

trickling on. When once it should catch the grass— Laying Kitty down on the ground, he swarmed up a tree which overhung the stream, and tried to shout, but no, his voice, choked with smoke and heat and thirst, refused to make a sound. At last he found he was able to make a feeble noise, and then, his voice, growing clearer, he sent cooee after cooee down the wind as he had done that night on the Broadwater, but with what different meaning now! But there was no responding shout, and looking back, he saw that the fire was beginning to catch the grass. Another very few minutes now, and he would take Kitty and jump with her into the water, though he could not swim,

but it would at least be better to die that way. A few more shouts, and he was standing at the brink of the river with Kitty in his arms, the flames scarcely two yards away, when—

The quick sweep of a pair of paddles, the sudden jolt of a boat's stem against the bank, and a voice he knew, it was Jack Lidstone's. Jack had never spoken to him since that night on the Broadwater, and what a long way off his voice seemed to be! "What you, Harry? And Kitty, too, by Jove! Give her to me! Now jump! Quick! That was a narrow squeak. I guess you won't go fooling around cooee-ing out of pure cussedness again!"



Arbor Day

By the Rev. Hugh Macmillan, D.D., LL.D.

HOLIDAYS are usually commemorative. We can trace their origin to the desire to do honour to some widely popular personage, or to perpetuate the memory of some remarkable event. In almost every case they have respect to the past, reminding us of some former blessing, or of some great benefactor who lived long ago. We cease from our ordinary work, and set apart an appointed day for rejoicing in some good that has come to us from other days, in whose reflected light our life brightens and beautifies. But there is one holiday, of which I am going to speak in this paper, that is an exception to the general rule. It is not retrospective but prospective. It bids us look not to the past but to the future. Instead of celebrating some outstanding benefit that belonged to bygone generations, it has respect to benefits that are to arise to coming generations, who shall fill our places, and take up our work when we have passed away. The founder of the holiday in question said that it is "the sole holiday of the human family which looks forward and not backward."

About thirty years ago the Honourable J. Sterling Morton, a man of very original and independent character, when Secretary of

Agriculture during President Cleveland's second term, started a movement to plant trees on an extensive scale on the treeless plains of his native state of Nebraska. Previously the necessity for this seemed not to have arisen. There was such a vast superabundance of woods and forests over the American continent, that the difficulty was to dispose of the timber; and one of the greatest hardships of the settler in the newer parts of the country was the clearing of a space among the dense forests for a farm to cultivate. But Mr. Morton had a deep sense of the value of trees as essential elements in the prosperity of countries, and before his prescient mind arose the vision of a time when the axe of the farmer and the lumberman would largely denude the land of its forests, unless they were to be replaced and the harmony of nature preserved by the planting of new trees. Mr. Morton has recently died, but he lived long enough to see that what he feared had already taken place in the older states, where a famine of trees was beginning to be felt, and where regions that were formerly well wooded were becoming bare and exposed and suffering from the effects of disordered meteorological conditions.

To remedy this state of things he went about the country, endeavouring to arouse popular interest in his favourite hobby of forest preservation and forest extension. He knew that if the planting of trees were left to the caprice of individuals, the work would be intermittently and ineffectually carried out. Every one would at once agree with him that something ought to be done without further delay, but the proverb would prove true that what was every one's duty would become nobody's. The enthusiasm would soon die down, and only a few individuals here and there would persevere in the beneficent work. Accordingly he hit upon the ingenious idea of inaugurating an annual holiday, in which the community would be released from their ordinary work, and left free for the sole purpose of planting trees where they were required. This holiday he proposed to call Arbor, or Tree-planting Day. The scheme caught at once the popular fancy. It was something new, romantic, and useful. At the very beginning the interest of the young people, and especially of the children attending the public schools, was excited, and they took to it with all the eagerness of novelty. It touched the latent poetry that was in the nature of the rudest. It awoke the dormant old-world memories and associations that ran in the blood, and linked the woods and forests with the early homes of man, where he found his food and his safety, and brought back those who were tired of the conventionalities of society for one day, at least, to the simple conditions of nature.

