## CANADIAN WOODS USED IN MANUFACTURE.

We continue our quotations on the above subject from Mr. R. W. Phipps' Forestry report .

From an Orillia barrel factory.

I may state that I use oak, clin, ash and basewood in my business, which is that of proparing material for both tight and slack barrel work, principally flour barrels. The timber is original. Any size of trees from six inches to sixty inches are used. Becand growth timber would not do as it is too t ugh

From a match factory at Buckingham

The wood used in our business, matches is pine, and the very best at that. My stock I obtain in this section of the country, Ottawa. Much that I use is the buttings from three inch deal, the piece that is cut from the deal to bring it to length. When the supply of that kind of stock is not sufficient I use the deal. Of course you know that deal is cut from the best and largest logs. Lumber that I use for my cases is largely spruce, as that is cheaper and I think makes a tougher case, although sometimes I use pine.

From a grain cradle factory at Mount Forest I get my supply in this neighborhood, but find it getting scarce and require to go some distance now to get the required quality. The timber use for snaiths is clm. I prefer white ash, but it is not to be had in this vicinity, only in very small quantities. For fingers I use maple, natural crook. That also is getting very difficult to get. The size of elm trees should be from six to fifteen inches in diameter maple any size. I might say all kinds of mexhantable timber, such as pine, rock elm Of maple cherry, and basswood are scaree and hemlock there is a fair supply in this neighborhood, that is within a radius of about six miles. Of course, in the immediate neigh borhood, there is little or no timber . bought, the farmers requiring all they have for their own use.

From the vencer factory at Harriston :-

We use mostly soft and rock elm, also birch, which after cutting into proper lengths and steaming, we tut un into veneering and barrel staves and cheese box material. We also use basswood for manufacturing into barrel heading and tops and bottoms of cheese boxes. All the timber used in the factory is grown in this township (Minto), of which two inches up to four and five feet in diameter, the soft elm especially attaining good size. We use no foreign timber of any kind.

From a prominent piano manufacturing firm in Guolph :-

We give herein a list and description of the wood used by us in our business, as piano manufacturers. Black ash of the largest size and best quality, used for tops and rims of manos, to be veneered with resewood. Basswood and whitewood of the largest size, and best quality, carved into legs and lyres for planes. Pine of the best and softest quality, (white), for keys, and also for bottoms and blocks used in building cases. We also use cherry for upright piano cases, and small parts of all pianes, this of the best quality. The foreign wood used is spruce, (American), for sounding boards, and rosewood veneer. We have found our Canadian spruce too hard and gummy in its nature to answer our purpose. It does not give to the piano that sound which the American wood does, and is much more difficult to work. You see all the wood we use requires to be of the largest size and best quality, soft grain, not liable to warp or twist, and easily worked. Cherry veneer could be used, but there are no mills in Canada that can cut veneer; we get cherry veneer from New York, yet most of our best Canadian cherry lumber goes into the American market.

The following is from a leading furniture factory in Toronto : -

Concerning the kinds of Canadian wood we use in the manufacture of furniture in our business, I will class them according to their respective value. First, black walnut, which is principally used in the botter class of furniture, grows in the western part of Canada, especially in the counties of Essea, Kent, Elgin, Norfolk, Lambton and Middles z. In all these sections seventeen to twenty five years in favorable but even with our present plentful supply, it displacements, found. Soft implies a very useful, but compare will not long stand the demands made by there is not an effort made in planting this atively scarce. Birch is next in value to cherry, American dealers, who, taking none but the

valuable wood, it will not take many years w become extinct for commercial purposes. The price we pay for first class wainut is from \$80 to \$100 per thousand, Cherry is another wood that is used for the better class of furniture. it grows generally all over Untario, more or lessand is becoming very scarce, owing to the demand for it in the United States, where most of it has gone. Its market value is from \$40 to \$50 a thousand. Uak is used by us, but not very extensively, it not being aiways very suitable for furniture. Value about \$30. White pine is much required in our business, but it needs no comment from me, as no doubt you are well acquainted with that class. Hard maple, or sugar maple as it is sometimes called grows extensively throughout the whole of Canada. From it we make our inferior class of furniture, such as chairs, bedsteads, etc. Value about 810. Rock and soft elm are getting to be very much used for a certain class of furniture, because it is so easily worked. It is cheap and and abundant. Price, about \$12 to \$14 per thousand. Soft maple and whitewood are woods that we handle a large quantity of, especially the maple. These grow luxuriantly in the western part of Untario, and are always found abundant where there is walnut. Their price per thousand is from \$10 to \$15. Butternut is also used in cabinet making. It grows generally all over the Province, is not very abundant and is getting scarce. I'rice, from \$25 to \$30 per thousand. White and black ash are valuable woods for our business, and very much used. They grow generally all over the Province in large quantities, especially the black ash, which has a very beautiful grain. Its price ranges from Sis to \$20 a thousand. Basswood also is in much use in our manufactory and is from \$14 to \$16 per thousand. Uriginal growth and old trees we prefer for our business, as they are better adapted and easier worked. Second growth is better for beading purposes. Of it we use a little, but it is more adapted for waggon and carriage making.

