FIFTY YEARS

IN THE

NORTHWEST

WITH AN INTRODUCTION AND APPENDIX

CONTAINING

REMINISCENCES, INCIDENTS AND NOTES.

BY W. H. C. FOLSOM.

EDITED BY E. E. EDWARDS.

PUBLISHED BY
PIONEER PRESS COMPANY.
1868.

LUMBERING ON THE ST. CROIX IN 1845

The progress of civilization involving the building of railways, the transformation of the wilderness into cultivated fields, the growth of villages and cities, the increased facilities for manufacturing and the bringing the forest domain under law, has created such changes in the business of lumbering as to justify the insertion of a chapter relating to the life and surroundings of the early lumberman. Let us go back to the year 1845. The country, save a few sparse settlements on the navigable streams, is as yet an unbroken wilderness, and tenanted only by wild beasts and roving Indians. There are vast regions, densely wooded, in which the sound of the woodman's axe has never been heard, lying about the headwaters of the Chippewa, St. Croix and other streams. These pineries can only be reached by stemming the currents of the minor streams in bateaux or birch bark canoes, or by traversing the country on foot or with teams. Parties operating must puchase their outfit, consisting of teams, supplies of flour, port, etc., in Illinois or Missouri. Sometimes they drive their teams through unsettled country, without roads, swimming and fording streams, clearing away obstructions, and camping where night overtakes them. Sometimes they ship their supplies by steamer to Stillwater or St. Croix Falls. When landed at Stillwater the supplies are packed upon flatboats and poled to Taylor's Falls, where they are to be portaged to the head of the rapids, a distance of six miles, and transferred to bateaux. The portage is a difficult one. The goods are to be hoisted up over the rocks of the Dalles and placed upon sleds calculated to run upon the bare ground. Considering the inequalities of the surface from the Dalles to the head of the rapids, the portage is an immensely difficult one. They are then taken to their place of destination, the bateaux returning to the Falls for successive loads, the whole transfer requiring considerable time. Sometimes, if late in the season, part or whole of the fleet of bateaux may be caught in the ice, in which case a bushed road must be made, and the supplies transported by teams and men.

Arriving on the ground, the operators blaze trees on lines surrounding the region which they wish to work during the winter. These claims are generally respected by others. The first work to be done is making a camp, building stables, clearing streams of obstructions, and making roads. Incidentally the Indians, certain to be visitors at the camps, are to be propitiated with presents of flour, pork and tobacco. These pacified and out of the way, the lumberman must say with Alexander Selkirk -

"I am monarch of all I survey;
My right there is none to dispute."

Trespassing is unknown. The lumberman is not conscious that he himself is a trespasser on the domain of Uncle Sam. Nor is he. Has he not the best title in the world? Who is there to dispute it? No government agent ever troubles him, or questions his right to fell the royal trees and dispose of them as he may choose. He is earning by his strong right arm his title to the trees. He endures much, accomplishes much and is the advance courier of civilization. He spends long months away from the common haunts of men. He is cut off from the mails and from home pleasure. He lives an industrious life. Cold is the day when the stroke of his axe is not heard. The snow deepens around him, the temperature sinks lower and lower, till it would not discredit Labrador; still he toils on unceasingly, and at night builds high his blazing fire, wraps himself up in his buffalo robe and blankets, and sleeps through the night the sleep of the tired and the just. Meanwhile, his appetite is marvelous. The cooking (done by one of the crew) may be of the rudest, and the provisions none of the daintiest, but exercise and the cold gives a relish to the food not often found in the fashionable restaurants. The members of the crew have each allotted duties. To one is intrusted the cooking department, to another the position of teamster, to another that of sled tender; some are choppers, some are swampers, some a sawyers. The records of the camp are kept by the foreman or some person detailed for that purpose.

The winter over, the teams are returned to the settlements. The log driving crew succeeds the choppers and other workers. The logs, having been hauled upon the ice of the driving streams, with the melting of snow are afloat on the swollen streams, and the drivers commence their work, following the logs in their downward course to the mills or booms, dislodging them when they are driven upon shore, and breaking jams when they occur. This work is difficult and attended by considerable exposure, as the driver is often obliged to go into the stream. It therefore commands higher wages than other work. The drivers are without tents, but a wangan, or small flat boat, containing bedding, provisions and a cooking kit, is floated down the stream so as to be convenient at night. The wangan is managed by the cook alone, and his work, when he ties up for the night, is to take ashore the bedding, cooking material, etc., build a fire and provide a meal for the hungry crew. His cooking utensils are of the rudest kind, consisting of a tin reflector and a few iron pots and pans. The savory repast is scarce finished before the arrival of the crew, cold, wet, tired, and hungry. They are not particular about a table with its furniture, but are satisfied to eat from a tin plate, sitting or lying on the ground. Hunger satisfied, they spend their evenings by the blazing fire, drying their clothing, jesting, story telling, or recalling the events of the day, or scanning the open or clouded sky for indications of weather changes. When the sky is clear they trace the constellations, locate the principal stars and planets, or follow the devious windings of the milky way. Some of them have studied astronomy, and some have learned from others, and all are intent, though without books or teachers, on learning the wisdom that Nature teaches, and some are found who have learned to look "from Nature up to Nature's God."