From Nebraska the movement spread rapidly, until ultimately almost the whole of the United States were included in it, and the holiday became a national institution, looked forward to every year with the utmost pleasure. Unlike Thanksgiving Day and other public fêtes it was not universally observed on the same occasion. Each state had a different date; but the periods chosen were usually those most favourable for the rooting and transplanting and growth of trees, mostly in November and December, or in January and February. In Nebraska the holiday was observed in April, and in Dakota at the beginning of May. Washing-

ton's birthday, February 22, appealed to some patriotic states, notably Texas, as a suitable time. Sometimes the holiday extended over more than one day. In South Carolina a whole week was devoted to the picturesque task. The number of trees planted by means of this beautiful custom of Arbor Day, over the whole Union, cannot be estimated. It has added enormously to the woodland and orchard wealth of the country, imparted richness and beauty to places formerly bleak and desolate, and helped greatly to adorn the landscapes and ameliorate the climate. In the State of Nebraska, where the scheme originated, it has been calculated that nearly seven hundred million trees have been planted, the whole character of the province has been changed, and while previous to 1872 it was called the Great American Desert, it is now known to every one as the "Tree-planter's State."

From the United States the holiday was introduced with markedly good results, into Canada, which was also, notwithstanding its former plenitude of primeval forests, beginning to suffer in some parts from the wasteful and indiscriminate felling of the timber. On the other side of the world the holiday came with rapid steps, and proved a great boon to the people. Large tracts in Australia which had been exposed to periodic droughts and floods of a violent character, have been made mild and equable by the extensive planting of trees suitable to the climate. The introduction of trees where they were before unknown has the most marvellous effects upon the whole economy of the region. The roots consolidate the soil, the foliage shades the ground, attracts moisture, and tempers the winds; and in hollows on hill-sides they collect and retain the rain-water, and give it off slowly and gradually, thus forming the sources of perennial springs and streams. They purify the air by their breathing and the fragrance which they exhale, and are thus the most perfect sanitary agents in nature, converting into wood and other useful substances the noxious waste products of combustion and decay, and preserving the atmosphere always in a condition fit for human and animal breathing; and they supply man with every kind of useful article, fruits

to feed him, fuel to warm him and cook his food, raiment to clothe him, medicine to heal his diseases, and timber to construct his dwellings and build his ships, so that the sea itself is made a highway. So indispensable are trees, not only in the human but also in the natural world, that the general destruction of them would be one of the greatest calamities that could possibly happen. What the countries of antiquity have lost by the wholesale destruction of the woods and forests it would be impossible to tell. This, more than the ravages of war and the oppression of the tyrant, has been the cause of their decay. They could not carry on their own perpetuity in the absence of what constitutes the principal wealth and stability of a nation.

We read in the Bible of the great primeval forests which covered the hill-sides and valleys of the Holy Land; the oak woods of Bashan, the ancient wood of Ephraim, where Absalom met his tragic fate, and the richly varied oaks of Mount Tabor and the forests of Lebanon; but every trace of these has long passed away, and throughout the length and breadth of the land there is hardly any tree that arrests the eye by its venerable age or great size, with the exception of Abraham's oak at Hebron, the cedar grove at Lebanon, and the traditional olives of Gethsemane. We see at the present day the mountain sides seamed by deep ravines, excavated by the power of streams, implying the prevalence in former times of a large rainfall, and consequently of extensive woods; but for ages they have been white and dry as the bones of a skeleton in the desert. A sudden storm on the hills at rare intervals fills them for a brief space with raging torrents, which disappear and leave the gorges as white and dry as before. So, too, with Greece, owing to the destruction of the forests many of the old classical streams have dwindled and vanished, and the land presents everywhere a desiccated appearance. The oaks of Dodona under the shadows of the clouds no longer utter their oracles in their rustling leaves. The sanctuary of Delphi, once shaggy with dark woods, is now a tenantless wilderness of bare rocks, with hardly any vegetation upon them; and the Castalian spring rising on the heights of Parnassus,

