

pensable condition of their rise in comforts, and of "the future improvement of Society."

These discussions have attracted great attention almost to the present day, and have been supposed to be very pertinent to the subject of wages, and thus to be an important part of Political Economy; but when one looks more closely, the force of that spring of population which the Creator has coiled up in the nature of man, as contrasted with the weakness of that power by which the earth brings forth sustenance for man, is seen to be a topic in Physiology and not in Political Economy at all. Political Economy presupposes the existence of Persons able and willing to make exchanges with each other, before it even begins its inquiries and generalizations. How they come into existence, the rate of their natural increase, and the ratio of this increase to the increase of food, however interesting as physiological questions, have clearly nothing to do with our Science. Each adult human being is as much constituted by Nature to receive personal services as to render them, in Economics each without exception receives when and because he renders, and all alike are naturally able to become capitalists also; economical laws present no obstacles, that we can see, to all men becoming *rich*, as we use that term; the town or city in which many people are growing rich simultaneously, is the best place in the world for other people to go to get rich in, and not at all towns in which other people are getting poorer; most men are unwilling, some perhaps may be unable, to fulfil the moral conditions of growing rich; while, we may depend upon it, the famines of the world have been caused more by the indolence and want of foresight of individuals, and especially by the monstrous maladministrations of Governments, than by any law of the increase of population.

Experience too has shown, that the strong impulse in

mankind towards procreation is not too strong for the purpose intended by the Creator; that HE who is the author of the impulses is author also of natural counter-workings of them; that, as men under moral and religious training come more and more under the influence of reason and affection, the preventive checks to population come silently and effectually into operation; and that, taking the world at large, food and comforts have more than kept pace with the stride of population, since its inhabitants as a whole were plainly never so well fed and clothed and housed as now. The abstract antagonism of the law of the increase of population with the law of the increase of food, or what we prefer to call the law of diminishing returns from Land, may be admitted, if one chooses to insist on it; but any practical *tendency* of these to come into collision, as the world is and is to be, is confidently denied. When Malthus wrote, and long afterwards, England was under the dominance of Protectionism; the wretched Corn-laws forbidding the importations of foreign grain, in order that the domestic growers might sell to their countrymen at artificial prices, and thus grow the richer as bread became the dearer, were only repealed in 1846; and the demonstrated ability of Great Britain under free trade to draw on the fertility of the whole world for the steadily and increasingly cheap maintenance of her people, demonstrates the irrelevancy of Malthusianism to the Science of Economics.

The Supply of personal services at any time or place in answer to the Demand for them, is affected by several important circumstances, which we shall now proceed to consider in their order.

(a) The *agreeableness* or disagreeableness of rendering a given set of services will affect the Supply of laborers at that point, and help to determine the rate of Wages paid to them; because the more agreeable employment will

attract the larger number of laborers, will experience in consequence the press of competition, and the rate of wages then and there will be lessened thereby. The more disagreeable employment will feel less the pressure of numbers, and will secure, other things being equal, a higher rate of remuneration in consequence. Among the elements which, in spite of diversity of tastes, make any employment agreeable or disagreeable to the laborers, are (1) the less or greater exertion of physical strength required, (2) the healthfulness or unhealthfulness of the service, (3) its cleanliness or dirtiness, (4) the degree of liberty or confinement in it, (5) the safety or hazard of the employment, (6) the esteem or disrepute of it in public opinion. To illustrate each of these in order, the stone-mason, the glass-blower, the scavenger, the factory operative, the worker in a powder-mill, the smuggler, will each receive a larger compensation owing to the peculiar element of disagreeableness involved in his own personal service; and he will be able to demand and secure the higher rate through the action of this disagreeableness upon the Supply of such laborers. Of all these elements, public opinion is perhaps the most operative; and if this be favorable to an employment, and some social consideration be attached to it, and only common qualifications be required for it, the wages in it will infallibly be low. This is doubtless the main reason why so many young women prefer to teach, rather than be employed in mills or shops or offices, and why the wages of female teachers have been so remarkably low; although each of the elements of agreeableness specified above may also contribute something towards the same result. If a business be decidedly opposed to public opinion, it must hold out the inducement of a large reward, or nobody will engage in it. This explains the abnormal gains of the slave-trade, the liquor-business, of gambling-houses, and of lotteries.

