

PACKING FRUIT FOR EXPORT.

There was an essay lately written for the Royal Agricultural Society of South Australia, by Mr. Amos Howard, on packing fruit for export, from which we take the following paragraphs:

Packing the Grape.—I consider the packing material a very important consideration. The materials I have had experience of are sawdust, seaweed, bran, fine meadow hay, and fine wood shavings. These were all partial failures, with the exception of the fine wood shavings; but of this last I cannot speak too highly. They combine these requisites—lightness, cleanliness, cheapness and elasticity. A good proportion of size for the cases is, length 2 ft., width 14 inches, and depth 11 inches—this size would contain about 50 lbs. of grapes. These boxes should be packed in the vineyard, the bunches being then but once handled. Sheets of common white paper are provided of two sizes, which a child can twist up into conical-shaped bags. They should be large enough to take in the bunch completely. The box is prepared for the reception of the fruits by placing a layer of the fine shavings on the bottom; the bunches are cut from the vine, held only by the stalk, and placed at once in the paper bags, being then laid carefully on the layer of shavings. On no account should the mouth of the bags be closed, as the sweating of the bunches would injure the berries. On the other hand, if the mouth of the bags is not doubled over, the shavings will absorb the moisture, and the fruit will remain uninjured. I have proved this from experience. As soon as the first layer of grapes is complete, another of fine shavings is placed on them, and these slightly pressed down so as not to bruise the berries, for this purpose a light board cut to fit inside the case with a handle to lower it gently, will be found to press the packing more evenly than the hand—the packer's judgment will teach what pressure is necessary to pack the fruit securely. These layers should be continued until the case is filled, and in finishing off the lid should press slightly on the top layer of shavings.

Packing the Plum.—The method of packing these is more simple. In their case the fruit is placed in single layers between each layer of the fine shavings, the same care is necessary in gathering and at once putting them in the boxes, selecting fruits without spots. The plums are packed without paper; as they lay firmer without. (I would here remark, that firm packing is of the utmost importance, as the slightest looseness is ruin to the fruit.) As each layer of shavings is placed on the fruit, the light board before mentioned should be used for pressing them evenly down. The layers then are continued until the case is filled, the lid slightly pressing down the top shavings. The firm-fleshed varieties will keep well for seven and eight weeks, and damsons even longer.

Packing the Apple.—These should be packed in the same way as the plums, taking the extra care only of having a little shavings between each fruit. Cases of the size recommended should hold about 150 apples, spotless fruit should be selected and packed straight from the tree.

THE FALL WOOL TRADE.

As the fall clip is now pressing for sale, the aspect of the Eastern markets is a matter of much interest. Walter Brown & Co., of Boston, in their latest circular, give the following outline of the trade and matters affecting it: The wool market for August opened with a moderate inquiry and strong prices; the purchases, however, by manufacturers were mostly confined to their immediate requirements, as they have had but little inducement from the sales of goods to encourage any anticipation of future wants by heavy investments in the raw material. As the month progressed, consumers held back from buying as much as possible, thus reducing the volume of sales, and the last week shows a smaller amount of transactions than for any

similar period during the previous 60 days. The only active demand has been for delaine and combing selections, which have sold freely at steady values; all other wools have been in very limited request, and in some cases concessions have been made to effect sales. The weakest wools on the list are the low medium and coarse grades from Territories and Western States, which have been much neglected by consumers, and exhibit a great contrast to the active movement of last season.

The indifference shown by manufacturers to the wools offering on the market would indicate a larger stock in their hands than has been generally supposed by dealers in the staple, and a belief that they can safely postpone purchases until actual scarcity of stock makes it necessary for them to buy. On the other hand, a large number of the farmers in the best wool-growing districts of the country are holding their wools with confidence, feeling that they will be needed at their own figures before another clip is available. What the result will be is to-day quite as much of an enigma as it was two months ago; one fact, however, is quite evident, manufacturers, so long as the trade for their goods continues in its present unsatisfactory state, will not buy wool faster than they need it, and the question arises will this "hand to mouth" demand be sufficient to relieve the market of the large supplies of wool that have accumulated during the past few weeks without a further concession in prices.

The general prosperity of the country in its cereal interests, as indicating a good healthy fall trade in all branches, is a strong argument in favor of a renewed activity in the wool business, and of which the advent is only a question of time; the prices of the staple in foreign markets are to-day too high to admit of additional importations in competition, and even should a further decline take place in the values of domestic wools, it will probably be only temporary.

