PART I.

## WALNUT LOGS AND HOW TO PREPARE THEM.

BY ANSON A. GARD.

Few seem to know what an export log should be, but the number who think they know includes about all who have never before gotten out logs for export. These latter think that if a log is the required length and diameter it will pass, and that they should receive the quoted high price for it, and will feel, when the returns are received, that they have not been treated squarely. They forget that rough, crooked, knotty logs make only cull lumber, and that when any market is overstocked with just such timber, when at the best there is no demand for it, the price at which it will sell is very low indeed.

An export log must be straight, sound, free from large limb, or rotten knots, free from heart checks or wind shakes and should not be cut shorter than 10 feet and as few under 12 feet as possible.

When the tree is selected to be felled, a notch should be cut in on the side toward which you wish to "throw" it the centre of the notch should be cut in toward the heart much deeper than the sides: when this is done start your saw a little above a line with the opposite notch and cut straight through. A tree can not only be sawed down quicker than it can be cut with the axe, but when down it is also "butted," thus saving much extra work.

When the tree has been felled, mark it off so that each log will be straight. This can usually be done even in crooked trees, unless the crook be a short one, in which case cut it out and use the piece for balusters. By cutting the logs 10, 12, 14 and 16 feet, the full length of the tree can be worked up to good advantage. When it can be done, as before mentioned, make as many of the logs 12 feet long as you can, as this length is best for export legs and also the best length for lumber.

Often when a tree is felled it may lie on a side hill, in which case care must be taken not to cut the logs slant ways, which you are sure to do if you let the saw "run."

Many a woodsman in order to safe an inch, loses a foot. He measures his log exactly of the foot mark, which is all right (although a log should be an inch over) providing he can run his saw "true," but nine out of ten sawyers will run to the right or to the left, and the bottom of the log may lack just enough to lose a foot. So I say don't be stingy, when it will pay you to be a little generous.

In some markets there is a duty on logs when they have been squared on the mill, while the same log will go duty free if hewn, besides a log looks better when properly dressed with the broad axe.

Too great care cannot be taken in selecting logs for shipping, as one or two questionable ones may reduce the value of a carload more than their value, while the freight on them is just as much as for the good ones, thus you lose both logs and freight. Therefore make it a rule not to select a log about which you have the least doubt of it passing. Having selected your logs, draw them to the railroad, if you ship by rail and there hew them on four sides to show a face taking care to use a large draw knife to smooth off the corners of the wanes, having first removed all bark therefrom.

When the logs are ready to ship, the ends should be painted with an inexpensive red paint. This not only prevents, to some extent, the logs cracking, but gives them a better appearance.

Just as soon as you have logs ready, load them at once; they will then come to the market looking fresh and will please the buyer far better than if they have been allowed to become weather-beaten and sun-cracked. The logs may cut out as much lumber and the lumber be just as good, but when a load of weather-beaten logs come to market it is surprising the difference in price they will bring. This is especially so in logs sent to foreign markets, where they are put up at auction to buyers who in the hurry and rush of a sale don't have time to carefully examine the lot, but who have to go by the looks, so that many a better lot of logs sells for less money than an inferior one well dressed and fresh looking.

In a country where snow covers the ground during the long winter months no one need be told to use a sled or drag, but where snow is the exception, or where it is never seen, a wagon must be used. There are wagons and wagons. I have been in countries where a regular log wagon would have been a curiosity. Here the loggers have from time without date hauled their logs on the high-wheeled farm wagon.

Two men are required, as the high wheel and sometimes both wheels on one side must be taken off, and the axles propped up. After much bother the log is finally loaded, and if more than one is to be taken on the load, the same process must be gone through with, and when the mill yard is reached, the wheel or wheels must again be removed. No one who follows logging can afford to use such a wagon when they can get one with which one man can do twice as much work in a day and do it easy to himself. This is the low broad tread log truck, requiring only to be driven alongside the log, "skids" run down from the tops of the wheels, the chain thrown under the log and back again to the opposite side of the wagon, then fastened to the "stretchers," the horses started, and your log is landed on the bolsters, and all in half the time required by the old tedious way. Counting the extra man and the time wasted, one could pay for a log wagon in a very short time. Another advantage is that the tire or tread being broad, a much larger load can be hauled over soft ground, as the wheels do not "cut in" like a narrow tread.

