

er way, that this article is penned by a nurseryman who has had forty years' experience in the business.

In the American Forestry Congress, recently held at Montreal, a paper was read by Dr. Warder, from Robert Douglass, of Waukegan, Ill., on the 'Three Motion System of Planting.' As you copied this article into the *Witness* last month I need not repeat it here; suffice it to say that it gave a greatly improved method of planting trees over what had ever been practised before, and cheapened it so much that two men and a boy could plant 4,500 one year-old trees in a day. In addition to this cost there would be the expense of raising them in the seed bed, lifting them at one year old, trimming the roots, and conveying them to the place of planting, nearly all of which could be saved, with the exception of one year's extra cultivation of the land, by adopting the natural method of tree-planting, while the trees at three years old would be much larger and worth two of the trees transplanted at the same age by the Douglass system and at no greater expense than planting corn would be.

For forest tree-planting on the prairies, as described by Dr. Warder and others, all that is necessary is to have the land thoroughly ploughed and prepared in fall, so that water will not lie upon it during winter or spring to solidify it.

If to be planted in the fall the land should be thoroughly harrowed, rolled, and marked the same as for planting—in rows four feet apart each way,—planting the nuts or seeds at the intersection of the rows and placing two nuts or three or four seeds in every hill, only the strongest of which should be allowed to grow.

If spring planting is preferred the nuts or seeds should be kept in moist sand or earth during winter and planted out the first thing in spring. If the land was ploughed in the fall and has got hard during the winter, it should be deeply cultivated, harrowed, and rolled in spring before marking out.

By the Douglass method one-year-old trees are planted with the roots more or less trimmed and laid in a slanting position. By this, the natural method, the tree would stand erect from the start, with its tap-root going straight down and its roots springing out all around, forming natural braces for its support.

Besides, some of the most valuable trees, such as the hickory and black walnut, more especially the former, could be planted in this way which cannot be transplanted. The hickory has no rootlets and very few fibres near the crown of the root, merely a very strong tap-root, with a few fibres here and there from which it draws its sustenance; when this is cut off in transplanting, there is nothing left to sustain the tree, and if it lives at all, it is weak and worthless.

A hundred acres of hickories planted in this way would prove a fortune, as the thinnings from time to time would be very valuable and even command a high price for exportation to England, where hickory poles are in great demand, but cannot be had in sufficient, if any, quantity, while the nuts and wood of the grown trees will always command ready sale at high figures. The black walnut would be ultimately more profitable on account of the great value of wood. But this is not all; why should not the apple and the pear be planted in the same way as the nut-bearing trees?

The present way of propagating the apple is by getting the seeds from cider mills, taken from all kinds of trees, healthy or unhealthy, sowing in seed beds or in broad rows, where they stand a year or two according to their strength, when they are taken up and root-grafted during winter with the desired variety, the tap-root is cut up in two to four sections, according to its size, and a graft inserted in each, wrapped around with waxed paper, and packed away with moist saw-dust in boxes or barrels till time for planting in spring.

This is a very cheap way of propagation but far from a good one, as the most valuable part, the tap-root, is sacrificed never to be renewed by after growth.

The pear seed is usually imported from France, and the young trees are generally treated differently from the apple (though some root-graft

them also). At one or two years old they are removed from the seed-bed and planted in nursery rows, where they are budded the same year. The tap-root has to be cut off and the other roots trimmed previous to planting. At two or three years old those that grown well are fit for sale, but, as the roots of the pear run naturally deep into the ground, with but few rootlets near the surface, in lifting the greater parts of the root has to be cut off, as the tree could not be planted again with them at full length; so that in looking at the roots of the tree as planted it has been a wonder to me that it could grow at all.

By sowing the seeds, several together, as previously described, in the place where the tree is permanently to stand, all these difficulties would be avoided, and fine, healthy, long-lived trees, probably in a great measure free from blight, would be obtained.

Any farmer or fruit-grower could plant in this way; he could obtain his seeds from some strong healthy trees—those from natural seedlings are preferable (the best French pear seed is all from natural seedling trees), and plant it in hills from twenty-five to thirty-five feet apart placing a stake at each hill as a mark. The field could be planted with corn, potatoes, or other hood crops (but not with small grains of any kind, as these exhaust the land), which should be well cultivated and all weeds destroyed round the young trees; of course all the seedlings should be pulled up but the strongest trees, which could be budded the same season or the following, and all that did not take could be grafted the following spring with the varieties required.

