THE TRADE AND THE PUBLIC.

It is a peculiarity of all class periodicals that in advocating the rights of the interest they undertake to represent they seem to give themselves no concern about the public good, as if that might be left to take care of itself. One might almost fancy their objects were antagonistic, for, while the one is always lamenting when low prices prevail, the other rejoices in getting its commodities as cheaply as it possibly can, and people may be said to trouble themselves very little about the cost of production of the article they want, when they go to market to lay out their money to the best advantage.

What avails it that the dealer can show that he is offering his goods at the merest shadow above cost price, if the man over the way is willing to sell a similar and equally good material at a still lower figure? Ever since the second Sir Robert Peel's time, when he became the advocate of free trade (having previously opposed it with all his might), and gave out his celebrated precept, as if it were a happy thought to which he owed his conversation, that it was a first principle of trade "to buy in the cheapest market and sell in the dearest," all idea of taking into consideration the expenses incurred in producing the material we are inclined to deal in has been abandoned, as an exploded weakness with which free trade has no sympathy.

But there was nothing original in Sir Robert's plausible phrase, which became popular merely because he had uttered it, as a novelty, and it was taken up and repeated as the essence of wisdom which embodied in a few words the whole doctrine of free trade, and left nothing more to be said about it. It had, however, long before been practically adopted by those branches of business which the police are supposed to keep an eye on, and of which we have a well-known representative in the character of Mr. Fagin, the amiable patron, erewhile, of Oliver Twist, and that class of trader might almost justify his calling by proving it to be in strict accordance with Sir Robert Peel's rescript, and possibly its tendency has been in some degree to demoralize trade. We may be less scrupulous in looking for cheapness, as a sort of duty enjoined upon us by this modern law of trade, which does not suggest to us the necessity of ascertaining how the goods we are in pursuit of came to be so cheap. That duty is left to the teaching of the statutes at large, if people choose to run the risk of them, and place implicit confidence in the honesty of the seller, without asking any inconvenient questions as to his rights of proprietorship in the commodity he is willing to dispose of so much below the market price. And there is always the chance of escaping ill-consequences by appealing to Sir Robert Peel's apothegm. It is easy to plead that unless you "buy in the cheapest market and sell in the dearest"—that is, the dearest market available—business cannot be done at a profit under free trade.

If it has not lowered the standard of trading morality in some appreciable degree, at all events the term "connection," as applied to business, seems now-a-days to have a different meaning from that which it formerly possessed. In past times the word was understood to mean certain parties who dealt regularly with a certain house for certain goods, and mutual dealings in this way often continued for a lifetime; now it means little more in a general sense than correspondents and dealers you are known to, and with whom you have an occasional transaction when they cannot get the goods a fraction cheaper elsewhere.

Fortunately, however, in the timber trade we are less exposed to malversations of this kind than in almost every other. The bulkiness of the wares is a sort of guarantee for integrity in the manipulation of them. They cannot be hidden away in bags, boxes, or barrels, and pass muster in transmission as something totally different. There they are, conspicuous to all the world, wherever they go, indifferent to comment and criticism, and entirely independent of it.

Neither is the apparent neglect of the public's interest so real as at the first it might be accounted in treating only of the advantages to trade. The desire to see prices kept up to a fair paying level arises from a conviction, not necessary to be constantly obtruded, that it cannot be good for the community at large that any important and legitimate trade should be carried on at a loss. A price may be very moderate and yet be a paying one; on the other hand, it may seem rather high and yet the sellers may be getting nothing by it. Such has been the state of the timber trade in many parts of Britain latterly, where wholesale transactions have borne no profit because too much was paid at first hand, in comparison of the plentifulness of the supply, to bring the commodity to market. The duty of the journalist who has undertaken its cause is then to call the attention of the trade to this state of affairs by pointing out the sources of its difficulty, collecting and submitting to them the facts that bear upon it, and suggesting how the evil may best be mitigated. But in a ...s there is no implicit disregard of the good of the public, who are supposed to gain what the trade is losing. There is nothing of the spirit of monopoly, and desire to obtain more than the fair value of the goods brought forward, and for the rest the public is well able to take care of itself, and requires no special pleader to teach it how to make the hardest bargains, as we have intimated, without taking conscience at all into its calculations.

