

Plate by Henry Brooks

As Washington towered above his fellows, so does the Dexter Elm, at Malden, Massachusetts, rise in majesty—the most beautiful of all trees that ever sprang from American soil, in the opinion of the author. Such an elm might have inspired the poetical words of Walt Whitman: "Why are there trees I never walk under but large and melodious thoughts descend upon me?"

TO ARMS FOR THE AMERICAN ELM

By JOSEPH EDGAR CHAMBERLIN

(Illustrated with plates from "Typical Elms and Other Trees of Massachusetts" by Lorin L. Dame and Henry Brooks, Boston, 1890)

WE DO not have in America "sacred trees" as they have them in China or India or as the ancients had them, but if one were to name a tree sacred to all our people it would be the American elm. Since the Pilgrims first landed it has hailed us joyously from the woods and the meadows; it has sheltered our homes; it has played with our children. By its friendliness, its virtuous beauty, its unfailing sympathy, the American elm has become enshrined in the very souls of our people and in the history of our country.

Of all our trees worth fighting for, the elm comes first. Even the soil in which it has sunk its roots is sacred earth to millions of men and women, boys and girls. America fought a good fight to save the chestnut—and lost. An invader

from foreign climes—the chestnut blight—wiped it from most of our landscape. We began that fight too late. Now another invader from foreign lands—the Dutch elm disease—has recently reached our shores. It has been uncovered in New Jersey, New York, Maryland, Connecticut and even Ohio. Incipient and scattered though its attack is, the disease potentially is as destructive to the elm as the blight was to the chestnut. Its invasion must be stopped promptly and while it is possible to stop it or the American elm will go the way of the American chestnut, and in its place will stand merely withered and rotting forms as monuments to its hallowed memory.

To arms, therefore, for the American elm!

Let us mark well its character that our vigilance and de-



Photograph by James A. G. Davey

Old elms at Deerfield, Massachusetts. Of all our trees worth fighting for, the American elm comes first. Its splendor of form has made it the pride of whole communities and being a "home tree" it has been planted at countless doorways throughout the land where its friendly and sheltering branches spread above little children who ever since the Pilgrims landed have played about its feet and climbed aloft into its sturdy limbs.



Plate by Henry Brooks

Taken as a group, the elms of old New England are the most characterful of all American trees—their lives are woven into our earliest history. The Pilgrims sought out these trees near which to build their homes, for the elms seemed to say: "We are a villageous tree. We are to serve and comfort people." The Old Elm at Rocky Nook, near Hingham, Massachusetts, transplanted by Stephen Cushing to its present position in 1729.

fense in its behalf may be worthy of its sacred service. It was one of the first trees to attract the eyes of the original European settlers on our shores. It welcomed them from the woods, from the river meadows and from the open spaces. They planted it to commemorate their arrival in a new land, their migrations, their marriages, the births of their children. And it grew in luxurious sympathy and significance with their lives and became associated with the history of each family.

Its surpassing splendor of form made it the pride of each community. Its gentleness aroused the affection of the children who clustered at its feet. For them it was a climbable tree—not when it stood tall, single and columnar, but, as it often did, when it parted near to the ground into two stems, to the rough and corky bark of which bare feet could easily cling until the lowest big branches were reached; and from these one could travel all over the tree, explore bird-nests, play games and test the venturesome spirit of youth. Chil-

dren and tree grew together. No wonder it gradually assumed a well-nigh sacred character.

When the Pilgrims landed on Plymouth Rock and Winthrop's men came ashore at Salem, and presently walked inland a little to see what the country was like, they looked off over shaggy wilderness and saw, here and there across the wild, the tops of certain trees rising above the rest. Those trees had spreading tops, sometimes flat, sometimes rounded into a dome, but always with a sort of brooding, protecting aspect, as if they were warming somebody when it was cold and cooling them when it was hot. They looked as if they had grown as they were to shelter and to decorate somebody's home. They seemed to say from the start, "We are a villageous tree. We are to serve and comfort people." The settlers went straight and sought these trees out. And wherever they found red men and women dwelling in huts of bark or tents of skin there was likely to be growing nearby an elm tree. If no men at all were there, trees of this sort stood out in open spaces or in river meadows as if they were waiting there till men should come.

When the newcomers examined the bark and the leaves of these trees they exclaimed all together, "Elms!" They were right. The trees were of the familiar kind they had left home in England, and had found so useful there. Elms! Their wood had the same toughness, the same flexibility, the same close-grained, unknotted quality; the tree had the same serrate leaves and quite similar purplish-brown tufts of flowers in spring. Yes, it was an elm, but how changed and glorified in form—ininitely more majestic and graceful in growth, vase-like, lofty, commanding, spreading widely forth at the top, as if extending a benediction over the meadows or the woods in which it grew, as if inviting the newcomers to come and dwell beneath it!