Occasionally some rougher specimen mars the order and pleasantness of this wild-wood converse by an oath or coarse remark, heard, perhaps, but unheeded by the more serious and thoughtful. Such men are found everywhere, in the streets, saloons, and even in the wilderness, men who pollute the air in which they move with profanity and obscenity. These are not the men who succeed and build up great fortunes; these are not the true comquerors of the wilderness. The sober, thoughtful man is the man who succeeds. It is not necessary that he have the learning acquired from books, or a smattering of science from the schools. He may acquire great knowledge by close study of men, and observation of the phenomena of nature, and so make himself a peer of the book worm and scholar of the library and schools.

The acquaintances formed in these camp scenes and toils often result in life long friendships, and the scenes of camp, river and forest become cherished reminiscences to the actors, who are as fond of recalling them as veteran soldiers are of recounting the hairbreadth escapes and stirring incidents of campaign life.

The drive ends with the delivery of the logs at the booms and mills, the men are paid off and devote themselves for the remainder of the summer to other work.

LUMBERING ON THE ST. CROIX IN 1886

The St. Croix lumberman, after the lapse of nearly fifty years, is still a picturesque figure, clad, as he is, in coarse, strong woolen garments, these of brilliant red, yellow, blue and green, or in some cases as variegated as Joseph's coat of many colors. He is usually a man of stalwart frame, which is set off to advantage by his close fitting garments. His circumstances are, however, widely different from his old time predecessor.

The rough, hard work of the wilderness, including the building of dams, the construction of reservoirs and roads, and the improvement of the streams, has been accomplished chiefly by his predecessors. He is abundantly supplied with food, produced almost in the neighborhood of the scenes of his winter's work. He travels by rail almost to his destination or drives blooded teams over comparatively good roads, where his predecessors tediously blazed the way and cleared it of underbrush. His camp accommodations are far superior. He is housed in comfortable cabins, warmed with large stoves and heaters, whereas the cabin of the lumberman of 1845 had a fire built on the ground in the center of the room. The modern camp is well furnished with tables and other conveniences. The cook has a separate room furnished with a cooking stove and modern appliances for cooking. He has his assistant, known as the 'cookee' or second cook. The table is spread with a variety of food, and delicacies that would have astounded the lumberman of 1845. Each operator is limited to his own special work. His bounds are set and he can go no further, except at the risk of the loss of his labor.

The work goes on with clock-like precision and is comparatively easy. Everything is done on a larger scale and more economically. The crews are larger and the life is not near so solitary. The various crews employed for the spring drive combine and thereby greatly increase their efficiency. They are supplied with better and covered boats. The cook in the drive has in addition to his "cookee" a wangan man to assist in managing the boat. The drives are larger and yet more easily handled, the conveniences are greater and the expenses less. The men are more independent, and owing to the number employed, and the nearness of settlements and villages, more sociable, and possibly more hilarious and less thoughtful. We shall nevertheless find among them men of character, thoughtful, industrious and earnest men who would have shone in the associations of the earlier camps and who will doubtless in the future be ranked among the successful and capable men, worthy successors of the veterans now leaving the stage of action.

Conjecture as to the future of the lumbering industry, and consequently as to the character of the men engaged in it, would be idle. Who can tell what a day or another fifty years may bring forth? The pine woods will not last always; already the camps are being pushed further and further to the north and west, and wherever the denuded pine lands are arable the farmer is making his home. The lumbering industry is also passing into the hands of corporations, and with their extensive means and the armies of men employed by them the forests are disappearing more rapidly than ever. It is possible that the present generation of lumbermen may be the last in the valley of the St. Croix, and that before another fifty years have passed the last of the number may have shouldered his axe or peavy and passed "over the divide."

THE LOG JAMS OF THE ST. CROUX

The St. Croix river in its passage through the Dalles is compressed into a comparatively narrow channel, by which means the logs driven down the stream are crowded closely together, so closely as to sometimes become firmly wedged or jammed together. The jam generally occurs at a point known as Angle Rock, a huge promontory of massive trap rock extending into the middle of the channel from the Minnesota side, and opposite to the St. Croix landing. The river makes a bend around this rock nearly at a fight angle with the channel above. At this point jams are, under certain conditions, almost inevitable. Sometimes they are of small dimensions and are easily broken. Sometimes the logs gather in such quantity and become so tightly wedged that it is a lobor of weeks to break them.

