute conformity to the work in hand as involved in the whole process.

This does not mean in the least, of course, that the process lowers the degree of intelligence of the workman. Of necessity a man must be intelligent and accurate to be intrusted with any one of the numberless modern contrivances in the mechanical process. He is a better workman the more intelligent he is. But the intelligence acquired in this disciplinary process is of a peculiar kind. The machine process requires close and unremitting thought-thought that runs in standard terms of quantitative precision. Other intelligence on the part of the worker is useless for the matter in hand; or it is even worse than useless. He cannot take to myth-making; nor impute purposes of benevolence and justice to the active forces in his work, such as is done in the fairy-tale or in pulpit oratory; for then he is sure to go astray. We observe, then, that his habitual thinking is carried forward