missing the sacred laurel grove that nourished its fountain heads, and whose leaves the Pythian priestess chewed before putting herself under the divine influence, dribbles down in the rift of the ravine, a scarce perceptible thread of water. So, too, on the Italian shores, the sombre pine-woods that made the hills around Lake Avernus so gloomy and forbidding, and formed a fitting avenue by which to approach the lower world of the dead in the subterranean caves that opened up in the rocks, were ruthlessly felled by the axe in the time of the Cæsars; and when I visited the place I found the site of the ancient woods occupied by beanfields, whose delicious fragrance charmed all my senses with a memory of home. Owing to the disappearance of the forests that once covered the Alban Hills the great plains around Rome were converted into the pestilential Campagna and the Pontine Marshes, which the malaria has made uninhabitable, although once amongst the most fertile districts in Italy.

Spain has suffered greatly from the cutting down of the woods that formed such picturesque features on the mountain sides of the interior, and from being one of the best-watered countries in Europe has become one of the most arid and desolate. The hollows, or deep gullies, riven in the sides of the Maritime Alps as they slope down to the margin of the Mediterranean, which are mostly dry all the year round, or through which during great rain-storms furious streams flow for a brief space, are the work of forces of denudation on a far more extensive scale in former times than now, owing to the deforestation of the country and the consequent greatly diminished water-supply. In Strabo's time the Riviera had a cool, moist climate, which favoured the growth of soft deciduous trees, where now only hard evergreens and thick-leaved plants can grow in the dry air and on the leafless lands. Even Norway and Sweden, and the regions bordering the Baltic, from whence we draw a large part of our supplies of timber, and which promised at one time to be inexhaustible, are beginning to feel the strain upon their resources, and are

making up for past carelessness by planting extensively the parts that have been denuded. In Switzerland and the Tyrol the care of the forests fortunately is committed to the commune of each region; for not only do the people depend upon these forests for their timber and fuel, but also for the preservation of their fields from the awful destruction of the avalanches. The woods on the heights are so sacred that no axe is allowed to touch them, for they stand there as the living sentinels guarding the homes of the community far below from the devastating snows of the lofty peaks.

In England, during Saxon and Norman times, there used to be extensive forests, such as Epping, Sherwood, New Forest, &c., covering miles of the country, and sheltering outlaws and freebooters in their remote recesses. Some of the traditional forests still remain, though shorn of much of their former magnificence and extent. England must have presented a rich sylvan appearance when one of its fair counties got the name of Buckinghamshire, or the home of the beeches, on account of the vast predominance of that noble tree in its landscapes, as in Denmark at the present day. Very large old trees may still be found adorning many an historic spot, and the elm and the lime-tree make majestic ancestral avenues, which are the glory of old family mansions all over the land. Scotland in primitive times had the great Caledonian forest, which covered a large part of the country north and south, and in which plants, insects, and birds, characteristic of Scandinavia, abounded, found nowhere except in that forest. But in consequence of the constant wars and feuds of the clans this vast forest dwindled down to a few patches, left here and there in the remote and more inaccessible regions; and the flowers and insects have disappeared with them, except in a few favoured spots. When Dr. Johnson made his famous tour in the Highlands he complained of the desolate aspect of most of the scenery. He said that there was hardly a tree large enough for a man to be hanged upon, and he missed very much the far better wooded landscapes of England. But since his day proprietors of great estates