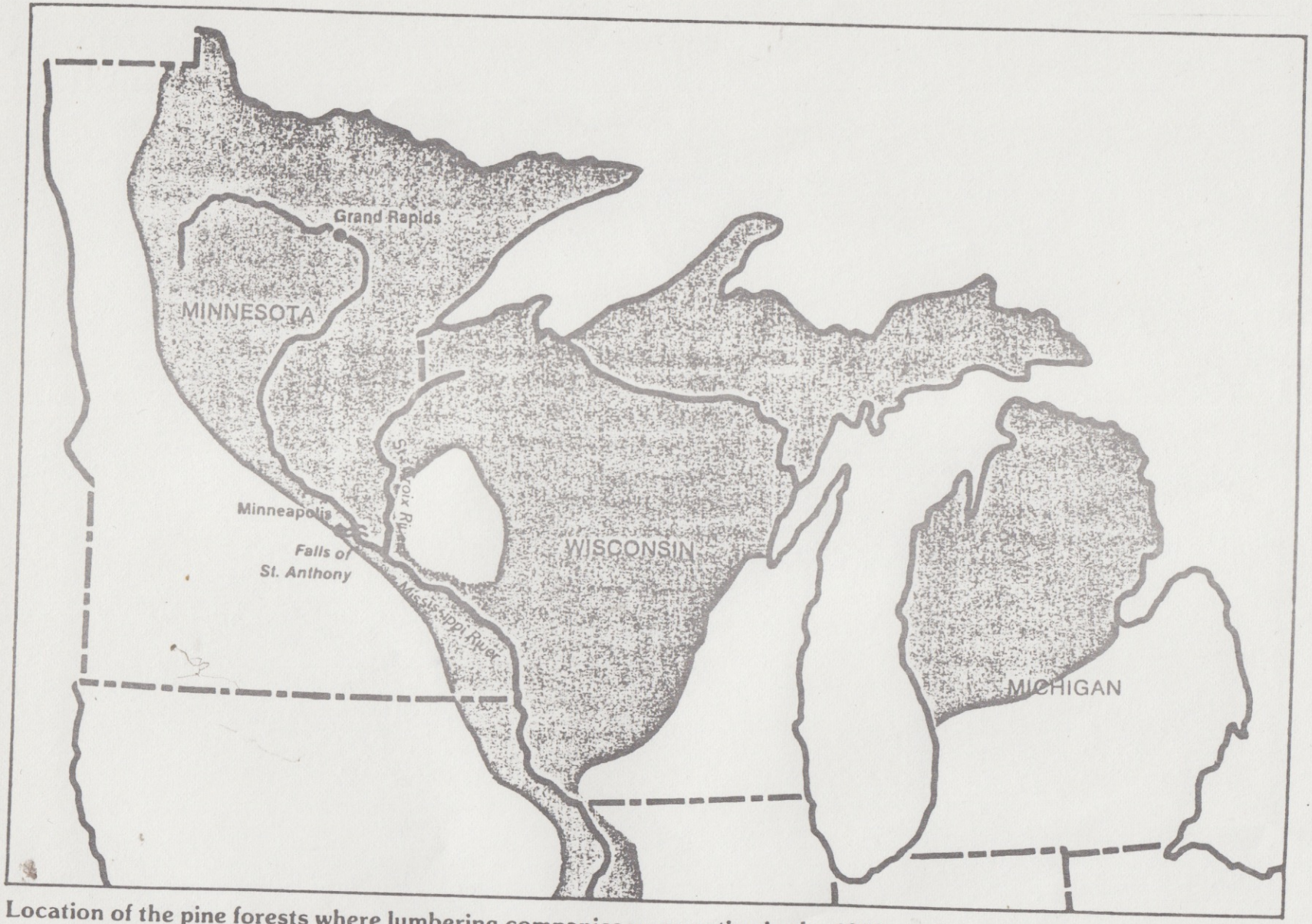
The first jam worthy of note occurred in 1865, during the prevalence of high water. It is, in fact, only during high water that jams can occur, the current being at such time swift and strong, and the logs apt to accumulate in greater number than in the regular drives, from the fact that logs that have been stranded in former seasons or at low water are floated off, and the river is thus filled with logs from bank to bank. These are crowded into the narrow channel of the Dalles faster than they can be discharged, and a jam results. An obstruction once formed, the logs continuing to come in from above fill the channel. The tide of logs arrested, crowd downward until they rest upon the bottom of the river, and are heaped upward sometimes to a height of twenty or thirty feet above the surface. The river thus checked in its course rises, wedging the logs more closely and heaping them higher.

In the jam of 1865 the river channel was filled nearly to the St. Croix dam, a distance of a mile and a quarter above Angle Rock. This being the first of the great jams excited unusual attention. Excursionists came up daily in the boats to look upon it. It was indeed a wonderful sight. The logs were heaped together in the wildest confusion, and wedged in at all angles. Men and horses were employed to break the jam, which at that time, owing to the inexperience of the workers, was no light task. The modus operandi of jam breaking is to remove logs from the lower part of the jam till some log which serves as a key to the jam is reached. This being removed the logs above commence moving, and if the haul be a long one, in a short time the movement is extended to the head of the jam. Perhaps the logs are so heaped above that no water is visible. It matters not; the tremendous current beneath sweeps downward, carrying the logs along, and the spectator beholds a wonderful scene, a river of logs, the current swiftest in the center of the stream, the logs rolling, tumbling, crashing, grinding, sometimes snapped in sunder like pipestems. The jam breakers are in the wildest excitement, cheering and hurrahing, and some may be seen out in the current of logs, jumping from one to another, or making their escape to the shore. Others on the lower part of the jam at the moment of breaking are carried down the river. Though apparently a scene of great danger, comparatively few accidents occur. The workers are cool, experienced men with steady nerves and stalwart arms, a race of men not surpassed for muscular development.

In 1877, another jam took place nearly as large as that of 1865. This jam came near destroying the beautiful bridge that spanned the river at the head of the Dalles. Many of the logs carried high in air by the pressure of the logs below struck the bridge, and at times its destruction seemed inevitable. This bridge has since been replaced by an iron structure, much higher than the first, but even this occasionally received a blow from some log carried along by the current at a "present arms."