The London auction sales began on the 17th ultimo, with a very large offering of colonial wools; the attendance was good, but the bidding lacked spirit, and the prices opened about 5% below the closing rates of the previous series. As the sales have progressed, they have suffered no further decline, while at times some animation has been evident in the competition. The assortment, though large, comprises but little wool suitable for the American market, even were prices low enough to attract buyers from this country; as it is, there is no probability that our stocks will be all increased by any purchases at this offering.

THE FUTURE LUMBER SUPPLY.—What are the lumbermen of the Pacific coast doing to replace the forests they destroy? This is a serious matter, and it ought to be looked squarely in the face. It is attracting the attention of ship builders and other lumber interests on the Atlantic side, and it should not be neglected on the Pacific where the lumber industry is assuming vast proportions. In relation to this business, the *American Ship* thinks that the Lumbermen's Association should consider the matter and endeavor, through the action of its members, to secure protection for the timber lands so that the trees shall be thinned out rather than destroyed, and given an opportunity to make fresh growths from year to year. That journal says: Some legislation may be needed in the public interest for the protection of the forests against the cupidity of men, anxious only about present profits, and the Lumbermen's Association ought to be able to suggest measures that will be fair to all interests. There is scarcely a nation in Europe that does not to-day regret its neglect to provide in time for forest culture, though nearly all now have laws on the subject. The existing laws in this country are really applicable only in the far Western States, where there are public lands which might be worth obtaining for forest culture. In the States now most in need of growing forests, there is very little tree planting, but the waste goes on at a great rate.

TO DISTINGUISH DYES IN COLORED GOODS.

It is often necessary to know with what coloring matters a pattern has been dyed. In some cases an experienced dyer can soon ascertain, almost at a glance, or by simple methods, which dyestuff has been employed; but with many colors this is sometimes impossible. Especially is this the case with blue dyed fabrics, in which it is not easy to say whether a pattern has been dyed with vat indigo alone, or has been topped with cheaper stuff.

The detection can be made by a chemical analysis, the method consisting in destroying one of the coloring matters by some reagent, and thus prove its existence by the use of the destroying medium. To ascertain which mordant has been used, it is only necessary to burn a certain quantity of the fabric, and to find out by chemical analysis which oxide was present on the fabric. These methods are, however, only of use to chemists; but the following is a simple method that may be employed by anybody to determine the coloring matter. To begin with blue dyed fabrics. *Vat blue*, in the first place, is neither affected by alkalis nor acids (with the exception of nitric acid). Only chlorine and chlorine compounds react on vat blue.

A blue dyed with *sulphate*, or *extract*, or *carmine of indigo*, is readily abstracted by boiling water, and even more so by caustic alkalis.

Prussian blue is easily recognized by using alkalis which destroy it, while chlorine and acids have no effect upon it. However, the alkaline chlorine compounds of commerce (bleaching powder, etc.) react upon it.

Goods dyed with *logwood* give, with acids, a coloration more or less yellowish. In case there is another color associated with logwood, the latter may be extracted with a large quantity of acid. The fabric is then well washed, and the remaining color examined.

The red colors are more difficult to determine; but these colors have not the same importance as the blues.

Colors dyed with *cochineal* and *Brazil wood* (which, however, every dyer can easily distinguish) become gooseberry red when treated with muriatic acid. If it is washed, and then passed through milk of lime, a pretty loose violet is obtained. *Madder red*, treated exactly in the same way, and after the milk of lime bath boiled with soap, acquires a more intense color.

Cochineal red and *Brazil wood red* can be easily distinguished by means of oxalic acid, cochineal red becoming brighter, while the other is more or less destroyed.

Black, which is generally dyed by two methods, either with iron or chrome, when treated with chlorine, is destroyed if dyed with iron; but, if a chrome black, resists to a certain extent, only becoming chestnut brown, even with strong treatment.

To distinguish other colors there are many methods, which are, however, too complicated to be mentioned here. Aniline colors require greater chemical knowledge to distinguish them from each other.

HOW SHIPS ARE DISINFECTED.—The following system of disinfection is recommended by the Austrian government for vessels that had cases of small-pox on board: Sulphur to the extent of 12 grains per cubic meter of space to be disinfected is to be burned in an earthenware basin, placed in the center of some sand to prevent all risk of fire. All the linen, clothes, etc., are to be hung across the cabin, which is to be hermetically closed for three hours, and afterward exposed to the strongest possible drafts of air for 12 hours. Then the walls, floor, ceiling, etc., are to be washed with one kilogramme of lime or one-half a kilogramme of chloride of zinc to every hundred liters of water.

TO RELIEVE CASKS FROM MUNTINESS.—Burn a little sulphur in the empty casks, bung, and let them stand for a day.