There is a disposition in fashion to insist that a fair day's work should be supplemented by a fair day's wages, but no one agitates for a fair profit to the man whose goods are fairly paid for. He must take his chance in the market against another who has perhaps not paid for the commodity he is selling, and never means to. Such are the *impediments* which come between a trader and his just expectations when he thinks he has laid out his money well, and is looking that it should yield him a reasonable return.

These thoughts have been suggested to us by the apparent necessity we have latterly been under of always harping on the same string. We look in vain for some encouraging news from the provinces, as to the solid revival of the trade for which the importers are waiting. If any of our correspondents speak cheerily, it is mostly after the manner of Captain Cuttle, at the *Wooden Midshipman*, in Leadenhall street, when he rubbed his hands, and thought business looking up, because somebody called and inquired the price of a pair of spectacles. The trade continues languid, and without hope of immediate improvement, though the manufacturing industries are reported as doing better than they were a little while back. Liverpool, Hull, Grimsby, Hartlepool, and Newcastle are all in suspense, and have no faith in obtaining satisfactory prices for the new arrivals, which are already coming forward in rather formidable proportions (especially in Liverpool), though they have not as yet materially affected home prices, because their effect was previously discounted, and people refrained from extending their orders abroad till they saw how their market would bear the new strain on them of their first importation.

On the other side of the Atlantic they are more hopeful of this season's trade than they are here, and our Chicago correspondent's letter (June 11, p. 361) draws a bright picture of the prospect before it out there, but not without a suggestion that the cutting of logs may be superabundant.

"A considerable increase is looked for by many in the amount of lumber turned out, as compared with the cut of other years. The majority of operators favor this view of the situation, and look for an abundance of lumber, though not more probably than the demand will call for."

The season has, it seems, been very favorable for getting the timber clear of the drives, and there is no anticipation of any difficulty in bringing the logs forward, as we learn from the concluding paragraph of the letter aforesaid. All idea, therefore, of any curtailment of our supply for this year has completely vanished, whether it be from Northern Europe or from America, and in its place a strong impression is gaining ground that our markets will be pretty severely tested on all sides.

In Liverpool it is expected that steamers will take a lead, even in the Atlantic timber trade, this summer, and as they will run at very moderate freights the shippers on that side are not unlikely to charter on speculation in the absence of orders; as in the worst case they will only have to hold stock on this side, instead of at home, with the chance of disposing of it during the winter, when if unshipped it would have to lie idle and useless until the following spring. It is the uncertainty which pervades the trade on these points that has kept it so quiet and unspeculative so long.

If the public gains by this kind of business, the trade does not like it.—*Timber Trades Journal.*

PRACTICAL ITEMS.

Loose pulleys require constant attention and much oil, and are very hard on the belt. It is best to have them a trifle smaller than the tight pulley, and with a step or flange running up to the diameter of the tight one. This takes the strain off the belt and the friction from the pulleys.

Where a mill is driven by mortise gearing, it has been recommended to use a mixture of pulverized chalk and linseed oil, for lubricating purposes. It is said that this mixture is much better for wooden cogs than oil, tallow or flour. The chalk for this mixture should first be pulverized and then sifted with a fine sieve.

Any sharp steel will cut glass with great facility when kept freely wet with camphor dissolved in turpentine. A drill may be used, or even the hand alone. A hole may be readily enlarged by a round file. The ragged edges of glass may also be thus smoothed with a flat file. Flat window glass can be readily sawed by a watch spring saw, by the aid of this solution. In short, the most brittle glass can be wrought almost as easily as wood, by the use of drilling tools kept constantly moist with camphorized oil of turpentine.

Ordinary white wood can be given the appearance of the finest black walnut. The wood, first thoroughly dried and warmed, is coated once or twice with a strong aqueous solution of extract of walnut peel. When half dried, the wood thus treated is brushed with a solution compound of 1 part (by weight) of bichromate of potassa in 5 parts of boiling water, and after drying thoroughly is rubbed and polished. By this treatment, the color is said to be fixed in the wood to the depth of one-twelfth to one-sixth of an inch, and in the majority of cases the walnut appearance is declared to be very perfectly imitated.