In 1883 another jam of considerable dimensions occurred, but it was removed with less labor and expense than its predecessors, and steamboats anchored below were used to aid in breaking it. It cost from $5,000 to $10,000 to break these jams.

By far the greatest of the jams occurred in June, 1886. The water was high, the current strong and the river above so full of logs that a log driver might have crossed upon them. This abundance was owing to other causes than those mentioned in the account of the jam of 1865. The dams at Snake, Kettle and other rivers had been simultaneously opened, and the logs in these streams all set free at once in the current of the St. Croix. On they came in long procession with but little obstruction till they reached Angle Rock, where they were suddenly arrested, and, owing to the force of the current, wedged more tightly and heaped higher than on any previous occasion, and the river channel was filled with logs to a point two miles above the St. Croix falls formerly known as the dam. To break this jam, two steamers, two engines, several teams of horses and over two hundred men were employed, and during the six weeks that occurred before it was broken, thousands of visitors came by rail and steamboat to look upon it. This jam was estimated to hold during it continuance 150,000,000 feet of logs.



Location of the pine forests where lumbering companies were active in the 1800s and early 1900s.

Lumberjacks and Logging

The lumbering business in America began in the early 1600s. Its first center was in New England. As the demand for lumber grew in the 1800s, the logging companies moved westward from Maine to Michigan and Wisconsin. By the 1830s Minnesota drew the lumbermen's attention because of the fine white-pine forests. The pictures in this book show logging and lumbering in Minnesota up to about 1900. This story is one part of a business that started along the Atlantic Coast and continues in the 1980s in the Pacific Northwest, the Upper Midwest, New England, and the southern states.

Minnesota land was chiefly of two kinds — prairie and forest. Most of the eastern half of the state was once covered with trees. The southeastern quarter contained hardwoods, such as oak, maple, and walnut. It was part of the Big Woods which reached westward from Michigan and Wisconsin.

In the area north and east of the Mississippi River (see map) the forest was mainly softwood — pine, fir, and spruce — as well as some hardwoods — mostly birch and maple. Early business in Minnesota centered on the wooded land. First, as part of the fur trade, men trapped the animals living in the forest. Second, the lumbermen moved in to cut the trees and float them down the many rivers to sawmills built near the growing towns. As early as 1837 lumberjacks from New England began cutting trees in the St. Croix Valley. Slowly the logging companies moved to the north and west until they reached the Canadian border.

The trees the lumbermen prized most were white pine, although other pine trees were also valuable. The white pine were very large, tall, and straight. One tree could produce several hundred feet of lumber. Farmers and townspeople building new homes in the midwestern states needed lumber for houses, barns, stores, churches, schools, and grain elevators.

Minnesota forests seemed to have enough white pine to meet all the demands for lumber.

Each fall logging companies hired crews of lumberjacks for the winter harvest. In spite of the cold, winter was the best time for cutting trees. Then the swamps were frozen, and trails could be made over the hard ground for dragging logs out of the forest. The companies set up camps. Each had a bunkhouse, a cookhouse with a dining room, a blacksmith shop, a company store or wanigan, and stables.

Life in the camps was hard. Six days a week the men woke to the call of "daylight in the swamp" and worked from "kin see" to "caint see." They ate typical frontier food — salt pork, baked beans, bread, flapjacks, molasses, doughnuts, dried-apple pie, and tea. After a quick breakfast, the crews headed into the woods. The undercutters notched the trees. The sawyers (men with saws) cut them down. The swampers trimmed off the branches before the sawyers divided the logs into regular lengths. A driver with a team of oxen or horses pulling a giant set of tongs or a sled called a go-devil skidded the logs out of the woods to the road. Then several loaders lifted logs onto a large sleigh and drove it to the nearest river. During the night an ice wagon poured water on the road leading from the piles of logs to the river.

The cookees (cook's helpers) carried a hot noon meal out to the loggers, who took a short break to eat. At sundown the crews returned to the camp and washed up. When the cookee sounded the bull horn, they trooped into the cookhouse. A good cook was necessary to a camp. Men might quit their jobs if the cook did not serve them delicious, well-cooked food. On most evenings in the bunkhouse the men played cards, read, or talked, but Saturday was special. The lumberjacks celebrated the end of the week with singing and dancing to fiddle or harmonica music.

Sunday was chore day when they did their laundry, wrote letters, and sewed up rips in clothing. Sometimes a traveling minister called a sky pilot offered church services.

With the arrival of spring the men's daily lives changed. The logs piled near the river had the owner's special brand stamped on each of them. The driving crews then rolled the logs into the water to float downstream. The first of three crews had to keep the logs moving. The second crew broke up log jams. The third crew picked up any logs that became stuck along the riverbank. A houseboat called a wanigan carried the kitchen and all supplies.

The river drive ended at the boom or collection point where each company sorted out its logs. Men who had memorized upwards of 2,000 log stamps hooked the logs and brought them into a floating corral belonging to their employer. Some companies sawed their logs at nearby sawmills. Rafting crews took others and roped several hundred logs at a time into rafts to be towed down the river to larger sawmills. The sawmills turned the logs into shingles and boards of many lengths. Trains then carried the lumber to the growing towns on the prairie.

