

parts of houses, as well as corrugated iron for roofs, etc., is becoming very general. Indeed, in large buildings of every description iron is almost superseding wood, being preferred on account of its lightness, durability and non-combustible nature.

But the grand consumption of iron is for railways.

In Great Britain, besides the rails required for new roads, it is estimated that at least 400 tons *per diem* are required to replace the old rails which are taken up and superseded by much heavier rails.—The original rails on the Liverpool and Manchester railway were of 40 lbs. per yard, now they are about 90 lbs. per yard, and all the rails now being laid down will be upwards of 85 lbs. per yard, and on towards 112 lbs. per yard, and even 149 lbs. per yard for saddle rail, as a maximum. Instead of wooden sleepers and cross-ties, those of iron are substituted. In the United States for the 2,500 miles of railway building the present year, at 200 tons per mile, there ought to be an export of 500,000 tons of rails, to say nothing of the iron required for locomotives, tenders, wheels, axles, and other parts which is generally made in the United States. From Russia a single order, viz: for the St. Petersburg and Warsaw railway, for 153,000 tons, has been given out. Of this quantity 140,000 tons will be of rails, and 13,000 tons of chairs, spikes, etc.—For Germany, Italy, Spain, Denmark, Sweden, Norway, Russia, Hindostan, Chili, Peru and Brazil, the orders for rails as well as locomotives, tenders and all other furniture for railways, must be executed in this country, and the demand for iron from these countries has increased wonderfully within 6 months, and likely to be very much extended.—With these facts before us, I may say there is no prospect of an early decline in the price of iron, but on the contrary, a further advance is expected.—Besides, wages are advancing and workmen are diminishing. No less than 6,000 of the best iron men of Monmouth and Glamorganshires, left for America and Australia in the last 12 months. The best workmen—the most sober—the most industrious—the most enterprising are generally the emigrants, and their fellow workmen contribute the means to their going abroad, with the view of diminishing the competition in the labor markets, and when down in the Welch iron region the other day, I was told that laborers and great numbers of good iron workmen were wanted, but could not be procured. There is always a great evil attending high wages—they are the means of diminishing production instead of increasing it. Having the ability to indulge in the national vice of intemperance, to a greater degree, when wages are high the workmen instead of devoting only Sunday and "St. Monday" to drinking and dissipation, now add Tuesday and sometimes Wednesday to their holidays. The greatest production of iron is when wages are low and demand good and steady. Then the workmen can only indulge in drinking on Sunday and Monday, and many of them not even the latter day, and of course they produce more work, have better health, and everything goes on more respectably. The only reason for expecting a diminution in the price of iron, is the present high price, and its probable advance, which invariably, in time, checks consumption in the same way as cheapness always stimulates consumption.

You enquire about the quality of the iron sent to America, the Americans neglect the best article, and for cheapness send for an inferior quality.—The English always buy the best article for themselves—our countrymen generally do the reverse.

But the rails made for America in Wales, though not considered good enough for English railways, are generally speaking very tough, difficult to be broken, and are good enough, but every individual rail ought to be inspected before it goes on board of ship. The American iron masters make good rails, because they generally use Charcoal iron, and the American railway companies could get the best rails here, if they would only pay for them. The make of iron (pigs) in Great Britain, in 1852, will be about 3½ millions of tons. I hope in the United States it will get up this year to 500,000 tons of pigs, and next year that it will be as high as it ever was—say 700,000 tons of pigs.

You enquire of other articles that have risen in price in England. There are several articles which have advanced exceedingly. An American article, turpentine, has advanced £9 per ton, within a few months. Oil, tallow, rice, timber, lead—all American articles have advanced very much. I am sorry to see that lead, which was formerly an export from our country, has been sent into the United States from England and Spain in large quantities. This is owing to the lead miners of the north west having gone off to the "gold diggings" of California. Copper, an interesting article for America because of the Lake Superior copper mines, claims more notice, copper has advanced from £88 per ton in April last, to £105 per ton to-day. The consumption is increasing exceedingly. Every narrow guage (4 feet 8½ inch) railway locomotive ought to have nearly 5 tons of copper and brass about it.—Every broad guage (7 feet) railway locomotive ought to have fully 5 tons of copper and brass about it. There are about 4,000 locomotives in Europe and the United States, and they are all daily and constantly consuming copper by burning out fire boxes, etc. So in all the steam engines and steamers, the consumption of copper and brass is very great. On board of the "Prince Albert" (Government propeller) of 120 guns, the consumption of copper and brass ought to be at least 100 tons; for her propeller ought to be made of copper. The use of copper and brass for machinery for the textile fabrics, as well as for engineering purposes is very great, and immensely increasing. A great reduction in price would increase the consumption amazingly.