Some further details of the uses of woods in furniture, may be interesting. For instance, chair and table legs are made of maple and birch, those of the better class of tables, of walnut; the curved portions of chairs, such as arms and backs, of rock and soft elm. Seats formerly made of basswood are now water elm. except those of rocking-chairs, which are still basswood. All visible portions of first-class tables are generally made of one wood, such as walnut or cherry. The inside machinery of extension tables, as of other furniture, where great strength and freedom of movement is required, is of white ash. Swamp elm is largely used for the tops and sides of tables, the legs being generally maple. Wash-stands, visible portions, of soft elm, concealed ones of pine or basswood. In bedsteads displaying the large smooth boards which are now fashionable, walnut, ash, red oak and water olm are used the upright portions being often maple, ash or walnut. Sideboards and wardrobes are made of cherry, red oak, water elm, and walnut. Some of these woods are used for such purposes, venecred with more showy ones, frequently of foreign importation. In common chairs, cheap tables and bedsteads, the woods generally used are basswood, whitewood and water elm. The next is from a similar firm in Belleville:

The descriptions of Canadian woods used in my business, are black ash, black birch, cherry, soft and hard maple (beech is also used fur chair work), groy or awamp clm; this last of late is coming into extensive use, and has a beautiful grain, and makes a fine cheerful finish. The objection which formerly prevailed against elm was the difficulty of drying it to keep straight, which is now entirely overcome. Easswood is largely used, our black walnut nearly all comes from Indiana. All the other basswood and some ash, are all of original

which is next in price to black walnut. Cherry is not abundant in this section, but birch is found in abundance just north of us, and is yearly increasing in demand.

give my readers the following well written little essay by Mr. J. B. Smith, agentleman connected with one of our principal Toronte lumber firms. It is a mass of valuable information, and comes from a thoroughly practical man .

The reckless waste of woods which has been going on for years, must eventually find an end in the total destruction of the timber with which this Canada of ours was once so bounti fully endowed. The losses incidental to the getting out of logs have been partially estimated, but the consequential damages, such as the changes in the climate, water supply and others, cannot be computed. Let any Canadian of middle age recall the appearance presented by, the forest in the days of his youth, and compare that with the present. He will remember the unmenso monarchs of the lorest that stood towering in their rugged strength. "The Monarch Oak, the patriarch of trees;" the wide spreading beech, the ash, Venus of the forest, with the feathery lightness of its foliage, the noble elm, the butternut, hickory, and the birch, with others, many of which have disappeared. And what will our Canadian now see ? No well guarded young trees replacing those which fell before the unrelenting woodman's axe, but dwarfed specimens of unhealthy progeny, or the fast decaying stump, a memento of departed greatness. Our duty is clear, not to mourn over the past wanton destruction, but to be up and doing, providing for the reproduction of woods each year becoming more scarce. Reproducing is our sole recourse. This cannot be too strongly arged apon our farmers. We know what description of timber grew in certain localities, why not replant? In some counties wainut, whitewood, white ash, etc., were to be had in abundance. Now few of these trees are to be found. Necessary information can be obtained and furnished to all wishing to engage in arboriculture. Few of the trees of our forests but have been manufactured into lumber and placed on the market. They are all used in the many industries—ash (white and black), birch, beech, basswood, butternut, balm of Gilead, cherry, cedar, chestnut, rock and soft elm, hickory, hemlock, hard and soft maple, red and white oak, pine, tamarac, spruce, sycamore, walnut and whitewood.

In agricultural implements, including wagons, are used white ash, oak, maple and rock elm.

Buildings-pine, hemlock, maple, oak, black ash, elm, birch, butternut, cherry and chest

Boats-pine, oak, spruce, tamerao and cedar. For cabinet work-birch, soft elm, maple, cherry, walnut, butternut, oak, black ash, bass wood, etc.

Car building-oak, pine, cherry, birch, maple, tamarac, walnut and whitewood.

Pianos and organs-walnut, whitewood, bass wood, pine, chestnut, cherry, oak.