Lumber companies and counties tried to sell the cutover land where the trees had once stood to settlers coming from Europe. In many areas the land was not good for farming. A farmer had to pull or blast out the stumps or plant around them and wait for them to rot. Rutabagas, turnips, potatoes, hay, and clover were the kinds of crops that grew successfully. Forest fires, which moved with alarming speed and often took many lives, were an ever-present danger for the farming families as they had been for lumberjacks and logging companies.

By 1920 most of the white pine in Minnesota had been cut down. The logging companies moved westward to Washington and Oregon and southward to Alabama and Georgia. The pine forest, an important natural resource, nearly vanished. Federal and state governments and members of the community began to co-operate in replanting pine trees. Today these trees are used for wood products (plywood), pulp (paper), and Christmas trees.

Although the day of the lumberjack has passed, it can be relived by visitors to the Minnesota Historical Society's Forest History Center at Grand Rapids. The center is a carefully rebuilt lumber camp. There are also exhibits explaining the lumber business.

Pine lumber found many uses from sidewalks to newspapers.

EASTERN WHITE PINE and RED (NORWAY) PINE

Eastern White Pine

80′ to 200′ high,
2½′ to 5′ or more thick

Curved cone,
4″ to 6″ long

Clusters of five needles,
3″ to 5″ long,
blue-green color

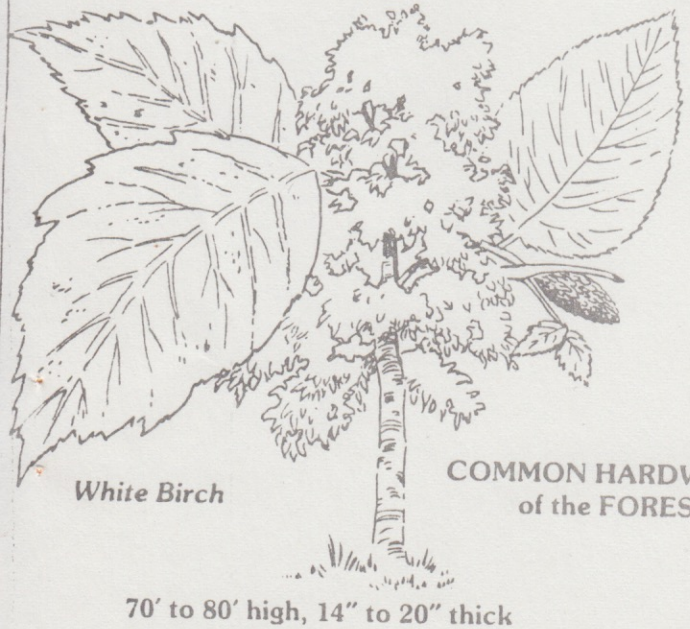
Cone opened
to release seeds

Cone unopened,
about 2″ long

Red (Norway) Pine

Clusters of two needles,
about 5″ long,
dark green color

50′ to 100′ high,
2½′ to 3½′ thick



White Birch

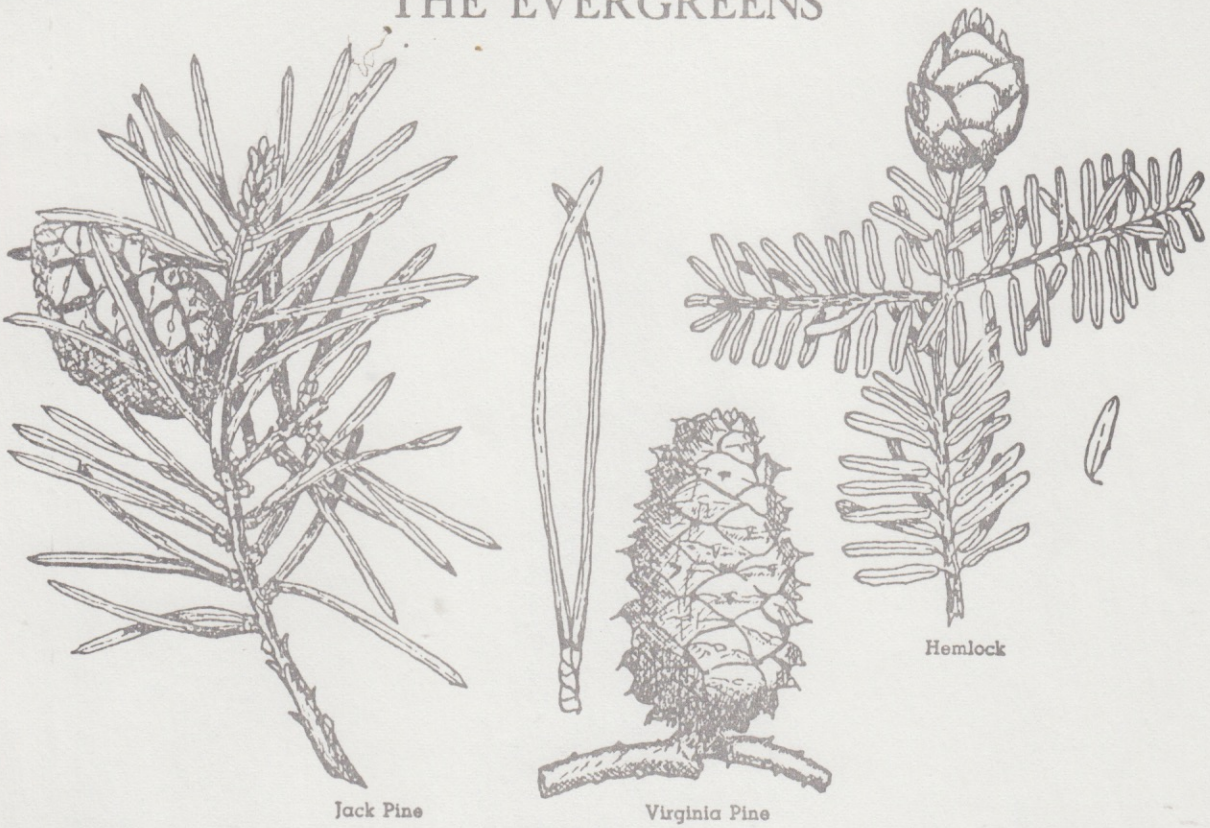
70′ to 80′ high, 14″ to 20″ thick
Fruit resembles cone, contains many seeds
Leaf 2″ to 3″ long, 1″ to 2″ wide

