

—Recent changes in the Government of Russia appear to indicate that the policy of that nation will be to drop its protective tariff and make agriculture its great end and aim. The wants of the average Russian are so few, or his tastes are so crude, and his purchasing power so low, that the manufacturing industries, especially textiles, are threatened with ruin. It is a portentous change in policy, and may profoundly affect the trade of Canada. Within the past few years the special attention given by Russian agriculturists to dairying and cattle and sheep raising has been such that they have been able to increase their trade with Great Britain and the Continent enormously. A Canadian fur merchant, J. D. Allan, of Toronto, just returned from Russia, says the stock raisers of that country have better methods than those of Canada. If Russia is destined to outdo Canada in stock-raising and dairying, will Canada be able to return the compliment by supplying Russia with textiles and other manufactured goods? If the question were asked with respect to finer goods, the answer would be clearly no; but there would be a possibility of doing a trade in coarse goods, since Canada has been able to ship cotton goods to China regularly for years past, and if to China why not to Russia if she abandoned her attempts to develop her own manufactures.

—It will be interesting to Canadian manufacturers of all classes to know that the new preferential tariff of the South African colonies, which was planned at a customs conference in Bloemfontein last March, is now in actual operation. Under this tariff goods from Great Britain will enter Cape Colony, Natal, the Transvaal and Orange River Colony at a reduction of 25 per cent. from the rate under the general tariff. It is provided that a like preference will be granted to any British colonies granting reciprocal concessions. It is provided in the Canadian Preferential Tariff Act of 1897 that the preference will be given to "any British colony or possession the customs tariff of which is on the whole as favorable to Canada as the British preferential tariff [of Canada] herein referred to is to such colony or possession," so that, so far as Canada is concerned, we understand that the reciprocal preference between Canada and South Africa goes into operation automatically. This will open up a promising field to Canadian manufacturers of clothing, men's furnishings, and some lines of cotton and woolen goods, binder twine and other items of textiles, some of which, as a matter of fact, have already been exported to South Africa under the level tariff hitherto in force. To give an idea of what the possibilities are for Canadian manufacturers in this part of the Empire we need only mention what our wideawake neighbors have done in recent years in South Africa. The exports of the United States to those colonies, though they have grown steadily in

the last twenty-five years, did not amount to a tenth of British exports there down to the year 1897, expanded to one-quarter of the British exports last year, or, in round figures, \$33,000,000. When the preferential act of 1897 was promulgated it already embraced in the scope of its operations the colonies of Bermuda, the British West Indies and British Guiana.

### DYE TESTING.

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(Concluded from last month.)

Mordants and assistants of the following strengths are best kept as stock solutions:

Glauber's salt, Xyls.....	10. 100
Common salt .....	10. 100
Potassium di chromate.....	5. 100
Copper sulphate.....	5. 100
Sulphuric acid.....	10. 100
Sodium acid sulphate.....	10. 100
Sodium hydroxide.....	10. 100
Sodium carbonate.....	10. 100
Alum .....	10. 100
Phosphate of soda.....	10. 100
Acetic acid.....	10. 100
Sodium sulphide.....	10. 100

Other chemicals less commonly used can be made up as needed. As the same amounts of mordants and assistants must be used in each dye bath of a series of comparative dyeings, the same degree of accuracy in weighing out the chemicals for these solutions is not necessary. Scales sensitive to 0.1 of a gram are generally used for this purpose

#### Method of Testing Strength of Direct Cotton Colors.

As a rule one per cent. of the standard is used, and this is true for blacks as well as other shades, since one per cent. dyeings are more easily compared than fuller ones. They are dyed with the addition of 20 per cent. Glauber's salt alone in most cases. Exceptions are dyestuffs very sensitive to acids, as Benzo purpurine and Congo reds and dyestuffs, which are difficult to dye level, in which case 2 per cent. soda or 2 per cent. phosphate of soda is also added. It is best to use bleached cotton yarn in all cases unless there is some special reason for using unbleached yarn. The length of the bath is usually twenty five times the weight of the yarn

As an example, suppose a sample of Benzo purpurine is to be tested to see if it is up to the standard. First four dye baths are made up as follows:

No 1	45 c.c Standard .....	1. 500 = 9%
	20 c.c Glauber's salt.....	1. 10 = 20%
	2 c.c Soda .....	1. 10 = 2%
	Water to 250 c.c. = 25 X weight of cotton	
No. 2.	50 c.c Standard .....	1. 500 = 1%
	20 c.c Glauber's salt .....	1. 10 = 20%
	2 c.c. Soda .....	1. 10 = 2%
	Water to 250 c.c. = 25 X weight of cotton.	
No. 3.	50 c.c. Sample .....	1. 500 = 1%
	20 c.c Glauber's salt.....	1. 10 = 20%
	2 c.c. Soda .....	1. 10 = 2%
	Water to 250 c.c = 25 X weight of cotton.	
No 4	55 c.c Sample .....	1. 500 = 1 1%
	20 c.c Glauber's salt.....	1. 10 = 20%
	2 c.c Soda .....	1. 10 = 2%
	Water to 250 c.c. = 25 X weight of cotton.	