You enquire the cause of the advance in price of the other articles as well as iron. I think the same reason may be given as I have stated above, viz: The general prosperity of the country arising from cotton, food and clothing, being in great abundance.

You enquire also if wages have risen generally. I reply yes, and throughout all branches of business and all parts of the country,* even down to that hitherto almost hopeless being, the agricultural laborer. Emigration to America, Cape of Good Hope and Australia, is the principal cause for this advance—a blessed thing for the workmen and poor laborers if they would only be guided by the precepts of Father Mathew.

You enquire lastly "at what price for British iron would it be better for the manufacturers of the article in the United States to prepare it for themselves." In reply, I say that American iron is every way superior as a general rule, to British iron, because it is usually made with charcoal fuel, (and

latterly, but partially with anthracite,) instead of coke of bituminous coal, and besides the ores used in America are generally better than the British ores, and for merchant bars and the higher qualities of iron, and especially for steel, I should say that if English common iron can be sold in the United States at \$40 per ton, that for general purposes American consumers ought to pay \$60 per ton in preference for American iron. I repeat that my remark applies particularly to the best sorts of iron, and not to railroad iron, for I believe the well made—the properly made—Welch rails—are as good for railroads as they need be, and it would be an extravagance to have rails made of the best American charcoal iron. The Americans ought to prevent the Swedes and Russians from sending their charcoal iron to our country—by making the same qualities as come from these distant countries, (paying excessively high freights and mercantile charges, as well as duty, and as regards Russia on inland transportation of iron from Siberia to St. Petersburg, of from 2,000 to 3,000 versts) so cheaply as to discourage importations of charcoal iron, all of which ought to be made within our own territories, which have far superior facilities and all the elements for the iron manufacture over both Sweden and Russia, but particularly the latter.—The United States ought to make the best iron in the world, and so cheaply as to exclude foreign importations. But my country, I am sorry to say, cannot yet compete with Great Britain in making *common iron as cheaply as she can*, and as the requirements of civilization and progress (particularly as connected with railways) demand. Railroad iron ought in America to be as cheap as possible, and then the American iron master will have an unlimited demand for his charcoal iron. The American iron master ought to say "let there be no duty on English rails."

AN AMERICAN.

The Commercial Cities of the Seaboard.

Cities are congregations of men drawn together artificially—dependent for existence upon the existence of others without the city. They have been denominated sores upon the body politic; yet they perform great uses. They return value received to the country for its supplies. Being dependent upon circumstances, cities cannot be built and go on prosperously for many years without favorable locations. They demand situations contiguous to fine agricultural regions; if commercial cities, they must have water facilities for harbors of shelter, for the erection of docks and warehouses, for manufacturing purposes, and for the free use of the inhabitants. Fuel must also be found in abundance at a convenient distance, from whence it may be transported at will to supply all varieties of demand, and at trifling cost. That the food necessary to support life may find easy transport from the rural districts, channels of communication, which will afford cheap and rapid transit from country to city, are highly important. In short, as it is upon the interior of the country that commercial cities must look for the traffic which sustains them, an easy communication with it is indispensable to their prosperity. For it is obvious that cities must be built up either by commerce or manufactures, or both combined. The word commerce is here used in its most comprehensive sense, and combines all kinds of sale, exchange, trade and transport. The city, then, which has the best communications with the great heart of the country upon which it must rely for customers in these branches of business, and which, besides, possesses great

* The North British Advertiser, a great advertising paper of Edinburgh, had last week, advertisements for 80 situations vacant, whilst there were only 7 persons advertising for situations. This was never heard of before!