(b) The *easiness* or difficulty of learning to render acceptably a given set of personal services, will have a quick and constant influence on the Supply of these services, and of course also on the rate of the return paid for them. The elements of this Difficulty in general are time, expense, lack of natural gifts, want of foresight on the part of those concerned, and lack of push and persistency on the part of the learner himself. To put a boy apprentice to a trade, for example, requires on the part of the parents a foresight, an ability to get on without his immediate help, and sometimes also an amount of money for his board and clothes which all parents do not possess; many boys too, who must acquire their skill to sell personal services when they are young, if at all, find on trial that they do not like the trade, or have not the requisite gifts, or fail in the appropriate patience and propulsion; and the consequence is, that the Supply of laborers along that particular line is lessened, and the right to demand and the ability to secure a higher rate of wages than is accorded to common laborers accompany the small supply, through the reduction of numbers which these obstacles at the entrance occasion and the consequent weakness of competition. This is one principal ground of the difference in the wages of skilled and unskilled laborers; the other being, as we have seen, the stronger and more constant Demand for the former, owing to the impulse imparted by Capital. All these points of difficulty at the outset apply still more strongly in the case of professional laborers, serving more effectually to thin out the ranks of these, and pushing upward still higher the gauge of compensation for the successful competitors.

(c) The *constancy* or inconstancy of prospective employment in a given business, is a consideration that affects the Supply within it, and then the wages. If the services

be of such a character, that they can only be carried on during nine months of the year, the wages of the renderers will be greater by the day or the month than they would be, provided the services were in order during all the twelve months. The laborer is apt to look at the aggregate earnings of the year, and will hardly take up a trade which affords employment but a part of the time, unless some compensation can be found in the higher wages for that time. This is the chief reason why the wages of the mason and house-painter, in this climate at least, are higher than those of the blacksmith and carpenter. The coachman, also, may stand by his horses half the day or night with no call for his services, and must have, therefore, a proportionably higher fare from those whom he does transport. In general, it is found that men prefer a constant rendering with a lower rate of pay, than an inconstant one with a prospect of larger wages for the particular jobs actually done; and because the many prefer that, those who take up with the other are able to secure a higher relative rate of pay in their less eligible vocation. It must be noticed, however, as counterworking this, that some men have desire for intervals of leisure in their business, and for opportunity to make these intervals subservient to some avocation or other means of livelihood.

(d) The *probability of success* or the opposite in any line of personal services, is a circumstance that has some influence on the rate of wages paid in it, through the action of this probability on the numbers of those who enter upon it. If ultimate success be doubtful, fewer persons will naturally engage in such a business, and those who dare in it and succeed, will probably reap a very high reward. So, also, those who take jobs by the contract, and therein assume more or less of risk, are commonly paid at a higher rate for their services than those who do similar

work by the day. It is true, that this is owing partly to the fact that the contractor usually puts in his own capital more or less, and must therefore be paid profits as well as wages, and also that the wages of superintendence are due to him in addition to ordinary wages; still, there is a residuum of difference, which can only be accounted for by the risk he runs of a successful issue of his contract. The general variation in Supply and wages from this fourth cause, would certainly be greater than it is, were it not for the overweening confidence which men in all generations seem to have in their own good luck. This excess of worldly faith is always seen in the rush which is made for newly discovered mining regions. It was seen to perfection in 1889 in the uncontrollable advance of thousands *into*, and their almost immediate exit *out of*, the then just opened territory of Oklahoma. The facility with which lottery tickets are sold even yet in many countries proves the prevalence of this over-confidence. It is demonstrable beforehand on the doctrine of Chances, that no person can rationally buy *any* lottery ticket at its advertised price, because if that person should buy all the tickets advertised he would certainly lose money, since the sum of the prizes is always less than the sum of the prices. Otherwise the projectors of the lottery would always lose money.

(e) The *mobility* or immobility of laborers as a class acts powerfully upon the Supply of them at any one time and place, and consequently upon the rates of wages then and there. In some countries, notably in the United States, laborers as a class move from place to place with considerable facility under the action of Demand for personal services. According to the Census of 1870, 7,500,000 of the native population dwelt in other States than those in which they were born. Many of these, doubtless, had

