

provided they have not been previously decorated upon the Bisque; if so, they would be finished in the gloss ovens. If this is not the case the design is placed upon the glaze and again subjected to fire, causing the colours to blend with said glaze. The time for firing this kiln varies according to its size. After these various processes they are now ready for the trade—a trade so beneficial to us all, for who can estimate its utility and the comforts we derive from it.

J. W. Gray.

P. S.—For much of the latter information I am indebted to Mr. Benjamin Bloor, of this city, a skilful decorator and a man of large experience in pottery.
—J. W. G.

THE CULTIVATION OF FORESTS.

The cultivation of forest trees is beginning to attract the attention of the farmers on the Pacific coast. They are being led to understand that there are profits to be derived from the cultivation of good forest trees, in the effect exercised on the climate lessening the probabilities of drought and decreasing the expenses of irrigation. This has also been the subject of much attention in the Eastern States, particularly in the more heavily-populated ones, where lands once covered with fine trees have been literally laid bare. On taking up a farm the first thought and act of the farmer was to cut down every tree growing on it; and he never seemed quite happy until the last one had fallen. In travelling through Canada I observed that the same erroneous idea prevailed, but possibly to a less extent. The governing idea in the mind of the farmer was, no doubt, to make every square inch of his land productive. The results of late years have proved to them how great was the mistake they made, one that has told very materially against the profits of the farm. They now see that this "clearing away" has also pretty well "cleared" away the climate, in reducing the number of rainy days and having a bad effect on the crops. A writer on the subject very correctly says, "Every foreign scientific man who comes to this country is impressed with the great waste of forest. Accustomed as Europeans are to the culture of woodland, the reckless methods of American farmers strike them with astonishment. The trouble has been that the boundless forests of the North-west promised to endure for ever, and there seemed no incentive to any care of the original growth of timber. Now a more sensible idea begins to prevail. It is seen that east of the Appalachian range the forest has almost disappeared; while in many parts of the west, the wholesale waste of timber carried on for years has had a sensible effect upon the face of the country. In the Southern States the system of exhausting land with cotton and tobacco, and then throwing it into old fields, has resulted in a thick growth of worthless scrub pine on the abandoned lands. To the tourist these fields at a short distance have the look of a good pine forest, but one who has had any experience in southern agriculture knows their utter worthlessness. The fine old forests of the south have been more shamefully ill-used than those of the north; the negro has so little regard for trees that he never fails to cut down the young saplings because they yield firewood with less trouble than other trees."

In the State of New York, where this error of a total clearing away was first observed, the replanting of forest trees has been attended with very good results. In one belt of country where replanting was general, the rainfall has largely increased, and the rain is more evenly distributed throughout the season than in a neighbouring district almost completely denuded of timber. On the prairies of Kansas and Nebraska, where a good natural growth of wood is lacking, the results obtained from the planting of forest trees were even more strikingly illustrated. The planted forest serves as a good windbreak, and the influence of the wood's growth was seen in lessened periods of drought and an increase in crops. What is demanded, however, is accurate information about the varieties of trees adapted to particular localities, and to provide this the Government has set apart an appropriation, and placed in charge of the work Charles Sargent, professor of arboriculture in Harvard College. Among the peculiar trees of Oregon is one known as the Port Orford cedar. It is used for building and other purposes, also in making buckets, tubs, and such like. The trees when tapped emit a liquid corresponding to turpentine, but which possesses the colour and flavour of the cedar wood, and is called oil of cedar. Fresh water put in a new bucket made of this wood will in a few minutes become so tainted as to be unfit to drink. From the captain of a merchant vessel who had brought down several cargoes of this wood I learned that fish placed in tubs made from it and filled with water would die in a very short time. From experiments made by him he found that crabs placed in one of these tubs filled with salt water died in two hours. Smelts only lived twenty minutes. A tree that has been found to do well in the State of California is eucalyptus, or blue gum tree, so well known in Australia. The rapidity of its growth is something remarkable, and for this reason many persons in the vicinity of San Francisco are cultivating them for the sole purpose of firewood. The scarcity of large trees in this immediate neighbourhood will always make wood for fuel valuable. The cultivation of the almond tree has also been attended with success. In the country near San José there are about 350 acres planted this year in almond trees. The growers claim that it is the best paying industry in that part of the country, the profits derived being larger than are obtained from any other enterprise.—*Land and Water.*

ANOTHER WORD ON A WORN QUESTION.

