

PROGRESS OF PAPER MAKING.

That the great bulk of paper now is not as good as it used to be is, I suppose, universally admitted. One reason is obvious. Far greater quantities are used every year; the best paper is made from linen rag, and there is less linen rag available since the larger wear of calico and woollen goods. Ultimately, of course, paper is now what it always was since first it was made from the fibers of the rush and papyrus. It was at first manipulated in no degree; the outer peel was stripped off the rush and the strips were fastened together. Gradually it was discovered that the vegetable fiber, beaten and disintegrated into pulp, then allowed under certain conditions to settle into a film and dried, was better. But the more the fibers can be disintegrated the better the paper; and no process is so complete as the making it in the first place into another material, and allowing it to be worn and broken, as the completest mode of destroying its stringiness. Every kind of material has been tried, especially those on which St. Paul said it would not do to lay a foundation—"wood, hay, stubble"—the most common being the coarse form of vegetable fiber known as Esparto grass, a species of broom. In Sweden, previous to 1866, a newspaper was printed for some considerable time on a paper made from horse-dung. It is not wholly fanciful that human wear and use has something to do with the excellence of paper, as with all other things of art. Mechanism is fatal to the higher and more spiritual qualities which make art. It has its great uses in cheapening and rendering plenteous much which is valuable and in a limited degree beautiful. But just as a chromo-lithograph is vile compared with an oil painting, just as a photograph of a picture compared with a beautiful print of it, so in exact proportion as in human work and human wear to bear on paper and printing you will have it, of its kind, supremely good, or only tolerable. This brings us to another reason why old paper was better than all but the best to be now procured. It was all hand-made; there was no machinery. The best paper now made, such as Whatman's in England, or the best Dutch, which is all still made by hand, is better, or at least as good, as was ever made since the world was; but the greater part of cheap paper is bad.—*Fortnightly J. view.*

SUICIDAL BUSINESS.

When Norway lumber is sold for \$8.25 per thousand, and the seller has paid \$7 per thousand for the logs, how much money is there in the transaction for the manufacturer? This query is suggested by the report from Alpena of a transaction of that character by O. E. Avery. Such childish business is not confined to Alpena, as we are aware of some of Saginaw river which will compare with it, and yet the "bears" in the lumber trade at many of the distributing centers are wondering why lumber don't come down, and persist in asserting that the manufacturers allow the dealers no chances for profit and are virtually driving them out of the trade. In regard to this Norway lumber foolishness and its influence on the white pine market, we have heretofore expressed ourself, and still maintain that it has been not alone detrimental, but destructive to the standing and demands for the coarser grades. There are many uses to which Norway can be applied, for which it is equally as good as pine, and in fact preferable to the coarser grades, and while men persist in slaughtering the former at ruinous rates, in order to get rid of it, they can only expect the influence of such folly to effect the latter. There has not been a time on the Saginaw river the present season when the finer run of lumber did not find ready sale at good prices, while the coarser grades have been slow to move; and but for the almost unflinching attitude and persistence of the manufacturer, a break would have resulted months ago. This state of affairs is more directly traceable to the Norway lumber folly alluded to above, than to any or all other sources combined. Men who own Norway timber will display vastly more sound judgment by letting it stand than by putting it on the market in the shape of lumber, under present conditions, and owners thereof may rest content that Norway timber will in the not very distant future be excellent property to have, unless the

suicidal policy of the present season is persisted in to its natural, inevitable and logical conclusion.—*Lumberman's Gazette.*

DESTRUCTIVE FIRE.

OTTAWA, Aug. 8.—To-night the citizens on the street about ten o'clock were startled by seeing the sky in the north-east suddenly becoming red and filled with smoke. A few minutes later the alarming sound of the Hull firebells told that the conflagration was on the Quebec side of the river, and going in the direction of the fire Gilmour's extensive steam saw mill, about a mile down the river from Hull, was seen in a mass of flames. The mill is situated on a point between the river and bay to the north, and is surrounded by large piling grounds, where millions of feet of lumber are piled. The fire was first discovered about 9:45, and a few seconds later covered the whole building. The water supply of the mill was at once brought into requisition, as was also the Hull steam fire engine, and the flames kept from spreading to the lumber piles. All attempts to put the fire out were useless, and all efforts were put forth to confine to the building. By 11 o'clock the roof had fallen in, and the fire began to abate, while the piles were still untouched. The mill is the largest in the vicinity and run entirely by steam, and was rebuilt for the second time a few years ago. The value of the mill, machinery, approaches, etc., burned will be in the neighbourhood of \$100,000, and is believed to be covered to a great extent by insurance.

QUEBEC CULLERS' OFFICE.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, &c. measured and culled to Aug. 2:—

	1881.	1882.	1883.
Waney White Pine..	999,603	912,719	1,450,020
White Pine.....	2,970,935	3,211,300	1,396,350
Red Pine.....	653,759	561,414	131,191
Oak.....	1,721,613	643,069	999,071
Elm.....	782,845	441,893	242,609
Ash.....	270,420	156,168	147,133
Basswood.....	3,069	256	1,357
Butternut.....	937	1,060	835
Tamarac.....	6,706	1,859	2,765
Birch & Maple.....	123,850	262,179	136,404
Masts.....	— pcs	33 pcs	— pcs
Spars.....	— pcs	— pcs	— pcs
Std. Staves.....	186.3.0.14	237.3.2.15	360.3.3.0
W. I. Staves.....	301.6.0.25	664.1.0.0	371.7.1.21
Br. Staves.....	10.0.3.4	871.7.1.21

JAMES PATTON,

Supervisor of Cullers.

Old Building Material.

An extensive trade in second hand building material has been carried on uninterruptedly in this city for fifty years, and is largely supported by builders and joiners. The stone and brick of an old building is used in the construction of a new one, the lime-whitened bricks making the inside of the outer walls and the partitions, and the stone going into the foundations. But it is not generally known that the inside wood work is used again, frequently without radical alteration. Many builders prefer this old timber because it is thoroughly seasoned, having been defended from the weather and been subjected to the influences of a measurably even temperature for years. The richer woods which are admired for their color acquire mellow tones by age and become more valuable as the years pass. Everybody knows that furniture of mahogany and rosewood that outlived several generations is much handsomer than that made from new wood. But it has an added value as mere material. An article made from the old wood will retain integrity in all its joints; its shrinking days are over. For the same reason timbering, wainscoting, and flooring of old buildings has an added value, although its selling price is less than that of the new material.

Masts and Spars.

A correspondent asks about the Quebec inspection of masts. An extract from the Act in regard to the culling and measuring of timber, masts, spars, etc., reads as follows: "Masts, bowsprits and red pine spars shall be sound, free from bad knots, rents and shakes, and the heart shall be visible in spots, at or near the partners. The following is given as to dimensions: "White pine masts, 23 inches



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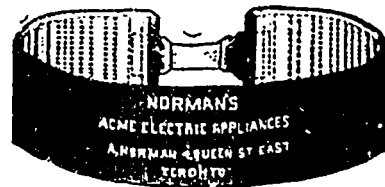
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and upwards at partners, shall be three feet in length to the inch in diameter: 22 inches, three feet in length to the inch in diameter, and two feet extreme length: 21 inches, three feet in length to the inch in diameter, and three feet extreme length: 20 inches and under, three feet in length to the inch in diameter, and four feet extreme length." The bend must not exceed six inches for every 70 feet, and in proportion for any greater length.

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