## CHAPTER 6 — THE RELATION OF TIME IN PRODUCTION

As space is the relation of things in extension, so time is a relation of things in sequence. All production of wealth takes place in sequence and requires time. The tree must be felled before it can be hewn or sawed into lumber; lumber must be seasoned before it can be used in building or wrought into the manifold articles made of wood. Ore must be taken from the vein before it can be smelted into iron, or from that form turned into steel or any of the manifold articles made from iron or steel. Seeds must be planted before they can germinate; there must be a considerable interval of time before the young shoots can show themselves above the ground; then a longer interval before they can grow and ripen and produce after their order; the grain must be harvested and ground before it can be converted into meal or flour. In exchanging, time is required even for the concurrence and expression of human wills which result in the agreement to exchange, and still more for the actual transference of things which completes the exchange. In short, time is a necessary element or condition in all exertion of labor in production.

Now, from this necessary element or condition of all production, time, there result consequences similar to those which result from the other necessary element or condition of all production, space. That is to say, there is a law governing and limiting the concentration of labor in time, as there is a law governing and limiting the concentration of labor in space. Thus there is in all forms of production a point at which the concentration of labor in time gives the largest proportionate result; after which the further concentration of labor in time tends to a diminution of proportionate result, and finally to prevent results.

Thus there is a certain degree of concentration of labor in time

(the intensity of exertion), by which the individual can in any productive occupation accomplish on the whole the largest result. But if a man work harder than this, endeavoring to concentrate more exertion in a shorter time, it will be to the relative and finally to the absolute loss of productiveness — a principle which gives its point to the fable of the hare and the tortoise.

And so, if I go to a builder and say to him, "In what time and at what price will you build me such and such a house?" he would, after thinking, name a time, and a price based on it. This specification of time would be essential, and would involve a certain concentration of labor in time as the point of largest return or least cost. This I would soon find if, not quarreling with the price, I ask him largely to lessen the time. If I were a man to whom cost is nothing and time everything, I might get the builder somewhat to reduce the time in which he would agree, under bond, to build a house; but only by greatly increasing the price, until finally a point would be reached where he would not consent to build the house in less time no matter what the price.

And so, although the concentration of labor in agriculture may with decreasing efficiency hasten beyond the normal point the majority of vegetables or fruit or even of animals, yet the point of absolute non-productiveness of further applications of labor is soon reached, and no amount of human exertion applied in any way we have yet discovered could bring wheat from the seed to the ear, or the chick from the egg to the laying hen, in a week.

The importance in political economy of this principle that all production of wealth requires time as well as labor we shall see later on; but the principle that time is a necessary element in all production we must take into account from the very first.