By using the hand corn-planter, properly gauged for planting nuts or seeds, as the case might be, a large field could be planted by one or two men in a very short time, talking care to plant the seed at the proper depth for germinating, which is about four diameters of the seed, and seeing that it is properly covered with fine earth, to be pressed down with the ball of the foot as the planter goes along.—James Douglass in *New York Witness*.

REMARKABLE DISCLOSURES.

(Seward (Neb.) Reporter.

Mr. B. S. Crane, manager and treasurer of the Alvin Joslin Comedy Company, struck Cheyenne the other day upon business connected with the appearance of that splendid company in this city at an early day. A reporter called upon Mr. Crane at his rooms at the Inter-Ocean and spent a few pleasant minutes in conversation about the coming attraction. Mr. Crane assured the writer that the personnel of the company is all that could be desired and that the public may look for even better performances this season than last. Noticing that the manager looked a little pale the writer remarked upon the fact, but received the reply that he was in good health.

"But," continued Mr. Crane, "I did have a pretty serious time of it last summer in New York."

"What was the trouble?"

"I had a very sharp attack of rheumatism. The disease attacked my left leg and left arm, and for a time I could neither walk upon the one nor raise the other to my head. I suffered horribly. Did you ever have the rheumatism, sir?" addressing the reporter. "If ever you are stricken with it there is one thing which I can recommend as a pretty sure cure, and one which will probably give you quicker relief than anything else you can employ. I refer to the Great German Remedy, St. Jacobs Oil. I am aware of the prejudice which many entertain against advertised medicines. I felt thus about the St. Jacobs Oil and thought my attention was too deeply rooted to be dissipated. But a man will sometimes catch at a hope as it flies. I purchased a bottle of it, when I found nothing else I applied would give relief, and commenced applying it. It proved a most effectual remedy, and the use of three bottles cured me."

"And you are now quite a devotee of St. Jacobs Oil?"

"That is, perhaps, drawing it too strongly. I certainly do believe it a fine specific for rheumatism, and as my belief is based upon personal experience, I don't mind commending its use to others."

In the office of the hotel, the reporter met Mr. Geo. A. Dunlap, who is the popular and efficient representative in Cheyenne of the Chicago firm of Wood Bros., live stock commission merchants. Happening to mention the interview with the manager of the Alvin Joslin company and what he said about St. Jacobs Oil, Mr. Dunlap replied that he was not surprised at the narration of the circumstances, for the Great German Remedy was a good medicine and he could also commend its virtues.

"Are you struck on Oil, too, Mr. Dunlap?"

"Well, I don't exactly put it that way, but I believe it a good remedy all the same. My experience with it is somewhat limited, but of sufficiently recent date to make me vividly remember what it has done for me. While supervising the loading of cattle this autumn, I fell from a car and seriously hurt my left knee. I believe a blood vessel was ruptured and the muscles severely strained. I could not walk for several days, and do not know that I would be capable of active locomotion now, were it not for the kindly offices of St. Jacobs Oil. Its powerful healing and stimulating properties put me right on my feet. It did, for a fact, and you can use the information if you so please."

"Almost everybody," remarked Mr. A. C. Stayart, representing Wober, Howland & Co., wholesale dealer in hats and caps at Denver, "uses St. Jacobs Oil where I came from. I once had a very sore foot and very naturally employed the Great German Remedy. It cured my foot in a very short time. I also can recommend it."

"Are there any other gentlemen present, who would like to endorse this wonderful specific?" said the reporter. "It has assumed the importance of a public question, and I intend to write it up for the benefit of others who may need the offices of this medicine."

"Yes," replied Mr. Wm. H. Dunlap, representing the great coffee house of Jowett, Sherman & Co., Milwaukee, "put me down as another believer in St. Jacobs Oil. I had rheumatism and St. Jacobs Oil cured me. You can just bet on it every time."

"Gentlemen," remarked the reporter, "this is a remarkable coincidence. Two Mr. Dunlaps, each of whom never met the other, both endorsing St. Jacobs Oil, followed by another gentleman in the room. It is a regular experience meeting. It will not be paralleled soon in Cheyenne."

The reporter was subsequently informed by one of the prominent druggists in the city that Father Hayes had also used the Great German Remedy for rheumatism, and, having been cured, commended its employment to his people.

The above is a true bill, and may be relied upon.

