

## A Huge Industry.

Most people who have been in the Dominion Capital have taken a run across the river to the lumber town of Hull, and viewed from the outside the collection of huge lumber and other mills clustered around the grand water power, which nature has placed on the Ottawa river at and around that town. Only a small number however, have gone beyond the outside view, and only the small number who have visited and inspected the mills and factories of the E. B. Eddy Manufacturing Company have any idea of the triumph of enterprise, indomitable energy and mechanical skill there to be seen. In fact it is questionable if the works of this company do not furnish the greatest monument to industrial skill and enterprise in Canada. The magnitude of these works has its first indication in the appearance they present from the outside. They stretch along the bank of the river taking up an area of 165 acres and have nearly two miles of railway track, within this limit, when all switches and side-tracks are taken into consideration, while the buildings, distributed over and containing the different factories, are all built of solid stone, presenting a massive appearance, very unusual in connection with lumber factory structures.

Sufficient space for anything like an accurate description of all the different branches of manufacture cannot be given in this journal at present, and we must content ourselves with noting some points about the best known ones, commencing with the pioneer one, started in on a very small scale in the year 1854 by Mr. E. B. Eddy himself, namely,

### THE MATCH FACTORY.

Few of those who carelessly use or waste the lucifer, can form any idea of the ingenuity brought to bear to facilitate and cheapen their manufacture. First the blocks of pine are cut and cross cut, until each block resembles a heckle or wool carder. The next process after the matches are cut clear of the blocks is the rolling machine. Belt conveyors carry the matches along to a small hub like wheel around which they are wound with a girth belt, until about half a gross of boxes full are formed in wheel shape, when the whole is removed in a solid shape, and a fresh hub attached to the machine and the winding process proceeded with. The embryo matches are on this hub two ordinary lucifers in length, so that in the sulphur dip, and afterwards in the phosphorous dip, both sides of the wheel of splints are dipped, and after drying and taking off the wheel they are taken on to another belt conveyor, leading to a circular cutter, which cuts them in equal halves, thus leaving the ordinary full fledged lucifer. It is worthy of note that the old system of fire melting the phosphorus dip has been superseded by high steam heating in the troughs, thus avoiding all danger of the explosions which so frequently occurred in match factories in years past.

The most wonderful piece of machinery in the whole factory is the match box cutter. The band of tough paper from which those boxes are made is conveyed by an ingenious piece of mechanism off the roll, into the cutter in which it is cut, grooved at the seams, printed and

glued, pressed into form, and thrown out a box complete. The whole process has no parallel for mechanical completeness, except it be that mythical machine of the minstrel negro, into which sucker fish were thrown, and, by placing the mouth to a tube and turning a crank handle the cooked fish went down your throat, and the bones out into the back yard. When it is learned that the machine can turn out 280 boxes inside of one minute, its wondrous mechanism can be in some degree comprehended.

The next process is the boxing of the matches and this is purely handiwork accomplished by girls, whose accuracy of grasp and touch is truly wonderful. How those nimble hands can grasp a handful of matches and stuff them into a paper sheath uncounted, not going three matches over or under the standard 100 in one box in a gross, is a study for the professional palmer.

Next in importance to the match factory, is the manufacture of

### INDURATED WARE

as the wood pulp utensils now so popular are called. The pulp used in the manufacture is almost the same as that used in making pulp for paper, and we need not therefore describe its manufacture. In making indurated ware this pulp reduced to a gruelly thickness and freed from lumps of every description is pressed into tubs, pails, dish pans or whatever utensils intended to be made, and under a hydraulic pressure of 160 pounds to the square inch it is moulded and turned out, and after this the moulded goods are dried and taken to another floor, where by different kinds of machine driven saws they are trimmed, then put upon a lathe they are polished. After this it is taken to the indurating vat and then thoroughly dipped in a solution which, as Dundreary says, "no fellow can understand," seeing the composition of the solution is kept a secret. After this the articles are dried in a kiln heated to 500 degrees Fahrenheit. When dried in the kiln, another dipping takes place in a solution which puts on the glaze finish, after which the goods are ready for market, unless in pails, tubs, and such like where handles have to be fastened on. These goods are then strong enough to allow any man of more than average weight to jump upon them without their being injured, and there can be no doubt, but they must rapidly replace not only the wooden and crockery ware, but also a large proportion of the metallic ware utensils now in use.

Another branch of this business is the manufacture of woodenware, and especially of those wire hooped goods, which do not fall to pieces or become leaky if left for a length of time in a dry and empty state. The sawing, turning, hooping, handling and so forth of these goods are all calculated to awaken interest in any mind with a leaning to mechanical affairs; but after inspecting the match and indurated ware factories the manufacture of plain wooden ware becomes tame, we will, therefore, dispense with a detailed description of its process.

The sash and door factory and the manufacture of paper pulp, and some other goods make up the balance of the industries carried on in these factories, the company having given up the saw mill business a few years ago to

go more fully into general manufacture of goods made from lumber and lumber-mill refuse. That the concern is a gigantic one, finds another proof in the fact, that in connection therewith some 2,500 hands are regularly employed, and at times the number reaches nearly 3,000. As already stated it is probably the greatest monument in Canada to mechanical skill and enterprise.

Like most gigantic industrial concerns the E. B. Eddy Company's works had a small beginning, when Mr. Eddy started his small match factory in 1854, and even with the pail and tub factory added in 1856, the institution was but a modest one. After going into lumbering and sash and door manufacture in 1858, the business went forward rapidly, but received a bad set back in 1873-4 during the great panic and crash, from which it recovered in 1877 and again went rapidly forward until the fall of 1882, when a disastrous fire swept away over two-thirds of the whole institution. It was after this fire, that the stone buildings were erected so as to avoid a similar disaster in future. Since then the company have had another turn of prosperity and progress, and the factories now take their place as one of the largest industrial concerns located at one point in the Dominion. Their wonderful growth and development are due almost entirely to the energy, enterprise and commercial courage of their founder and president of the existing company, Mr. E. B. Eddy.

## Toronto Live Stock Market.

There was a great improvement in the tone of the cattle market to-day, prices in nearly all departments showing a firmer feeling. Business was brisk all along the line, and although the receipts were large, about everything was cleared up towards the close. The arrivals were: 54 loads, including about 1,415 sheep and lambs, 420 hogs and 100 calves.

Export cattle—Foreign advices showed an advance of ½c. The offerings of this class of cattle were fairly liberal, but were not quite adequate to meet the demand. All good cattle were wanted. Prices ranged from 5 to 5½c per lb, but sales were mostly within the limit of 5 and 5½c per lb. A good many butchers' cattle were taken for this trade, owing to the scarcity of cattle of a better class, and for these from 4 to 4½c per lb was paid. Among the purchases of butchers' cattle for export was one lot of 727, averaging 1,010 lbs, which was taken at 4½c per lb.

Butchers' cattle—The supply of this class of cattle was adequate for all the requirements of the market. The quality of the offerings was somewhat better than what has been on the market for the past two weeks, and butchers found very little difficulty in supplying their wants. Nearly all offered were taken at prices ranging from 3½ to 4c for good to choice, and 3 to 3½c for inferior.

Stockers—There was a fair demand for stockers to-day and a good many changed hands at from 3½ to 3¾c per lb.

*Farm Implements*, a journal published at Minneapolis, is reproducing the letters from *THE COMMERCIAL*, by "Manitoba Merchant" and Mr. Van Allen, in the controversy between them regarding the implement trade.