With the latter I do not agree, and unless the manufacturing establishments are of such a character as to require a large amount of low pressure steam for dyeing, bleaching and similar purposes I am inclined to think that the minimum cost of steam power should be taken at about $20, except in cases of very large powers, for it is a well established fact, that the cost of a steam plant diminishes per horse power in the inverse ratio of its increase in size, and the cost of operation diminishes in the same direction. It does not cost four times as much for an engineer to run a 1,000 horse power engine as it does for one man to run 250. The cost of firemen and laborers seems to diminish also per horse power, and the cost of fuel also appears to be less as a general rule.

I had occasion a few years since, when employed in one of these appraisement cases, to endeavor to get the actual cost of a horse power of steam, from a favorably situated mill, which was using steam for power only, and without reference to the use of exhaust for heating or any other purpose. These facts I obtained from Mr. Arnold S Sanford, of Fall River, for an engine of 1,050-h.p during the months of April, May and June, 1893, when the engine, a compound condensing one, was so run. The cost of the plant engine, boilers, etc., was given me as $66,000, or $62.83 per horse power.

Coal burned in 73½ days, 1,527,000 pounds at $3.70 per gross ton, or $2,519.55; labor, $555.50; oil and supplies, $76.50; being a total expenditure of $3,157 55 for the 73½ days, equal to $13.25 per horse power per annum for coal, labor and supplies. To this I add charges on cost of plant, bringing net horse power $23.90.

My son, Mr. William O. Webber, has prepared a "graphic diagram," showing the variation in the cost of steam power, due to difference in size of plant, deduced from the results obtained and the estimates made, by Messrs. Chas. E. Emery, F S. Dean, R. S. Hale, Chas. T. Main and myself, at different times and places, covering a long series of observations, and so nearly as I can reduce this curve to round numbers, it gives the cost as follows:

For 100 horse power	$63 00
For 200 horse power	45 00
For 300 horse power	37 00
For 400 horse power	32 00
For 500 horse power	29 00
For 600 horse power	28 00
For 700 horse power	27 00
For 800 horse power	26 00
For 900 horse power	25 00
For 1,000 horse power	24 00
For 1,500 horse power	22 00
For 2,000 horse power	21 00
For 2,500 horse power	20 00

These figures are supposed to represent net horse power delivered from the engine.

As above noted, these costs would be very much reduced in cases like those of the Amoskeag, Manchester and Pacific mills, where a large boiler plant is always required to furnish low pressure steam for dyeing and bleaching purposes, and where the cost of power would be reduced to charges on engine and additional boilers, wages of engineer and extra firemen, and coal consumed in raising pressure from 30 to 120 pounds and the steam used for dressing yarn or heating mills, say from $3 to $5 per horse power, should be deducted or added to the cost of water power in making comparisons.

—Lustering Wool and Cotton.—A French patent has been taken out for lustreing these materials by means of a solution of real silk in caustic lye Soda lye of 36 deg. B. is put into an earthenware vessel, and to it are added raw silk scraps, fragments of cocoons—in fact, any raw waste, to the amount of 3 per cent. of the caustic soda used. The solution obtained is diluted to 10 deg. B. if it is to be used cold, to 3 deg. to 5 deg. B. if hot. The fabrics are then plunged in, and after about 10 minutes immersion centrifugal, soured, rinsed, and dried at a low temperature. The prepared fabrics can be dyed perfectly well.

OREGON WOOL DEVELOPMENT.

C. H. McIsaac, the secretary of the Manufacturers' Association of the Northwest (Oregon), writes that Oregon is a wool producing state, the clip for 1890 having been about 22,000,000 pounds, of which only a small proportion, 3,000,000 or 4,000,000 pounds is used by local mills of the state. The balance is shipped to the east, to be returned later made up into clothing, blankets and cloth, to the great loss of the state. We are going to make an effort, says the Manufacturers' Association, to make Portland the wool market of Oregon, as San Francisco is of California, and by the erection of a woolen mill here, and the cheap transportation from Eastern Oregon, and the Willamette Valley, this, we think can be accomplished. Portland's shipping facilities for the products of a woolen mill here are as good as can be found on the Coast, but the great feature is the unsurpassed climate of this section of the state for wool manufacturers. Our climate has no superior. Evenness of temperature and absence of electricity from the atmosphere, and freedom of the water from alkali, are very rarely so favorably united as they are here. We can make here goods equal to the famous Scotch cheviots from our valley wool, and kerseys and fine Meltons from the Eastern Oregon fleeces. This, of course implies that we have the machinery for the work, and are operating on such a scale as to secure skilled labor. It has been proposed by this association to form a corporation with a capital stock of $100,000, 1,000 shares at a par value of $100 each. What we want to do in this connection is to secure a practical experienced woolen mill man, with some capital, to take hold of the matter, and Portland will subscribe the balance of the money to build and equip the mill. "If you know of any such persons that you could recommend," the secretary writes us, "I would be glad to have you refer them to me, and I will take the matter up directly with them."

DYESTUFFS.

Acid Anthracene Brown W. & T.—These new qualities possess the same valuable properties as the older R brand, as they also dye easily level, penetrate well and are extremely fast to light, acids, alkalies, milling and steaming. The W brand is similar but somewhat lighter than the R mark, whereas the T quality is of a deep brownish tone with a reddish blue over hand. Both new qualities are very well adapted for dyeing loose wool, yarns and pieces in one bath.

Diamond Green SS like the older B quality, dyes wool well with acetic acid, the shade being a dull green, but is said to be remarkable for its greater fastness to light than the Fast Greens, etc. It also dyes wool well in neutral baths, and is suitable for the dyeing of half woolen goods. The shade is not changed by after-treating with Bichromate of Potash, and is almost as fast as Diamond Green B to light and milling, and will therefore meet most requirements in this respect. It is most useful as a shading color in dyeing fast shades according to the one bath process, whether on wool, yarns, slubbing or piece goods.

Azo Fuchsine 6B is brighter and bluer than the older B mark, and its fastness on the whole is the same as that of the other Fuchsines. Azo-Fuchsine 6B dyes easily level in a boiling bath, and is very fast to alkalies. On account of its clearness of