So eminent an authority as Professor Sweet says, in reference to the question of economy by reduction of friction, that of two systems, one offering a saving of 10 per cent. by reduction of friction, and the other 20 per cent. in the use of steam, he would take that which led to a saving in friction, which of necessity implies saving in maintenance, attendance, repairs, delays, etc. The loss by attendance, repairs and delays is greater in small engines than in large. To get economy in friction, there should be generous wearing surfaces, well fitted, and properly lubricated, and the engine should be in absolute alignment. We often find shafts which are set in perfect line and remain so when at rest, but which are deflected by the strains put upon them while at work.

The *American Architect and Building News* says that maple is unquestionably better than the average yellow pine for flooring. It is very fine-grained and tough, though perhaps no harder than yellow pine, and is completely free from the liability to splinter, which injures much of the latter. Some years ago a number of Boston mill-owners made thorough tests of various kinds of material for flooring their factories, where the wear is very severe, and concluded that maple was superior to any other. Very possibly this experience may have led to the favor with which maple house-floors are regarded in that region.

Fourteen years ago a Mr. Sterling, of Monroe, Michigan, placed two gate posts of white oak in front of his residence. When they were set he bored into the top of each with an inch and a half auger a hole three inches deep, filled it with common salt, tightly plugged it, and coppered the posts. Having occasion recently to change the location of the posts, he found them as sound from top to bottom as the day they were planted.

HOW FORESTS PRODUCE MOISTURE.

Dr. Franklin B. Hough, United States Commissioner of Forestry, gives the following explanation of the effects of forests on moisture: It is a matter of common remark that our streams diminish as the woodlands are cleared away, so as to materially injure the manufacturing interests depending upon hydraulic power, and to require new sources of supply for our state canals, and for the use of cities and large towns. Many streams once navigable are now entirely worthless for this use. The mode in which this influence operates will be readily understood when we consider the effects of forests upon the humidity and temperature of air.

A deciduous tree, during the season when in foliage, is constantly drawing from the earth, and giving off from its leaves a considerable amount of moisture, and in some cases this amount is very great. This change of state from a fluid to a gaseous condition, is a cooling process, and the air near the surface, being secured from the sun and from the winds, becomes, by this means, so humid that a rank, succulent vegetation often springs up and thrives, which in an open field would wither and perish in an hour. The air being thus charged with moisture and cooled, does not take up by evaporation the rains which fall, and the soil, being more open, readily allows the water from melting snows and from showers to sink into the earth, from whence a portion appears in springs and in swamps, which give rise to rills and streams.

The air at all times holds more or less watery vapor in suspension, and its capacity for doing so is increased as the temperature is raised, not by a steadily gaining rate, but more rapidly as the heat is increased. There can be no evaporation when the air is saturated with moisture, and no deposit of water in any form until the temperature is reduced to the point of saturation. It is not yet determined as to how far the cooling and moistening influence of a grove may extend. It must depend upon many circumstances, and especially upon the slope of the surface, and the direction of the winds. The effect is often apparent to the eye from the freshness of the herbage in adjacent fields for many rods in width.

The effect of woodlands in retaining snows where they fall, and in delaying their melting in the spring, has been everywhere observed in snowy countries. In such localities the snow cannot be drifted by the winds, and when it melts is disappears slowly, sinking into the soil rather than flowing off upon the surface. The effect of this delay in checking a too early appearance of fruit blossoms, cannot be mistaken. The result is in fact similar to that of considerable areas of water, such as our northern lakes, along the borders of which, especially on the lee-side, fruits are found to flourish with the greatest success. In a country interspersed with clumps and belts of woodlands, the snows drift less, and their melting more evenly over the surface cannot fail to be beneficial to the interests of agriculture, and more especially to meadows and pastures.

HEMLOCK RAILROAD TIES.

During November, 1866, the Rock Island railroad laid 2,000 hemlock cross ties that had been saturated with chloride of zinc in the road bed of the main line, some three-fourths of a mile west of Englewood, as an experiment. Last Saturday these ties were examined, and several of them brought to the company's office in Chicago. Some of them were found in good state of preservation, while others that had been rejected were found sound within, but were rotten on the surface where exposed to the wet. Hemlock is considered very poor as regards its preserving qualities. It is also claimed that it usually commences decaying in the center. Near these hemlock ties were some oak ties that were laid in 1873, some of which were badly decayed. Upon these specimen ties had been laid at the same time steel rails from England, where they still remain, they also having been placed there on test.