It is hard to tell whether the Pilgrims immediately took the American elm into their lives or whether the elms took the Pilgrims into theirs. When the Pilgrims, their feet once on the firm ground, walked abroad in the new land they had resolved to make their own, they had a two-fold feeling about this tree—it was the elm, their own elm, and yet it was a new and finer tree; a familiar friend, and yet a revelation of the new world. They proceeded to make the identical use of its wood that they had made of its English brother. Beginning as an old friend, it soon became a grand new friend. Like the English elm, it represented civilization and progress, for its wood was particularly adapted to the making of wagons, the knowledge and use of which marked the difference between savage and primitive life and civilized existence. Besides wagons, it furnished the keels and other makings of boats, in which people, food-stuffs and all merchandise were transported on the streams and along the sea-coast. The settlement and civilization of the country would have been much slower without the providential presence of the elm in the new land.

Though the pious Pilgrims must have recognized the hand of Providence in the abundance and superiority of the American elm, it may well have been the beauty of the tree that first induced the newcomers to dig it up in the woods and transplant it to their homes. The old records show that they planted handsome young elms from the woods or

AMERICAN FORESTS

the meadows at their doors to grow and to serve as memorials of their first marriages or of the birth of their children. It became the new

In point of size and pure grandeur, the palm is yielded to the tree known as "the Big Elm of Lancaster" which as long as it stood was known as the greatest elm in all New England. In 1890 its height was ninety-five feet; its girth twenty-four feet and its spread of branches 114 feet.

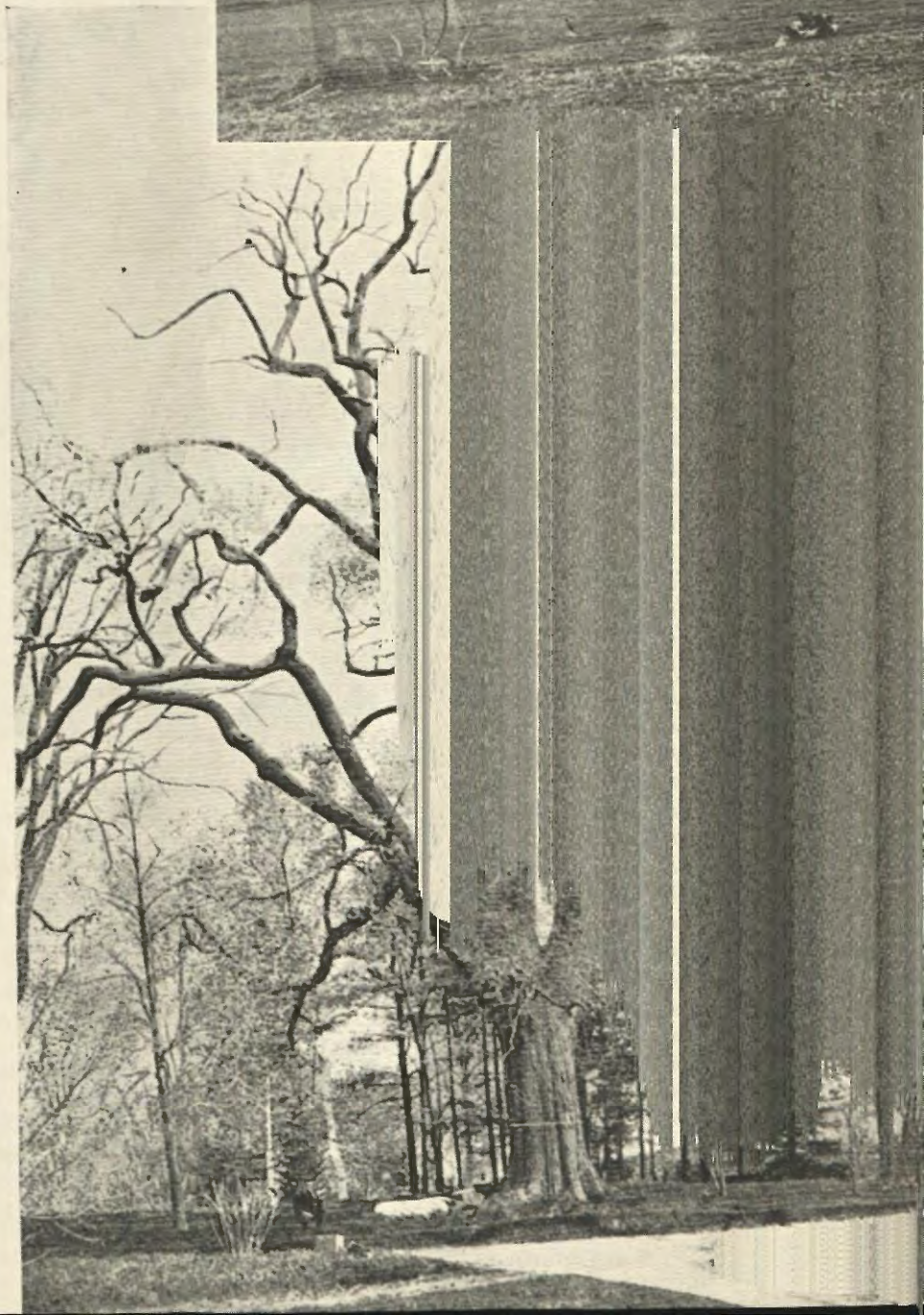
country's monument tree, for which purpose, it seemed, the Almighty had shaped it. As the settlers increased and spread to the westward and northward, they found the tree growing naturally and in greater abundance. They found the Connecticut Valley a veritable nursery and Paradise of elms, and they planted towns there in the shade of the elm fathers. They and their children found it not only throughout New England, but in New York, and in Pennsylvania, where William Penn. at the head of another company of English pilgrims, made with the Indians a beneficent treaty under an elm which remained as a monument of the event for centuries. Colonists penetrating farther and farther west found it and before many years it was proven **indigenous to the whole country east of the Great Plains.** But it had no liking for the arid lands.