"Which will pay me better, to ship my Walnut in the log or saw it into lumber?" This question is the first one asked when the owner of Walnut timber is ready to make disposal of his wood.

The answer to the above will depend entirely on the given lot of trees. If they run large and smooth, it will pay to ship them in the log, but if they are but few large trees and many small ones, it will pay to saw them into lumber, as the large logs will enhance the value of the product more than can be realized from selling them in the log, even at the higher price at which the logs would sell. There are many advantages in selling logs instead of sawing them—other things being equal. In the first place the tree can be cut down and the logs delivered in market almost as soon as it could be sawed into lumber, thus gaining all the time required for sticking up and drying, five months at least saved, which to one of moderate means is a long while to wait.

Again, every producer of lumber will always prefer to know how much his stock will bring as it runs. When sold in the log, there is but one price, while if sawed into lumber the same log is sold at three and in some markets at four prices, and the aggregate price governed by an inspector who may never have seen a walnut tree grow.

Don't write to a log buyer or lumber dealer and say, "I have some logs," or "some lumber; what will you pay for them?" or "it" as the case may be. The fact that "it is good stuff!" don't convey any notion of what it is, or what it is worth. Take for illustration of how you should write to inform a buyer that you have logs for sale:

Mr. A.—Dear Sir: I have, now ready to ship, two carloads of Walnut logs, fresh hewed and in good order. There 26 logs in the lot and they measure as follows: (Give lengths and diameters, being careful not to measure more than they contain). I will deliver these at (give point of destination) for $— per M feet.—Yours, etc., J. S.

When the buyer receives this letter he knows that "J. S." has some logs; he knows how many, and what they contain; he knows that the writer means business, for he has put a price on his stock, and the result will be that J. S. will sell, and have the money invested in more trees, before the man who says: "I've got something, what will you give me for it?" will even get a reply to his letter. This is an age when men must be definite, if they would succeed—the man who don't tell what he has to sell will be passed by the one who lets the buyer know what he has to offer and what he wants for it.

One word of advice to J. S. and others who may write what they have to offer. Don't say that you have two cars of logs, that one will run twenty-four inches and larger, for which you will take $— per M., and one car twenty to twenty-three inches at $—, and in shipping them put some of the small ones in the higher priced car and expect to get the higher price for them, just because they were all together. This would seem unnecessary advice; had I not had a recent case of this kind I never would have thought that it could occur.

Poplar—or miscalled whitewood—logs are now being exported from localities where the rate of freight will warrant their shipment. The same rule for the preparation of Walnut logs will apply to Poplar. They must be evenly hewed on four sides and the wanes smoothly dressed.

I would call the attention of the hewer to one point in particular in preparing the log. Don't cut away too much of the wood *i. e.*, don't square the log, as by measurements there is a great loss over Scribner. A point in question. Two cars of Poplar logs, measured here by Scribner, have just been rejected in a German market on account of being too much squared. Thus not only a loss of wood, but a sale lost.

Different from Walnut, Poplar, Gum and such other rough bark woods, Cherry is shipped round. This may also be said of what few Ash logs there are exported.

When the sap is at work building up new tissues, making new leaves and twigs, the tree when felled is most apt to "check" when made into logs. For this reason valuable timbers should be cut before the middle of March in this climate, and earlier in the far South, then in July or August, when the sap has done its work and is at rest, you may begin and continue till March again. It is well in making Walnut logs to have a bucket of glue water and broad brush, and as soon as the log is sawed off "size" the ends, which when dry part of walnut logs
tends to keep out the air and prevents checking. This "sizing" is simply made with ordinary glue dissolved in hot water and made very thin.

Much more could be said on the subject of logs, but it would not change the one important fact that only good ones are required, and poor ones will ever be a risk to a shipper. If you who have logs bear this in mind you will find that it will pay you a large per cent. in satisfaction and the buyer will never tell you; "He has enough of your stock."