A SPLENDID
SAW and GRIST MILL
For Sale by Auction, at
COATE'S AUCTION ROOMS
IN THE
CITY OF TORONTO,
ON
Saturday, December 9th, 1882,
AT 12 O'CLOCK NOON.

These mills are situated on the Gull River, in the village of Norland, County of Victoria. The Saw Mill has two large circular saws, one butting saw and one edger, with an extra supply of belting. The Gull River affords a means of bringing down timber for 100 miles north of the mill. The Grist Mill has two run of stones. The dam is maintained by the Government of Ontario. There is a never failing of water. The property consists of 240 acres of land, more or less. One tenth of purchase money at time of sale. Terms for balance will be made known at time of sale. For particulars apply to
JONES BROTHERS & MACKENZIE,
Solicitors, &c.,
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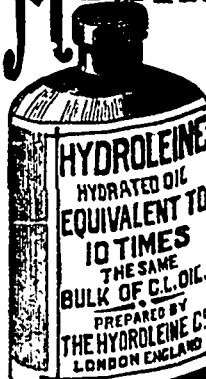
The Lord Mayor of London, with the other commissioners of Epping Forest, have been visiting the Duke of Portland's Welbeck estate, which is widely known for the grandeur of its trees. Some of the timber grown in the park years ago was used in building St. Paul's Cathedral, and at the Abbey there is still preserved a letter written by Sir Christopher Wren, who, communicating with the Duke of Newcastle's agent in 1695, sends the dimensions of the beams he requires for the roof of the edifice, and adds that he "expects this season but ten of the great trees." The Greendale oak in Welbeck Park is called the Methuselah of Trees, and writing of it in 1790, in his "Descriptions and Sketches of remarkable oaks at Welbeck," Major Rook said the tree was then thought to be 700 years old. In 1724, an opening was made in this oak large enough to allow a carriage, or three horsemen abreast, to pass through it. At that time the girth of the ancient tree above the arch was nearly 36 feet, the height of the arch was 11 feet, and the topmost branches were 54 feet from the ground. Although crippled with age and some rough treatment, the Greendale oak still flourishes. It has, like some old men, to be propped up; but its boughs are yet green, and its foliage bright. The timber taken from the tree's heart was in 1724 made into a cabinet for the Countess of Oxford, and this cabinet, which is now at Welbeck, contains several inlaid pictures, one or two of which represent a former Duke of Portland driving a coach and six horses through the cavity cut in the old oak's trunk. On the estate a story is told that His Grace, in an after-dinner frolic, made a bet of 1,000 guineas that he could drive a coach and six through the body of the tree without touching the bark, and that he accomplished the feat and won the guineas. The cabinet, which is quite a work of art, also bears the following quotation from Ovid's "Metamorphoses":

Oft did the Dryads lead the festive dance
Beneath his shade, or hand in hand enclose
The orbit of his trunk, full fifteen yards;
Whose head above his fellows of the grove
Doth tower, as these above the ward beneath.

A great many mills throughout Minnesota and Wisconsin are shutting down. In some cases there is a lack of logs, and in others there is feeling on the part of the mill men that there is enough unsold lumber in their yards.

The Merrill, Wis., correspondent of the *Northwestern Lumberman* says that most of the mills at that point are shut down, having cut all their logs. The river will be clearer than ever before. Men are going to the woods very fast. The weather is cold, and some snow has fallen. With a good winter there will be more logs put in than in any one season before.

HYDROLEINE
(HYDRATED OIL.)
An artificially digested
Cod Liver Oil.



For Consumption, Winter Cough, Affections of the Chest and all Wasting Diseases. Prescribed by the leading physicians of England, the United States and the Dominion of Canada.

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HYDROLEINE mixes perfectly with water, showing a complete artificial digestion of the oil, and just as the Hydroleine mixes with the stomach, so does it mix with the liquid contents of the stomach, and enters immediately into the system to nourish and build it up. The efficacy of Hydroleine is not confined to cases of Consumption, as from its valuable tonic effect on the nervous system in addition to its special stimulating action on the organs concerned in the production of Fat in the body, it causes marked increase in weight in persons of naturally thin habit, who do not present any evidence of disease.

Unlike ordinary preparations of Cod Liver Oil, it produces no unpleasant eructation or sense of nausea, and should be taken in such very much smaller doses, according to the directions, as will ensure its complete assimilation; this, at the same time, renders its use economical in the highest degree.

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