Sugar Maple

75′ to 100′ high, 2′ to 4′ thick
Seeds are winged
Leaf 3″ to 5″ long with 3 to 5 pointed lobes
Sap is source of maple syrup and sugar

COMMON HARDWOODS
of the FOREST

THE EVERGREENS



Jack Pine

Virginia Pine

Hemlock

The evergreens are also called conifers (pronounce with long "o"), because they have their seeds in cones. Conifers make up many forests in the north, in bogs and on high mountains as well as on dry, sandy soil.

The leaves are called needles because they are narrow, but not all leaves of conifers have sharp needle points.

THE JACK PINE. This is a small tree, never over fifty feet in height, with short needles (about one inch). It is common on sandy soil. The cones are small, without spines on the scales of the cones.

In parts of Indiana, Ohio, New York and southward is a small pine which looks very much like the Jack pine but its leaves are from one to two inches in length and the cone scales have spines. It is the VIRGINIA PINE.

THE HEMLOCK. This tree is usually found in hardwoods. The bark is dark-brown and breaks up into thick scales. The needles are flat and are attached to the twig by a small petiole. The leaves are so turned on the twig that they appear as in two rows, making the twig flat. It is a common tree in the north and in eastern mountains.

THE WHITE PINE. This tree grows to be very tall. The bark is dark-gray with deep furrows. It differs from all other pine in that its needles are in clusters of five. The needles are soft and thin, making the whole tree look lacy. It grows in sandy soil as well as in bogs.

THE NORWAY or RED PINE. This is a tall tree, which usually grows in the same places as the white pine. The bark is scaly and reddish in color. The long, coarse needles are in clusters of two.

THE WHITE SPRUCE. This is a tree which looks much like the balsam fir, but you can tell it from that tree by the square needle. If you roll a needle between two fingers you can easily tell a square from a flat needle, for a flat needle will not roll. The best way to tell the spruces from the firs is by their square or almost square needles.

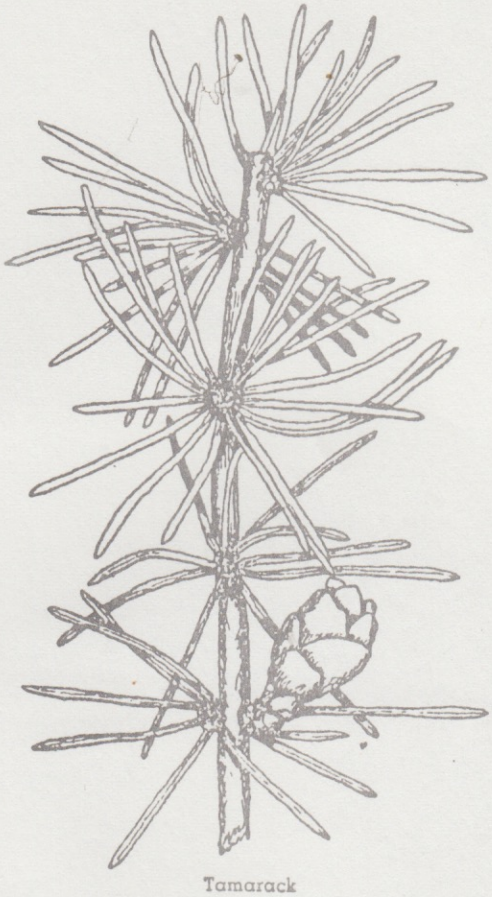
THE BLACK SPRUCE. This spruce is a small tree which grows in bogs and swamps and along the edges of lakes. The needles are very short, stiff and light-green in color.

THE BALSAM FIR. This is a beautiful spire-shaped tree. The needles are flat in cross section; they have a spicy odor when they are crushed. It grows equally well in bogs and on uplands. The bark is smooth and greenish when the tree is young.

