

factory or domestic use, roving cans for factory use, fire buckets, umbrella stands, acid tubs and pails, hatters' finishing tubs, water coolers, vases, fire casks, measures, pots, and receptacles of many kinds for factory and domestic use. In the cotton and woolen mill the indurated fibre buckets, cans and receptacles have been found to be of special use, having many points that make them better than all other wooden or metal appliances. Such pails and utensils do not swell or shrink, they do not leak, they are not affected by hot or cold water or steam, they are proof against oils, such as naphtha, kerosene, etc., and even resist the action of many acids. They are lighter than almost any kind of wood, and are practically indestructible. All these points have been abundantly proved by their use, and they are rapidly becoming indispensable in all textile mills. A leading cotton mill company who have used these goods in the United States writes of them: "We have used your pails for two years about the mill for any and all purposes that we have for pails. We have also used them in our dye-house. We can recommend them to be far superior to any other pail we have ever used. We believe that they are all that is claimed for them." Another mill writes that they have given up the use of all other pails for any purpose whatever. We shall be interested in giving the results of further tests of these pails, a sample of which can be seen in this office. — *Canadian Journal of Fabrics.*

LATEST DISCOVERIES IN DYESTUFFS.

ALIZARINE-CYANINE BLUE R.—This new Alizarine Blue dyestuff comes to the dyer in the form of a paste containing twenty coloring matter. It has the advantage over Alizarine Blue of dyeing even, faster shades (especially in light tints, slates, greys, etc.) Although the cost per pound of this color is more than Alizarine Blue, it is in reality a cheaper coloring matter on account of its productiveness (less color being required to produce the same depth of shade). Besides being both cheaper and faster than the ordinary Alizarine Blue, it is more valuable for dyeing full Navy shades on account of possessing a bloomy appearance, without the addition of any other dye that is commonly used, such as Cudbear, Alizarine Red, etc.

Alizarine-Cyanine R. is dyed as follows:—100 pounds clean wool is previously mordanted by boiling for $1\frac{1}{2}$ hours in 3 lbs. Bichromate Potash (or Soda), 1 lb. Oxalic Acid; rinse and enter dye-bath containing 5 to 10 lbs. Alizarine-Cyanine R., 2 lbs. Acetic Acid, (or $\frac{1}{2}$ lb. Sulphuric Acid, according to shade of Navy required); for light Greyish Blues 8 oz. is sufficient. Enter dye-bath cold and leave wool underneath water for about twenty minutes, then turn on steam and gradually raise temperature to boil and boil for one hour; while only poling the wool sufficient to keep the dye from taking on uneven, rinse.

ANTHRACENE YELLOW.—This new Alizarine color, while having the advantage of being faster than the yellow dyestuffs now in use, such as Fustic, Fustic Extract, Quercitron, etc., but has not yet come into general use for this market on account of the cost. It is specially adapted for dyeing silk.

DIAMOND-GREEN (Patented).—This new Aniline Color has just been discovered, and dyes wool a dark so-called Russian Green shade. Diamond-Green is very fast, and will withstand scouring, milling, light, stoving and acid. What is of special importance, however, is that Diamond-Green will dye well in one bath in combination with Diamond-Black, being of same constitution, and by such a combination a fine coal black is obtained superior to Log-wood Black.

Alizarine-Cyanine R., Anthracene-Yellow, Diamond Green, have all been discovered by the Farbenfabriken vorm Friedr Bayer & Co., Elberfeld, Germany.

The Dominion Dyewood & Chemical Co., Toronto, are sole agents for Canada, who will be pleased to furnish further particulars, prices, etc.

PETERBOROUGH, ONT.

SPEAKING of the manufacturing industries of Peterborough, the *Review* has the following to say regarding some of them:—

We have the Auburn Woollen Mills, which have been in operation nearly thirty years—turn out vast quantities of splendid clothes, and employ a large number of hands. The goods of this Company are of a high order, and find a ready market in the wholesale centres.