LOGS REDUCED TO INCH BOARD MEASURE.—GARD'S RULE.

| L. Ft. | Dia. 8 | Dia. 9 | Dia. 10 | Dia. 11 | Dia. 12 | Dia. 13 | Dia. 14 | Dia. 15 | Dia. 16 | Dia. 17 | Dia. 18 | Dia. 19 | Dia. 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 10 | 14 | 20 | 28 | 33 | 41 | 51 | 61 | 73 | 85 | 100 | 110 | 130 |
| 9 | 11 | 16 | 23 | 31 | 37 | 47 | 57 | 69 | 82 | 95 | 110 | 125 | 145 |
| 10 | 12 | 18 | 25 | 34 | 41 | 53 | 63 | 76 | 91 | 105 | 120 | 140 | 160 |
| 11 | 13 | 19 | 27 | 37 | 46 | 59 | 70 | 84 | 100 | 115 | 135 | 155 | 175 |
| 12 | 14 | 20 | 29 | 40 | 50 | 62 | 76 | 92 | 109 | 125 | 145 | 170 | 190 |
| 13 | 15 | 22 | 32 | 43 | 54 | 68 | 83 | 99 | 118 | 135 | 160 | 185 | 210 |
| 14 | 16 | 23 | 34 | 46 | 57 | 72 | 90 | 108 | 127 | 150 | 170 | 195 | 225 |
| 15 | 17 | 25 | 36 | 49 | 62 | 78 | 96 | 115 | 136 | 160 | 185 | 210 | 240 |
| 16 | 18 | 27 | 38 | 52 | 65 | 82 | 102 | 123 | 145 | 170 | 195 | 220 | 255 |
| 17 | 19 | 28 | 41 | 55 | 69 | 89 | 108 | 130 | 155 | 180 | 210 | 240 | 270 |
| 18 | 21 | 30 | 43 | 58 | 74 | 92 | 113 | 138 | 164 | 190 | 220 | 255 | 290 |
| 19 | 22 | 33 | 46 | 61 | 78 | 100 | 121 | 145 | 173 | 200 | 230 | 265 | 305 |
| 20 | 23 | 36 | 48 | 65 | 82 | 105 | 127 | 154 | 182 | 210 | 245 | 280 | 320 |
| 21 | 24 | 39 | 50 | 69 | 86 | 109 | 133 | 160 | 191 | 220 | 255 | 295 | 335 |
| 22 | 25 | 41 | 53 | 74 | 90 | 113 | 139 | 168 | 200 | 230 | 270 | 310 | 350 |
| 23 | 26 | 45 | 56 | 79 | 94 | 117 | 146 | 176 | 209 | 245 | 280 | 325 | 370 |
| 24 | 27 | 48 | 60 | 84 | 100 | 123 | 152 | 183 | 218 | 255 | 295 | 340 | 385 |