White Spruce

Black Spruce

Balsam Fir



Tamarack

Arbor Vitae

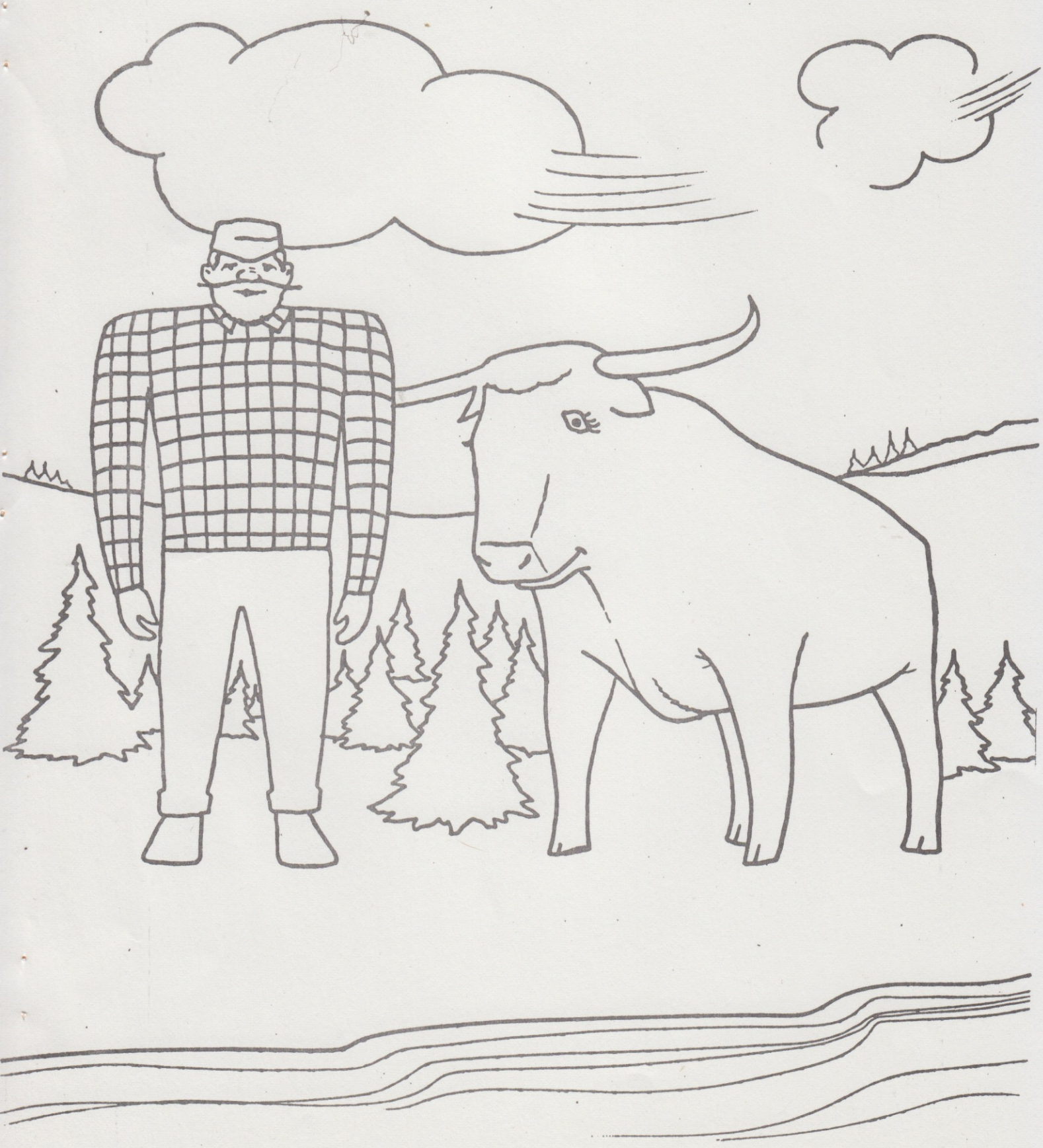
THE TAMARACK. This is a common tree in bogs and swamps. Its needles are soft, light-green in color and appear in clusters of eight or more needles. It is the only one of the conifers which loses all its leaves in winter.

THE ARBOR VITAE or WHITE CEDAR. This is a very common tree in bogs and swamps. It has scale-like leaves which lie flat against the twig. They are smooth and yellowish-green in color. The bark peels off in soft, thin strips. The wood is used for cedar posts, railway ties and telephone poles. It is now a common small tree around the entrances of homes of cities and in the country everywhere.

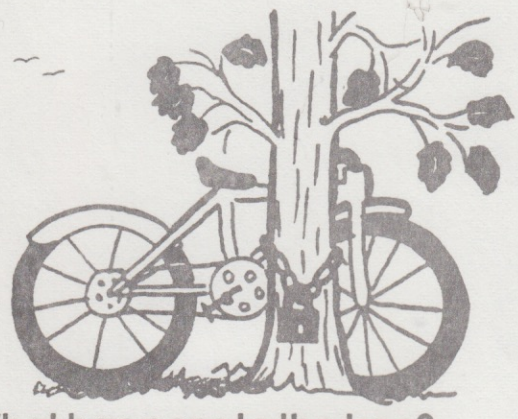
The trees just described are all common native trees in the northern states, but even south of Michigan they are frequent in parks and about homes. Outside of these there are planted about homes three very common conifers which originally came from Europe. They are:

THE NORWAY SPRUCE. This is a beautiful, tall tree which you will recognize at once as a spruce because its needles are square.


White Pine
Norway Pine
White Pine



"How Do People Wound Trees?"