have become alive to the importance of restoring their old woodland aspect as much as possible. Extensive tracts of country have been enclosed, drained, and planted with beeches and pines. The Duke of Athol, on whose property at Dunkeld is still growing, as a very gigantic tree, the first larch introduced into Scotland from its native country in the Tyrol, and which was first cultivated, in ignorance of its habits, in the conservatory as a green-house tree, until it pined and withered and was thrown out, and then discovered to thrive best in the open air, gave a great impetus to the making of larch plantations all over the country. In his own domains many thousands of acres, formerly bleak heathland and desolate slopes of hills, had a rich green mantle of this picturesque tree thrown over their nakedness. In the grounds around Inveraray Castle, Taymouth Castle, Dunrobin, and the Duke of Buccleuch's policies at Drumlanrig, planting was carried out wholesale; and in these later times the magnificent pine-trees of America, and the great cedars of India, have been made to feel at home in many a park and shrubbery, and the lowland scenery has been assimilated to the rich vegetation of foreign lands. But still Great Britain, as a whole, occupies the lowest position, so far as the proportion of forest-land to its total area is concerned, of any country in Europe; Russia and Sweden, Austria, Germany, France, and Norway, all taking precedence of it by a long way. Russian and Swedish forests occupy forty-two per cent. of the area of these countries, while Great Britain and Ireland only occupy four per cent. of the area with forests.

How important therefore it is that our country should be aroused before it is too late to the wisdom of bringing itself into line with the great countries of the Continent, and setting up for this purpose the exceedingly useful institution of Arbor Day in every part of the land. Hitherto, with the exception of a single district in Kent, this institution has not been adopted in any part of Britain. If this charming custom were to become popular, it would provide a most enjoyable holiday for our hard-working population, and we have not too many

holidays as it is. We hear on every side with alarm of the fast-diminishing supply of our coal; and the cry of a positive timber-famine in the near future, when foreign supplies are restricted, is heard in our busy industries. Just as it is with our corn, by improving and fostering our agriculture in a way which we have strangely neglected of late years, so it is with our timber; we could go a long way to supply our own wants, and be independent of foreign aid if we rectified at once our previous great neglect, and realised more our duty to ourselves and to posterity to make our woods and forests a far more valuable life-estate to the commonwealth.

Arboriculture cannot safely be left to the negligence, caprice, or avarice of private enterprise. From the very nature of the case, owing to the shortness of individual life in comparison with the longevity of trees, and the long time it takes to get adequate returns for labour and expenditure in planting, it is obvious that the State should undertake to a much larger extent than at present the management of our forest-lands, so that they might be established upon permanent principles, and the wants of the present generation might be provided for without injury to those of future generations. Unfortunately the amount of Crown lands that could be forested is very limited; but by some method or other of administration, in co-operation with our large landholders, who are called upon to conserve their woods and forests by the law of entail, and even with private individuals who own a small plot of ground that might be set apart for

the growth of fruit-trees, the government of our country should take care of what is so precious and essential a part of the national wealth. Our rich country might well imitate the example of Germany, which distributes young trees for planting to municipalities at cost price, and pays a handsome premium per acre for planting them. Private individuals are invited by this system to help on the good cause; and there are numerous instances where the townships of Germany require to levy no direct taxation, as the profits of growing the forests around them are more than sufficient to pay the rates. We need to revive the old interests in rural pursuits, for in these days the country is depopulated, the work-people swarming into our large towns, and crowding the slums beyond all reasonable bounds. To the attraction which man ought to find in the cultivation of the land, which yields an annual recompense for all the toil and care expended, we ought to add the further attraction that may be derived from the care of our trees, for the growth of our timber and firewood, and the beautifying of our scenery, and so pass from selfish considerations to the claims of posterity upon us. We have entered into the labours of our ancestors, and enjoy the valuable woods which they planted and left as a legacy to us. Should we not show our gratitude by doing in turn for our posterity what our forefathers have done for us, and so hand on our heritage of trees to future generations, greatly extended and enhanced in value by our labours?

