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“The Comparative Value of Labour in different Countries.”

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THE following notes as regards manual work done, are chiefly the result of the Author's experience, as acting for direct employers of labour in various countries abroad and at home, including work by Englishmen, Frenchmen, Belgians, Italians, Greeks, Spaniards, Hottentots, Kaffirs, Zulus, Madrassesees, Moplabs, Candaharees, and other tribes, varying as much in their daily rates of wages as from 3*d.* up to 10*s.* for the same character of work.

The late Mr. Brassey is said to have stated that, when native labour is fairly plentiful, difference of wages does not materially affect price of work, and no doubt, if the absence of labour-saving appliances, and the greater cost of transport and European superintendence, be set against the lower wages, the total cost of a large work abroad may not be greatly different from that of a similar one at home; but if he meant that wages generally adjust themselves to the ability of the workman, the statement is certainly open to question.

It is from the latter point of view that the subject is dealt with in this Paper, that class of work in which manual labour is the chief ingredient being alone considered in the comparison, and the result arrived at is, in general this, that the lower the wage is, the lower is the price of work; though of course, not in the same proportion.

To illustrate this, a few Tables are subjoined, showing roughly the comparison between the physical capabilities of various races for different classes of work, and that between the actual cost of the results produced. In every case the latter is obtained by dividing the sum paid direct to the pieceworker, by the number of units of work executed for it, and an average is taken from large totals:—

TABLE No. I.—EARTHWORK.

Side Cutting excavated and removed to Embankment. Nature of Soil, Lift, and Lead being approximately the same in each case.

—	Amount of Work done in a given time, average English Quantity being Unity.	Cost of Unit of Work, (Labour only), English average being Unity.
Englishmen	1·00	1·00
Frenchmen, Belgians, Germans, North Italians, &c	0·75 to 0·90	0·90 to 1·00
Southern Europeans	0·60 „ 0·85	0·60 „ 0·80
Hottentot half-breeds	0·50 „ 0·80	0·90 „ 1·25
Kaffirs, Fingoes, and Zulus	0·40 „ 0·70	0·80 „ 1·00
The stronger Indian races	0·40 „ 0·70	0·25 „ 0·60
Inferior „ „	0·25 „ 0·40	0·20 „ 0·50

TABLE II.—ORDINARY BRICKLAYING.

—	Amount of Work done in a given time, average English Quantity being Unity.	Cost of Unit of Work (skilled Labour only), English average being Unity.
Englishmen	1·00	1·00
Frenchmen, Germans, Dutchmen, &c.	0·80 to 1·00	0·80 to 1·00
Natives of India, best class	0·40 „ 0·50	0·50 „ 0·65
„ „ inferior	0·30 „ 0·40	0·43 „ 0·60

TABLE III.—HAMMER-SQUARED RUBBLE. DRESSING and SETTING ONLY.

—	Amount of Work done in a given time, average English Quantity being Unity.	Cost of Unit of Work (skilled Labour only), English average being Unity.
Englishmen	1·00	1·00
Frenchmen, Germans, &c.	0·75 to 0·90	0·90 to 1·00
Southern Europeans	0·55 „ 0·70	0·70 „ 0·80
Natives of India, best class	0·40 „ 0·60	0·65 „ 0·80
„ „ inferior	0·33 „ 0·50	0·60 „ 0·80

TABLE III.—PAINTING ON NEW WORK.

—	Amount of Work done in a given time, average English Quantity being Unity.	Cost of Unit of Work (skilled Labour only), English average being Unity.
Englishmen	1·00	1·00
Natives of India.	0·40 to 0·60	0·60 to 0·80

The skilled work, generally speaking, of the Englishman, it must be admitted, is superior to that of the foreigner.

Now the chief characteristic of these Tables is the difference in cost of result of unskilled labour in England and in India, and it is clearly shown that, to explain it, other causes must be brought than those produced by the ordinary supply and demand theory, which, if fully operating, would absolutely equalize the amounts paid for the same work everywhere.