left their native region to obtain more fertile land, and many also to obtain more remunerative employment as laborers. The native American, more than most other persons, is not only willing to move from place to place in the hope of bettering his condition, but is also willing to change his occupation from time to time in the same hope. There is more freedom of movement locally, and less fixedness of occupation on the part of laborers and others, in this country than in any other industrial country. Even foreign immigrants here, — factory operatives, miners, and other laborers, — seem to catch after a while the spirit of the country in both these respects. There is one considerable advantage in all this, namely, competition becomes more uniform in all places, an unusual demand for laborers at any one point is easily met, and wages neither rise so high nor fall so low at special points as they otherwise would. But there are considerable disadvantages in all this too, chiefly these, the services of laborers floating locally or changing the kind of their labor can never become so excellent as service more *steady* in place and time; and, especially, thorough apprenticeships, or whatever may be equivalent to these, are held in too little esteem by public opinion, and are too little requisite in order to obtain transient employment. To meet the obvious pressure of these disadvantages, an admirable device is now being hit on, namely, to introduce into our public schools something in the way of "manual training" for the various trades. Public institutions also, some of them on a great scale, as the Cooper Union in New York and a more recent munificent foundation in Philadelphia, have been established on purpose to train boys and girls both in eye and hand to render skilfully those artisan services of the various kinds which will always be in demand among men, and which have certainly deteriorated among us

owing in part to the disuse of the old apprenticeship-system.

In Europe, on the other hand, the laborers as a class are far less mobile than here; and in Asia still less so. There is said to be no country in Europe in which the proportion of foreigners to the native population exceeds *three per centum*. In England, which is a small country, the difference in Wages between the northern and southern counties is very remarkable. Professor Fawcett is authority for the statement, that an ordinary agricultural laborer in Yorkshire during the winter months earns 13 shillings a week, while a Wiltshire or Dorsetshire laborer doing similar work during the same number of hours earns but 9 shillings. The contrast in general between the Wages of English agricultural laborers and those paid in mills and mines and furnaces is still more striking. And so more or less, in respect to the Value of Commodities: competition is yet by no means perfect in distributing these so as to make their price uniform in the same country or even in the same county; but the immobility of laborers for an obvious reason is much greater than the immobility of goods. While laborers should certainly be free to go wherever their services may be in greater Demand, the natural reluctance of most men to leave their native haunts, enables each of the nations to work out its freely chosen ends without wholesale interference from abroad. If China should precipitate itself upon the United States, or India upon England, as the mere *economical* impulse might indicate, it would be disastrous to the western nations; but men are everywhere under other influences besides the economical one, although this is strong and distinct and pervasive; Political Economy deals with men as they *are* all things considered, and with Buying and Selling as this actually takes place over the

world, or rather as it would take place if factitious economical restraints were removed; and Providence has other great ends in view besides commercial prosperity, vital as that is to all other progress, and often holds one impulse in check by a stronger one.

(f) *Custom*, with its cognates *Prejudice* and *Fashion*, has still a good deal to do with the Supply of laborers in certain departments of effort, and of course with the rates of wages in them. In former times in this country and in the older countries particularly, Custom and decree were dominant in determining, for example, the current fees of lawyers and doctors, competition coming in to decide how many such fees a professional laborer should get, rather than the amount of each particular fee. The shares of the produce going respectively to the agricultural tenant and to the landowner, were specially under the dominion of Custom; as the mode (now decadent) of taking farms "*at the halves*," once universally prevalent in New England, sufficiently shows. In certain other matters relating to land and trade, Custom has long been gradually hardening into express law, as, for instance, the famous "*Ulster Right*" in Ireland. Prejudice, which is only another name for Custom, has some voice still in adjusting rates of wages, as may be seen in women's wages crowded down apparently to a point unreasonably low as compared with the wages of men; and also in the rate of John Chinaman's wages in those parts of the United States where he ventures to offer his services in the teeth of public opinion and hostile legislation. It may be spoken with general truth and satisfaction, that competition seems now to be breaking down mere custom and prejudice in all directions, and may perhaps in the good time coming reign supreme over the economic field; while Fashion, which bears indeed on one side of its shield the motto "*custom*," carries too on

the other the bold word "*competition*," and this second side is likely to be presented to the public mostly in the future, because, they who lead the styles in any department whatsoever will always offer their services to Society at an advantage to themselves, that being one form of competition, and their rate of compensation will be legitimately higher than the average rate of their fellows, of which a good instance was the marked worldly prosperity during the decade of the Eighties of Worth, the man-dressmaker of Paris.