| L. Ft. | Dia. 33 | Dia. 34 | Dia. 35 | Dia. 36 | Dia. 37 | Dia. 38 | Dia. 39 | Dia. 40 | Dia. 41 | Dia. 42 | Dia. 43 | Dia. 44 | Dia. 45 | Dia. 46 | Dia. 21 | Dia. 22 | Dia. 23 | Dia. 24 | Dia. 25 | Dia. 26 | Dia. 27 | Dia. 28 | Dia. 29 | Dia. 30 | Dia. 31 | Dia. 32 | Dia. 33 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 420 | 450 | 480 | 510 | 545 | 580 | 610 | 650 | 685 | 720 | 760 | 800 | 840 | 880 | 145 | 160 | 180 | 200 | 220 | 240 | 265 | 290 | 310 | 340 | 365 | 390 | 420 |
| 9 | 475 | 505 | 540 | 575 | 615 | 655 | 690 | 730 | 770 | 810 | 855 | 900 | 945 | 990 | 165 | 180 | 205 | 225 | 250 | 270 | 295 | 325 | 351 | 380 | 410 | 440 | 475 |
| 10 | 525 | 560 | 600 | 640 | 680 | 725 | 765 | 810 | 855 | 900 | 950 | 1000 | 1050 | 1105 | 180 | 200 | 225 | 250 | 275 | 300 | 330 | 360 | 390 | 420 | 455 | 490 | 525 |
| 11 | 580 | 620 | 660 | 705 | 750 | 795 | 840 | 890 | 940 | 995 | 1045 | 1100 | 1155 | 1215 | 200 | 225 | 250 | 275 | 305 | 335 | 365 | 395 | 430 | 465 | 500 | 540 | 580 |
| 12 | 630 | 675 | 720 | 770 | 815 | 865 | 910 | 970 | 1025 | 1085 | 1140 | 1200 | 1260 | 1325 | 215 | 245 | 270 | 300 | 330 | 365 | 395 | 430 | 470 | 505 | 545 | 590 | 630 |
| 13 | 685 | 730 | 780 | 830 | 885 | 940 | 995 | 1055 | 1110 | 1175 | 1235 | 1300 | 1365 | 1435 | 235 | 265 | 295 | 325 | 360 | 395 | 430 | 470 | 510 | 550 | 590 | 635 | 685 |
| 14 | 735 | 785 | 840 | 895 | 955 | 1010 | 1070 | 1135 | 1200 | 1265 | 1330 | 1400 | 1470 | 1545 | 255 | 285 | 315 | 350 | 385 | 425 | 465 | 505 | 545 | 590 | 640 | 685 | 735 |
| 15 | 790 | 845 | 900 | 960 | 1020 | 1085 | 1150 | 1215 | 1285 | 1355 | 1425 | 1500 | 1575 | 1655 | 270 | 305 | 335 | 375 | 415 | 460 | 495 | 540 | 585 | 635 | 685 | 735 | 790 |
| 16 | 840 | 900 | 960 | 1025 | 1090 | 1155 | 1225 | 1295 | 1370 | 1445 | 1520 | 1600 | 1680 | 1765 | 290 | 325 | 360 | 400 | 440 | 485 | 530 | 575 | 625 | 675 | 730 | 785 | 840 |
| 17 | 895 | 955 | 1020 | 1090 | 1155 | 1230 | 1300 | 1375 | 1455 | 1535 | 1615 | 1705 | 1785 | 1875 | 305 | 345 | 385 | 430 | 470 | 515 | 565 | 610 | 665 | 720 | 775 | 835 | 895 |
| 18 | 1010 | 1080 | 1150 | 1225 | 1300 | 1380 | 1460 | 1540 | 1615 | 1710 | 1800 | 1890 | 1985 | | 325 | 365 | 405 | 450 | 495 | 545 | 595 | 650 | 705 | 760 | 820 | 880 | 945 |
| 19 | 1070 | 1140 | 1215 | 1295 | 1370 | 1455 | 1540 | 1620 | 1710 | 1805 | 1900 | 1995 | 2095 | | 345 | 385 | 430 | 475 | 525 | 575 | 630 | 685 | 740 | 805 | 865 | 930 | 1000 |
| 20 | 1125 | 1200 | 1280 | 1360 | 1445 | 1530 | 1620 | 1710 | 1805 | 1900 | 2000 | 2100 | 2205 | | 360 | 405 | 450 | 500 | 550 | 605 | 660 | 720 | 780 | 845 | 910 | 980 | 1050 |
| 21 | 1180 | 1260 | 1345 | 1430 | 1520 | 1605 | 1700 | 1795 | 1895 | 1995 | 2100 | 2205 | 2315 | | 380 | 425 | 475 | 525 | 580 | 635 | 695 | 755 | 820 | 885 | 955 | 1030 | 1105 |
| 22 | 1235 | 1320 | 1410 | 1495 | 1590 | 1685 | 1780 | 1880 | 1985 | 2090 | 2200 | 2310 | 2425 | | 395 | 445 | 495 | 550 | 605 | 665 | 725 | 790 | 860 | 930 | 1005 | 1080 | 1155 |
| 23 | 1295 | 1380 | 1470 | 1565 | 1660 | 1760 | 1865 | 1970 | 2075 | 2185 | 2300 | 2415 | 2535 | | 415 | 465 | 520 | 575 | 635 | 695 | 755 | 830 | 900 | 970 | 1050 | 1125 | 1210 |
| 24 | 1350 | 1440 | 1535 | 1635 | 1735 | 1840 | 1945 | 2055 | 2165 | 2280 | 2400 | 2520 | 2645 | | 435 | 485 | 540 | 600 | 660 | 725 | 795 | 865 | 940 | 1010 | 1095 | 1175 | 1260 |