The William Hamilton Manufacturing Company has been in business thirty-three years, employ 150 hands, pay out \$60,000 a year in wages, and are in a very flourishing condition. This company

makes a specialty of saw-mill machinery. Their works are very extensive, and this year have been largely increased to meet the demands of a trade which is constantly growing. Their mills are famed from Newfoundland to Vancouver. Saw-mills are frequently built in out-of-the-way places, and it is of the first consequence that the machinery should not break down, for a break means idle hands and a great loss. And here it is that the Hamilton company's machinery has made its repute.

Then there is the well-known agricultural implement manufactory of Mr. Peter Hamilton to make good wares. This establishment has been here many years, steadily growing and extending its manufactures—plows, seeders, mowers, self-binders, threshing machines—everything for the farmer. Mr. Peter Hamilton's goods are like himself—built on the "square," doing all they promise, and wearing well. Our own people know the merits of his machines, know how readily and cheerfully they can get repairs, and know they will be fairly and kindly dealt with; and so this business keeps growing year by year. This firm employs from 100 to 125 hands, pays out yearly the sum of \$45,000 in wages, and is one of our best establishments.

The Peterborough Bridge Works is an establishment we are all very proud of. Starting modestly, it has become an extensive and fast growing concern. Mr. Law, the proprietor, employs 120 hands, and pays about \$50,000 in wages in a year. His expenses in freight alone this month will amount to \$3,500. He turned out about 1,500 tons of iron and steel last year, and expects to do more this year. Mr. Law has erected a large number of bridges, has done extensive work for the various railway companies and for the city of Toronto. The great six-foot mains built in fifty feet lengths with socket joints for the Toronto Water Works, were turned out of this shop. Here may be seen riveting with compressed air, and with steam, sawing iron bars as if they were made of cheese, and huge hydraulic trip hammers which will crack a nut or mould the hugest bolts and bars.

We have saw mills that turn out lumber by the millions of feet. Peterborough is the headquarters of the Dickson Company, who turn out about 20,000,000 feet of lumber per annum and employ about one hundred hands.

Of flour mills, where will you find better than Mulhern & Davidson's, with 200 barrels a day, and Hilliard & Peplow's 100 barrels a day?

Then comes our Lock Factory. Our people speak with pride of this establishment. It is comparatively new, but it is ever expanding and occupying new buildings and embarking in new lines of work. A few days ago it sent to the Jamaica Exhibition 600 specimens of its manufacture, every piece a distinct pattern. The goods of this company are found in every Canadian city, town and village, and of a quality such that the verdict is—no American need apply. The other day the well known wholesale firm, J. H. Ashdown, of Winnipeg, received from the Peterborough Lock Company an entire car load of locks. This company employs 140 hands and pays out \$50,000 a year in wages.

The Carbon Works are new. This establishment is a success—the carbons are accepted all over the province as equal to the best American, and being Canadian and cheap, they find a ready market. It employs 40 hands and is about to branch out into other lines.

And now what shall we say of the Edison Electric Company? After examining all Canada this town commended itself to the astute Edison, as the very best place for his extensive establishment. Here the Company has twenty-seven acres of land in which they are now putting sidings, drains and foundations for ten huge buildings. This company expects to employ many hundreds of men, and we hope by this time next year that our population will be increased by at least 1,000 souls, and in two years by three thousand.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Caisson," will be received at this office until Friday, the 5th day of December next, inclusively, for supplying, erecting and completing in place, a Wrought Iron Caisson for the Dry Dock now in course of construction at Kingston, Ont., in accordance with the plans on exhibition at this office, and at the Engineer's office, 30 Union Street, Kingston, and with the conditions and stipulations contained in a Form of Tender, copies of which can be obtained on application to the undersigned and W. O. Strong, Esq., Resident Engineer, 30 Union Street, Kingston, Ont.

Tenders will not be considered unless made on form supplied, and signed with the actual signatures of tenderers. An accepted bank cheque payable to the order of the Minister of Public Works, equal to five per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
Department of Public Works,
Ottawa, Nov. 19, 1890.

A. GOBEL, Secretary.