We sometimes wonder whether it has ever occurred to the *Witness* that its own advertisers are much more fond of referring to the cost of production of the articles they sell as determining the prices at which they offer them to the public, than to any competition of opponents. They constantly assure us that they are selling at cost—or a little above cost—or sometimes, for supposed convenience through a disordered trade, somewhat below cost. They are enabled to sell cheaply because they have paid cash for all their purchases at wholesale, and have so avoided interest charges on value of goods. But when we turn to the leading columns in the same paper, we get quite a different presentation of the question. There we are asked to believe that everything in the way of price is regulated by competition on the great scale by the competition of foreign countries, and we may fairly ask which view we are to accept. We may take another look at this question. Competition is competition, and home competition might be just as coercive as the foreign. If we do not yet enjoy a sufficiency of the former influence in Canada, it will be sure to come when any home manufacture becomes established and prosperous. Indeed, so much was made of this point, at first, in the many-sided minds of the free-traders, that we were told all successful manufactures would be sure to be ruined by such home competition.

Now our manufacturers always claim that the great object of the National Policy is to secure not so much great prices as the home market for their goods, and they have sometimes said if they could be favoured with this they would take care that their prices should continue as low as the outside rates. The extent of the market in which he is able to operate is certainly a very strong consideration to the manufacturer of means and skill. Give him a wider market and he can lower his prices at once. If these points were admitted there would only seem to remain for the reasoners of the *Witness* school the argument of superior natural facilities for production in certain countries. We ought to look a little more closely than we have commonly done into the merits of this argument. The superior facilities dwelt upon will be found to consist generally of larger capital and greater skill and experience. A new and enterprising country like Canada, thinking the time has come for it, will wish to have some of this capital, skill and experience introduced upon its own field of operations, and to ascertain in what branches its facilities duly cherished will be likely in time to compare with those of other countries. To cherish the early growth of the manufactures here concerned, the advantage of a secured home-market is very important. If in spite of all probable or possible effort on our part there are branches of production in which we can never hope to excel, it should be shown clearly which those are; and it is not at all likely that any one will want to force them upon the country, or would succeed if he tried to do so. A new country could certainly afford to make some concessions for the sake of keeping its people at home,—the mind and muscle of the land. Such keeping at home is also a question of consumption of agricultural and other home produce, and of the home market generally, but it is a great deal more than that, for the people are the nation. Though urging these points, we are of course both willing and desirous to admit articles which we cannot produce ourselves, and specially articles embodying the fruits of special and localized taste and genius, such as books, pictures, objects of beauty and high-class manufactures generally. These we should like to see admitted at the most moderate rates possible, partly as specialties, and partly as productions for which our own time is not yet come.

The great destroyers of healthy organization in trade and commerce are just those which the economists and advocates of the *laissez aller* are disposed to overlook, and these are over-production and vicious credits. They are elements subversive of business prosperity and national happiness. The mischief they do enters into all relations of life. They create those cruel ebbs and flows of activity and means which tend to make of our modern civilizations a by-word to the ages. Add to these, trade adulterations in the quality of goods, and the picture is complete. Our great object is to set a good example in this respect, and to preserve the even flow of our operations and the solid basis of our credits. If we could suppose a branch of home manufactures carried on as it should be, say, after a model fashion as to charges and quality of goods, to which might, we will suppose, be added a system of time-bargains for production and sale. In such an imagined case what room would there be for outside competition? What purpose could be served by a glut of goods coming upon such a market from the outside? Do not such considerations induce us to look upon competition in the light of a powerful whip-thong? And to recognize such good scholars as there may be, capable of co-operation and of mutual agreement of capital and labour claims, as not needing the application of such a thong?

The general object to be sought is to establish neither a high nor a low price, but a true and just price, this latter being the outcome of many forces and thoughts and conclusions of reason. That we see is not a game of grab. For it a moderate competition may be sometimes needed, but it would seem more in concert with the general high purpose of the *Witness* newspaper that it should be engaged in promoting the development of this true price and this