(g) *Legal Restrictions* are another cause acting on wages, by acting directly on the Supply of laborers. Laws inhibiting or promoting immigration; laws appointing the fees and salaries of officials; tariff-taxes, whether prohibitory or only restrictive; laws creating privileged classes of any kind, which is only another designation for laws restricting the rights of the masses; unequal modes of taxation, whether adopted in ignorance or by design; all have a direct and powerful agency upon the distribution of laborers, upon the supply of them at given points, and upon the rates of their wages. Governments are coming, however, much more freely than formerly, but never through their natural choice and drift as governments, only by the gradual and oft-disappointed compulsion of their citizens, to leave all these matters Economical except the wages of their own servants and those commodities which they choose to tax, to the simple and safe action of Supply and Demand.

(h) *Voluntary Associations* for that avowed purpose were a mediæval, and have come to be again a modern, agency in adjusting the Supply of laborers to their respective markets, and in regulating the wages of various classes of them. The Guilds of the Middle Ages, and particularly the old guilds of London, had a remarkable history, upon

which we can not here even touch. Their local importance is sufficiently attested by the fact, that the City Hall of London is to this day the "Guildhall." King Edward III. humored the civic feeling of his time by becoming himself a member of the Guild of Armorers. "A seven years' apprenticeship formed the necessary prelude to full membership of any trade-guild. Their regulations were of the minutest character; the quality and value of work was rigidly prescribed, the hours of toil fixed from day-break to curfew, and strict provision made against competition in labor. At each meeting of these guilds their members gathered round the Craft-box, which contained the rules of their Society, and stood with bared heads as it was opened. The warden and a quorum of guild-brothers formed a court which enforced the ordinances of the guild, inspected all work done by its members, confiscated unlawful tools or unworthy goods; and disobedience to their orders was punished by fines, or in the last resort by expulsion, which involved the loss of right to trade. A common fund was raised by contributions among the members, which not only provided for the trade objects of the guild, but sufficed to found chantries and masses, and set up painted windows in the church of their patron saint. Even at the present day the arms of the craft-guild may often be seen blazoned in cathedrals, side by side with those of prelates and kings."¹

The Trades-Unions and Brotherhoods of the present day cannot plead the provocations and justifications of their mediæval predecessors. It cannot be denied, however, that they have some provocations and justifications in the bad example set before them by the various combinations (implied or explicit) of the Wages-payers as a class. If the Wages-payers combine, then the Wages-

¹ Green's Short History of the English People, p. 144.

takers would seem to have no resource but in combination. Both alike are wrong in this. Both alike oppose in this the spirit of Political Economy, which is ever the spirit of Freedom, and is ever against such factitious associations for such purposes, because they tend to destroy the independence of personal action on the part of both payers and takers of wages, and tend also to bring all the workmen of any one general grade down to one level of effort and reward.

(i) Lastly, we must note the influence of *Casual Events* upon wages, as these events affect the Supply of laborers. For example, in 1348, a terrible plague, called the Black Death, invaded England and swept away more than one-half of its population. "Even when the first burst of panic was over, the sudden rise of wages consequent on the enormous diminution in the supply of free labor, though accompanied by a corresponding rise in the price of food, rudely disturbed the course of industrial employments; harvests rotted on the ground, and fields were left untilled, not merely from scarcity of hands, but from the strife which now for the first time revealed itself between Capital and Labor" (Green). The landowners of the country districts, and the craftsmen of the towns, not understanding the law of Wages as an invariable resultant of the Demand and Supply of laborers, were scandalized by what seemed to them the extravagant demands of the new labor-class. Parliament equally ignorant with the People of the natural economic law, enacted as follows: "*Every man or woman of whatsoever condition, free or bond, able in body, and within the age of threescore years, and not having of his own whereof he may live, nor land of his own about the tillage of which he may occupy himself, and not serving any other, shall be bound to serve the employer who shall require him to do so, and shall take only the wages*

which were accustomed to be taken in the neighborhood where he is bound to serve two years before the plague began." Afterwards, the runaway laborer was ordered by Parliamentary enactment to be branded in the forehead by a hot iron, and the harboring of the country serfs in the towns, in which under their civic rules a serf keeping himself a year and a day was thereafter free, was rigorously forbidden. These acts of Parliament, and many more of the same kind, were powerless to keep down wages to the old standard, but were powerful to keep up ill-blood and social discontent. They prepared the way for agitators like John Ball, for the poet-agitator Piers Ploughman, and for the great Peasant Revolt of 1381. John Ball's famous rhyme condensed the scorn for the nobles, the longing for just rule, and the resentment at oppression, of the peasants of that time and of all times:—

"When Adam delved and Eve span,
Who was then the gentleman?"