Tool handles-birch, maple, etc.

And a host of minor industries all contribute to consume the product of our forests. We are not content with our native woods, but go to far off climes for lignum vitee, boxwood, maliogany, rosewood, baywood, tulip wood, holly, etc.
These we cannot produce. The average diam eter of trees manufactured into lumber is from 18 to 24 inches; this includes all the above These are, in the close mentioned kinds grained woods, mostly the original, of a few they cut up the second growth

The differ it species I have enumerated are to be found pretty evenly distributed, Walnut, whitewood, ash, maple, hard and soft elm, oak, balm, hickory, chostnut, sycamore, pine, bass wood and cherry, are said to be had in greater kinds named are native woods, and except some or less quantities in the southwestern counties. For birch, rock olm, beech, maple, basawood, growth, in fact the two latter, in my mind, are poplar, pine, hemlock, tamarac, we go to the the only ones which would reach a size fit for morthern and northwestern, as well as the uso in less than about seventy years. From easter, countries. Black ash is at present a casual observation, basewood will grow to a plentful wood and can be obtained in almost diameter of our to thereon inches in from any part of the Frosince. Soft elin is abundant

largest and choicest trees, use quantities of this and other timber in manufacturing stares, Each year sees a diminished quantity of hemlock. Our supply of bark for tanning will soon Though scant of space I am persuaded to be exhausted. Cherry is very scarce, what we have is a poor quality. The demand for thu wood during the past year has almost exhausted our supply. In the process of aboning, so much in vegue, great quantities of cherry are used. White sub, butternut, and white out, are also becoming woods of the past. Of walnut very little is to be had, and that is out from partially rotten logs, which, when it was more plentiful, were cut, and, not being considered sufficiently good, allowed to docay. We rolled in the abundance of our forest wealth and are now auffering somewhat of the evils attendent on such a course. To day we import whitewood and walnut from places to which formerly we exported large quantities of the same timber, much superior to what they are now bringing

We find the difficulty of getting a good quality of white oak, white ash and cherry increasing each year.

We are certainly opening up and clearing the country, but at a terrible cost.

In fine, unless we at once begin to reproduce, the limit of our forest wealth will soon be reached. It is not inexhaustible. Fires, cattle and men, not lumbermen alone, but camper, hunters, etc., seem combined to destroy the remnant of what seemed an cudless supply, as well as to prevent the growth of young timber.

As to the prices of Canadian woods, it is difficult to give you, as prices differ so much, they being regulated principally by the general run of the stock under negotiation, and the average quality of stock in different parts of the Province are not at all alike. However, I will give you the prices we would pay for the differ ont kinds, loaded on cars at point of shipment, per thousand feet, cherry, \$35 to \$40, butter nut, \$30 to \$35; chestnut, \$19 to \$21; white oak and white ash, \$18 to \$20; red oak and black ash, \$12 to \$14; soft elm, \$8 to \$9; rock elm, \$10 to \$11; whitewood, \$19 to \$30, baswood, \$11 to \$12; sycamore, \$12 to \$13.

Above prices are for first and second quality, together to average not less than fifty per cent of first. Cull cherry and butternut is worth about \$14. Culls in the other woods would be worth about one half the above prices. Pine is generally bought mill run, with mill culls out, and is worth from \$10 to \$14, according to the percentage of clear lumber in the stock. Mill culls are worth \$5 per thousand feet. Hemlock billstuff is worth (up to sixteen feet long) 87, and an advance of fifty cents por thousand for every two feet over that length up to say twentytwo feet; over that length it is worth considerable more.

Power Wasted by Shafting Out of Line

The amount of power wasted by shafting being out of line, badly lubricated, of insufficient size and imperfectly coupled, can hardly be estimated. Great as is this loss, that from badly laced, crooked, stiff, and generally outrageous belting is but little less. In some establishments a belt lacing of sufficient size for the main belt of the establishment is considered plenty good enough to lace a three inch belt with, and is used accordingly. A punch large enough to make holes for the biggest lacings is. of course, necessary, and it has the advantage of answering for all sizes of belts. The apparent advantage of having but one size in a large ostablishment is captivating to the business department. The result in belt efficiency, however, is something which would astopush the counting house if it could be made to understand the figures .- Inquitrial American

## For the Ladies.

Laughter is the poor man's plaster, Making every borden light, Turning sadness into gladness. Darkest hour, too may dawn bright, Tis the deepest and the chespest Cure for lis of this description, But for those that woman's hoir to, Use Dr. Pierce's "Eworite Prescription,"