What happens to the tree?

What happens to the tree?

What happens to the tree?

What happens to the tree?

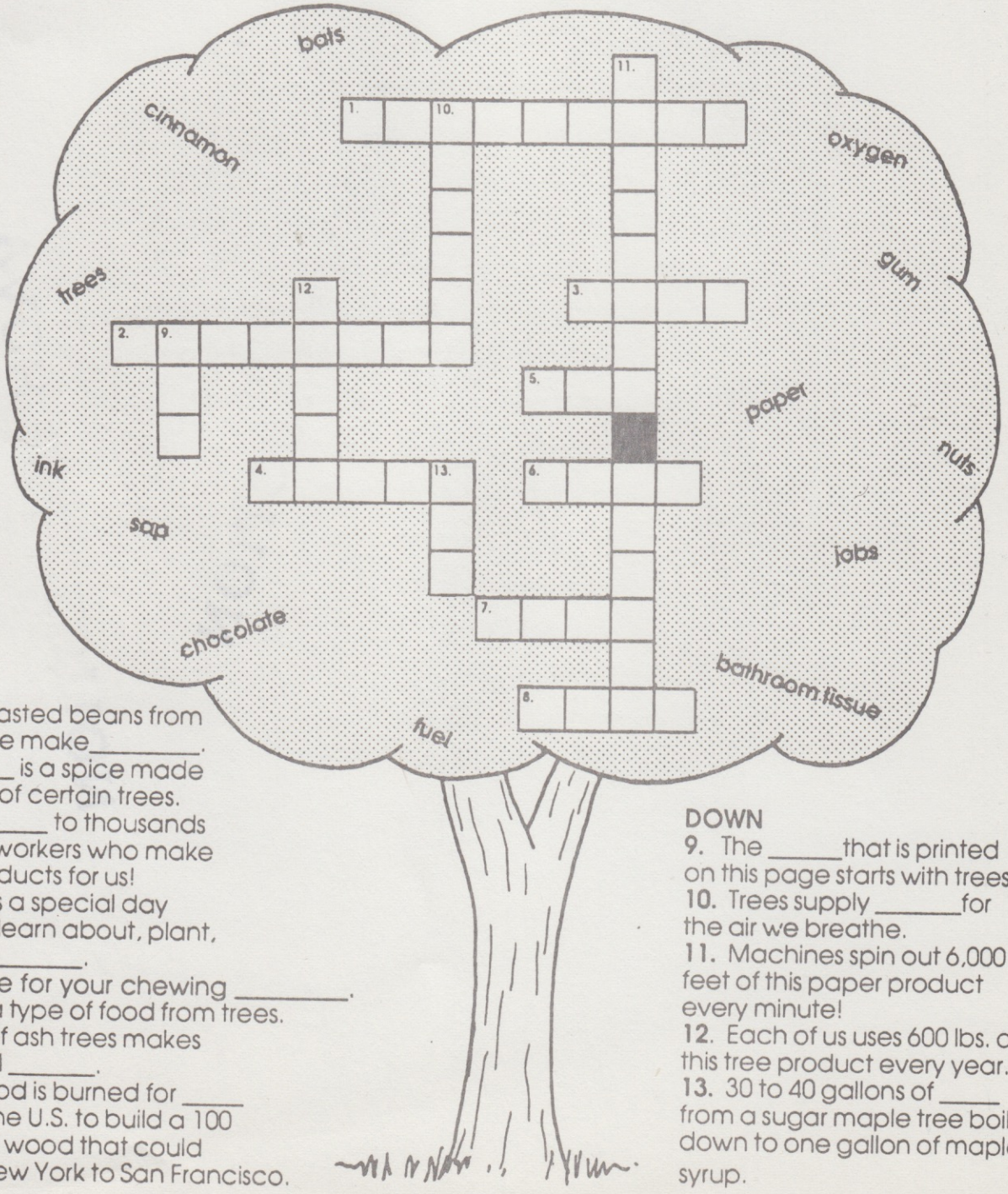
What happens to the tree?

What happens to the tree?

Tree~Mendous

tree (tre) *n.* a woody plant that is at least 20 feet tall when fully grown; trees grow taller, live longer, and become more massive than any other living thing; trees grow in many sizes and shapes; they serve us many ways.

You'll think trees are tree-mendous when you see some of the things they give us! Use these words to fill in the "crosswood puzzle". . . then you just might want to pat a tree on the bark!



ACROSS

1. Ground, roasted beans from the cocoa tree make_____.
2. _____ is a spice made from the bark of certain trees.
3. Trees give _____ to thousands of Minnesota workers who make these tree products for us!
4. Arbor Day is a special day when people learn about, plant, and care for _____.
5. Thank a tree for your chewing _____.
6. _____ are a type of food from trees.
7. The wood of ash trees makes great baseball _____.
8. Enough wood is burned for _____ each year in the U.S. to build a 100 foot tall wall of wood that could stretch from New York to San Francisco.

DOWN

9. The _____that is printed on this page starts with trees.
10. Trees supply _____for the air we breathe.
11. Machines spin out 6,000 feet of this paper product every minute!
12. Each of us uses 600 lbs. of this tree product every year.
13. 30 to 40 gallons of _____ from a sugar maple tree boil down to one gallon of maple syrup.