A hundred years after the Black Death the wages of a common English laborer—we have the highest authority for the statement—commanded twice the amount of the necessities of life which could have been obtained for the wages paid under Edward III.

3. Having now seen fully the varied action of Supply and Demand upon the Value of personal services in their three kinds, we come at length to the most important general point in this chapter, namely, that in the second class of Services, those purchased in connection with the use of *Capital*, **WAGES ARE ALL THE TIME ENLARGING RELATIVELY TO PROFITS.** We have seen clearly already, that Cost of Labor and Cost of Capital are the only onerous elements in the cost of Commodities; because, while Natural Agents are all the time assisting and assisting more

and more effectively in such production, they work without weariness or decay and without fee or reward. The reward of laborers is Wages, and the reward of capitalists is Profits; and we are now to demonstrate, that the part of their joint products falling to laborers as wages is all the while increasing as compared with the remaining part falling to capitalists as profits. This truth is of the deepest significance, and of the most cheering character; because men are more important in the universe than things; and because the number of men who sell their services as laborers is vastly greater than the number of men who sell their services as capitalists.

It is another indisputable and exhilarating truth for the masses of mankind, that the Value of each item or article of those products created by the joint action of laborers and capitalists is ever becoming less and less as measured by any relatively fixed standard as Money; so that, while wages as thus measured becomes a larger and larger aggregate as compared with the aggregate of profits, and is shared of course by a much larger number of people, those commodities looked at as a collection of items for which the wages of these many is usually expended for their own comforts, are becoming all the time cheaper and cheaper to everybody, owing to the ever-enlarging and wholly gratuitous action of natural forces.

For the sake of simplicity in the argument on this great point, we will first look at what the facts are through recent illustrations gathered by other parties for a wholly different purpose, and then give in detail the economical grounds for these patent and universal facts. Take for example, from Poor's Railroad Manual for 1889 a table showing in a graphic way the steady reduction in freight charges per ton per mile from 1865 to 1888 of seven representative Eastern trunk railroad lines, namely, the Penn-

sylvania, Fort Wayne and Chicago, New York Central, Michigan Central, Lake Shore, Boston and Albany, and Lake Erie and Western; and of six leading Western roads, namely, the Illinois Central, St. Paul, Burlington and Quincy, Chicago and Northwestern, Rock Island, and Chicago and Alton. The following are the figures:—

RATE CHARGES PER TON PER MILE (IN CENTS).

Year.	Eastern.	Western.	Year.	Eastern.	Western.
1865	2.900	3.642	1877	.971	1.664
1866	2.503	3.459	1878	.898	1.476
1867	2.305	3.175	1879	.764	1.279
1868	2.132	3.151	1880	.869	1.389
1869	1.860	3.026	1881	.763	1.405
1870	1.593	2.423	1882	.756	1.364
1871	1.478	2.509	1883	.829	1.310
1872	1.504	2.324	1884	.740	1.220
1873	1.476	2.188	1885	.636	1.158
1874	1.332	2.160	1886	.711	1.111
1875	1.161	1.979	1887	.718	1.014
1876	.985	1.877	1888	.609	.934

This reduction of rates in the case of the group of Eastern roads has amounted to 79 *per centum*, and in the Western group to 73 *per centum*, in the twenty-four years. Not less remarkable than the extent of this decline in freight charges per mile is its uniformity. Both groups show a wonderful steadiness in the progress of rate reductions. Starting at quite different points as to territorial development, they have yet travelled at a nearly equal pace in the same direction. This shows the operation of causes at once steady and universal. Statistics can never of themselves yield us *causes*; but they guide the way to them; at any rate, they prevent any radical misinterpretation of them. The great and overshadowing cause here of the cheaper freights per ton, as everywhere else of cheaper

rates at the junction of efforts by capitalists and laborers, is of course the perpetual and augmenting and ever-gratuitous assistance of natural forces at every point.

While the rates of freight per ton have decreased more than three-quarters in less than one-quarter of a century in the case of these 13 railroads on the whole average, the entire cost of the operation of these roads in this interval of time has not been diminished to any appreciable extent, as also stated by the same Manual. The main item in all the operation-expenses of railroads is the wages paid to the laborers of all grades; and the laborers are quite as well paid now on these 13 roads as they were in 1865, proper allowances being made for the changed and changing standards in the national Money. If, on a broad view, railroad employees of all grades have lost nothing as such in their wages in this interval; and the general public, including these laborers and also the capitalists concerned, have greatly gained, how can we account for the immensely lessened freight-charges while the whole operation-expenses continue substantially as before?