Economists state that rates of wages for unskilled labour may be divided into two categories, namely, first the *market* rate, which is that which chiefly prevails in the more wealthy communities, and is mainly influenced by the laws of supply and demand; and secondly, the *natural* rate, where these laws find their limit, and which represents—having regard to the prices of commodities—the lowest means of sustenance for the workman and his family. It is obvious that no supply of labour, however great, can bring wages below this point; as should they be lower, the labourer must starve, and the work must come to an end. Now from various causes, which cannot be entered upon here, the natives of India and many other populous tropical countries, are to a great extent living on *natural* wages; and this explains partly the advantage which the Indian employer possesses over the English one, as shown by the Tables, in the cases considered.

Then there is in India the disinclination of the native to leave his village, and follow the demand for labour, and the absence of any ambition on his part to be any richer than his forefathers or neighbours; moreover, his domestic requirements are so few that the women are as numerously employed as the men, and this again tends to cheapen prices, the women being direct producers of work, while in Europe they are entirely occupied in providing for the necessities and comforts of their husbands or brothers, two people having to be fed for the work of one.

Again, the wages of the Indian native are nearly all returned to his employer in work done. They are mainly spent on food which, if not of a very strength-giving character, is cheap, and consists almost wholly of tissue-forming matter, all utilized in the work given in exchange for it, small as that work relatively is. Turning to the Englishman, beer, no doubt, supplies strength; but most people would admit that the three or four quarts drunk daily by the average British navy, is more than is necessary for the work he has to perform. The tropical native commonly spends much of his spare time in sleep, thus storing up tissue to be expended for the benefit of his employer, and saving his money

the while;¹ the white man, on the contrary, probably using the same opportunity for spending his substance in more exciting distractions, legitimate or otherwise, to provide for which the general rate of wages is kept up, and the equivalent return for it, in work, kept down.

The extreme case of European as compared with Indian unskilled labour, has been chiefly dwelt upon as showing, in a more emphatic way, the causes of divergences such as are shown in the Tables; but those of intermediate races, and of the artizans work might be similarly explained.

Another reason for divergence, which can hardly be left out of sight, is the method of working in different countries. As regards earthwork for instance, there are in England and other places, the "getter" excavating earth with a pick, the "filler" transferring it with a shovel to the barrow, which the "wheeler" drives to its destination on a wheeling-plank. In Spain, a donkey with a *seron* or pannier, and a boy to drive it, replaces the barrow and wheeler. In India the filler uses a tool something like a large hoe, with a short handle, called a *momati* or *phoura*, by which he fills a basket placed on the ground between his feet; he then assists a woman cooly to place it on her head, and it is carried in that fashion to the bank.²

Whether the mechanical advantage in the locomotive part of these operations lies in conveying the work through the arms to the spine as in the English method, or using the spine only, as in the Indian fashion, or throwing it entirely on to the donkey as in Spain, is a moot point. Comparing the use of the basket in India as against the barrow in England: a cooly woman at 3*d.* per day, will take sixty journeys to deposit a cubic yard of ordinary light clay, while an English navyy, at sixteen times the wages, will have to make 160 journeys with a barrow holding $\frac{1}{10}$ cubic yard, in the same time, to give the same value in work for the money paid to him for that time. In other words, allowing $1\frac{1}{2}$ mile per hour for the average walking speed of the woman, the navyy would have to drive his barrow at four miles per hour to compete with her.

The case of prices in sparsely peopled new countries, would

¹ It is not unusual for the cooly to stop work before the end of the week, if he has earned enough to barely sustain life till the beginning of the following one, spending the interval in almost total inactivity and in sleep.

² See the Paper "Earthwork in Scinde," by W. H. Price, M. Inst. C.E., in "Professional Papers on Indian Engineering," January 1874, for comparative cost of barrow and basket work.

occupy a wider field of inquiry than is advisable to undertake in the present Paper, involving questions of the enhanced rates due to imported labour and other considerations. Enough has been said to lead to the conclusion that every engineer in estimating, or contractor in tendering, for work abroad, unless guided by existing rates, should exercise great care in ascertaining the habits and character, as well as the rates of wages, of the people by whom any proposed works are to be constructed.