| L. Ft. | Dia. 47 | Dia. 48 | Dia. 49 | Dia. 50 | Dia. 51 | Dia. 52 | Dia. 53 | Dia. 54 | Dia. 55 | Dia. 56 | Dia. 57 | Dia. 58 | Dia. 59 | Dia. 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 925 | 970 | 1015 | 1060 | 1105 | 1150 | 1200 | 1250 | 1300 | 1350 | 1405 | 1460 | 1510 | 1570 |
| 9 | 1040 | 1090 | 1140 | 1190 | 1245 | 1295 | 1350 | 1405 | 1465 | 1520 | 1580 | 1640 | 1700 | 1765 |
| 10 | 1155 | 1210 | 1265 | 1320 | 1380 | 1440 | 1500 | 1560 | 1625 | 1690 | 1755 | 1820 | 1890 | 1960 |
| 11 | 1270 | 1330 | 1390 | 1455 | 1520 | 1585 | 1650 | 1720 | 1790 | 1860 | 1930 | 2005 | 2080 | 2155 |
| 12 | 1385 | 1450 | 1520 | 1585 | 1655 | 1730 | 1800 | 1875 | 1950 | 2030 | 2105 | 2185 | 2270 | 2350 |
| 13 | 1500 | 1575 | 1645 | 1720 | 1795 | 1870 | 1950 | 2030 | 2115 | 2195 | 2280 | 2370 | 2460 | 2550 |
| 14 | 1620 | 1695 | 1770 | 1850 | 1935 | 2015 | 2100 | 2185 | 2275 | 2365 | 2460 | 2550 | 2645 | 2745 |
| 15 | 1735 | 1815 | 1900 | 1985 | 2070 | 2160 | 2250 | 2345 | 2440 | 2535 | 2635 | 2735 | 2835 | 2940 |
| 16 | 1950 | 1835 | 2025 | 2115 | 2210 | 2305 | 2400 | 2500 | 2600 | 2705 | 2810 | 2915 | 3025 | 3135 |
| 17 | 1965 | 2055 | 2150 | 2250 | 2345 | 2450 | 2550 | 2655 | 2765 | 2875 | 2985 | 3100 | 3215 | 3330 |
| 18 | 2080 | 2180 | 2280 | 2380 | 2485 | 2590 | 2700 | 2810 | 2925 | 3040 | 3160 | 3280 | 3405 | 3530 |
| 19 | 2195 | 5300 | 2405 | 2515 | 2625 | 2735 | 2850 | 2970 | 3090 | 3210 | 3335 | 3465 | 3590 | 3725 |
| 20 | 2310 | 2420 | 2530 | 2645 | 2760 | 2880 | 3000 | 3125 | 3250 | 3380 | 3510 | 3645 | 3780 | 3920 |
| 21 | 2425 | 2540 | 2655 | 2775 | 2900 | 3025 | 3150 | 3280 | 3415 | 3550 | 3685 | 3825 | 3970 | 4115 |
| 22 | 2540 | 2660 | 2785 | 2910 | 3035 | 3170 | 3300 | 3435 | 3575 | 3720 | 3860 | 4010 | 4160 | 4310 |
| 23 | 2660 | 2785 | 2910 | 3040 | 3175 | 3310 | 3450 | 3595 | 3740 | 3885 | 4040 | 4190 | 4350 | 4510 |
| 24 | 2775 | 2905 | 3040 | 3175 | 3315 | 3455 | 3600 | 3750 | 3900 | 4055 | 4215 | 4375 | 4535 | 4705 |

ONE of the signs of the times is the extensive preparations that are being made to get out logs in Northwestern Ontario or rafting to mills on the other side of the international line. It is evident that their supply of standing timber at many points across the lakes is falling short and they are driven to have recourse to our forests. Now we have not too much pine for our own mills and the employment of our own people, so the development of this system of transportation in the log is not at all to be encouraged. The Dominion export duty on saw logs has hitherto acted as a deterrent to a very considerable degree, but as the demand for logs for United States mills becomes more pressing the restraining influence seems to have lost its effect. It is not the easiest thing in the world to collect this duty in the region where these operations are chiefly in vogue, but such arrangements should be made by the Canadian authorities as will ensure their not being evaded. If they want our logs in the United States they should certainly be made to pay for them.