There is only one rational account to be given of this. And it is trustworthy. All known facts jump with it, and nothing substantial can be urged against it. The gains to the masses including the capitalists and the laborers *have come out of the capitalists as such*. This is apparent as well as real. Cost of Labor and Cost of Capital is the whole cost. If the whole cost of moving one ton of freight from Boston to Chicago is $\frac{3}{4}$ less than it was $\frac{1}{4}$ of a century ago, the cost of the labor being the same at the two points of time, then the conclusion is inevitable, that the *cost of the capital* at the second point is less than it was at the first point. With this conclusion all facts agree. All the laborers connected with a railroad from highest to lowest must be paid at any rate, or else the trains will certainly

cease to move, whether the stockholders receive any dividend or not on their capital invested. The original *stock*—the capital that built the roads—of many if not of most the railroads in the country, has been annihilated, a new indebtedness in another form called *bonds* having taken the place of it. Even the nominal dividends of dividend-paying roads have declined in the interval from 10 or 8 to 5 or 4 *per centum* in the general, that is, 50 *per centum*. It is perfectly evident on every hand, that there is something in the nature and progress of things, that makes for wages as contrasted with profits: wages hold on and relatively enlarge, profits decline or go out altogether.

Fortunately we are not left to generalities here, however plain and certain these may be. One of the 13 railroads specified above, the Illinois Central, made a remarkable exhibit in its own annual Report of 1887, showing the cost of its locomotive service for each year of the thirty years preceding. This cost per mile run had fallen from 26.52 cents in 1857 to 13.93 cents in 1886. This reduction had been effected wholly on the *Capital* side of the account, by inventions and improvements of all sorts in the *machinery* of locomotion; while the wages of the engineers and firemen had risen in the period from 4.51 cents to 5.52 cents per mile run. The cost of the labor had risen both relatively and absolutely while the cost of the capital had declined both absolutely and relatively. In 1857 the engineers and firemen had received as wages 17% of the entire cost of the locomotive service, but in 1886 they had received 39% of that total cost. The table is as follows:—

I. C. R. R. CO.

PERFORMANCE OF LOCOMOTIVES. RELATION OF WAGES TO TOTAL COST PER MILE RUN.

Years.	Cost of wages of engineers and firemen per mile run.	Total cost per mile run.	Years.	Cost of wages of engineers and firemen per mile run.	Total cost per mile run.
	Cents.	Cents.		Cents.	Cents.
1857	4.51	26.22	1872	5.77	21.76
1858	3.97	19.81	1873	5.84	21.10
1859	3.81	20.78	1874	6.02	19.57
1860	3.96	20.17	1875	6.03	19.57
1861	3.84	18.92	1876	5.79	18.81
1862	3.85	17.42	1877	5.54	17.21
1863	3.93	22.28	1878	5.46	15.29
1864	5.56	33.52	1879	5.41	14.15
1865	5.65	37.44	1880	5.41	14.95
1866	5.78	32.67	1881	5.54	16.58
1867	6.18	29.62	1882	5.09	15.82
1868	6.11	27.57	1883	5.35	15.57
1869	5.88	25.49	1884	5.28	14.45
1870	5.95	25.15	1885	5.49	15.02
1871	5.72	21.50	1886	5.52	13.93

In 1857 the engineers and firemen received $17\frac{291}{1000}$ per cent. of total cost.

In 1865 the engineers and firemen received $15\frac{81}{1000}$ per cent. of total cost.

In 1867 the engineers and firemen received $20\frac{865}{1000}$ per cent. of total cost.

In 1886 the engineers and firemen received $39\frac{527}{1000}$ per cent. of total cost.

These illustrations from the railroads are plainly indicative of a general truth of the utmost importance in Political Economy, namely, *that all increase of Capital and all inventions and improvements in its practical application, while it redounds to the benefit of capitalists as a class, redounds in a still higher degree to the benefit of laborers as a class.* Let us now attend for a moment to the convincing Proof of this truth in two phases of such proof, and also to a cheering conclusion that follows it.

(a) As any country grows older in time and richer through abstinence, and as the whole world thus grows