The elm tree has not changed its habits since the days of settlement. It has never formed great forests by itself, though it has covered considerable tracts, and in several states it has furnished, and still furnishes, large quantities of timber for export to other states or to foreign countries. It has always occupied a high place in public sentiment, because always its ways have been ways of pleasantness and its paths the paths of peace. One of the most self-supporting of trees, it needs little care, often thriving without any care at all. It has favored the meadows, the door-yards and the roadsides. Its likings are domestic. All its suggestions are happy.

When you are in your bed in the dead of winter, to think of the elm is to dream of the summer. You see it dappling the pasture with broad and slowly-moving spots of shade, and seeming to arrange these spots so that the cows and sheep come into them, and so that the boy on the bank of the river, fishing, sits in one of them. You see the elm holding its restful shadow over the tired housewife as she seeks refuge from the hot kitchen on her doorstep. You see the row of elms along the village street spreading a beneficent parasol over the whole village. Even if outside the town only a lonely landscape of scraggly woods meets the eye, there are in it single elms or clusters

Plates by Henry Brooks

This venerable tree citizen is the "Pratt Elm," perhaps better known as the "Great Elm at Concord," and is believed to have been set out in 1700. Loved of Emerson, Hawthorne and Thoreau, it is of the "oak type"—its beautiful stem rising, like the pipes of a great organ, to be played upon by the winds of heaven.



of them which tell a comforting little story of their own. It suggests that if the oak was sent to the earth for strength, **the elm was sent for shade and grace and cheer and beauty.** Finding its sustenance where it sprouted and grew, it sends its seeds far and wide. Like the citizen, it aspires to the greatest heights, and has the widest outlook. It struggles determinedly against enemies and disadvantages.

The elm tree does not like drought any more than human beings do, but it will stand a lot of it, and in this characteristic arises the need for the American citizen and the American elm to collaborate if they wish to keep on living together in the successful amity which has marked their three centuries together. The big elm at your door is a thirsty being. For its health and vigor it needs, we are told, thirty barrels of water every day! If it does not get it in its immediate vicinity as a free gift from heaven, it seeks it by sending its wonderful rootlets long distances. These little rootlets, growing out of the larger roots, permeate the ground all roundabout. They suck moisture from the soil wherever they can find it. They are not at all considerate of what the apple tree, and the plum or the peach, or the rose bushes may regard as their prior right to the soil. The elm rootlets pass under the house you live in; under the concreted floor of your cellar, and come up in the garden on the other side, and every drop of water they can find they take. For this, nature's great design constituted them. Sometimes this means devastation for the garden, and fatal thirst for the rose bushes and the plum and the peach. But your faithful elm, your beautiful and cheering and beloved elm, must drink to live. Its straight and noble form, its vase-like spread that so delights your eye, its great bulk and height that make it a monument in your life, your memory, your character, have been created and nourished by the abundant water which it is able to draw from near and far.

This water you have been taking away from it with your

increasing cultivation of the ground, your garden crowded with plants, your numerous shrubs filling your yard, your heavy and sapping lawn. Our recent changes in the way of life, our intensive cultivation, have been robbing the door-yard and street elm of its supply of water in the soil, often weakening its constitution and making it more susceptible to disease—the Dutch elm disease. This robbery

must be supplied, if necessary from your domestic supply. Even the household well, from which the elm tree used to pilfer a few drops, is gone. The tree will expect at least as many drops from your taps.

It was natural that the first American elms to find a place in the records of science, and to achieve mention in history and literature, should have been those of New England. The same trees earliest attracted the attention of the European botanists who were the first to study the vegetation of our continent. Michaux, the French botanist and traveler, who wrote the first authoritative book on "The Trees of North America," pronounced **the American elm "the most magnificent vegetable of the temperate zones."** Michaux must have seen the elms which still survived in New England at the beginning of the Nineteenth Century, and which had attained fame by that time either on account of their size and splendor or by association with events. He may have stood under the "big elm" on Boston Common which, according to the traditions of the people of that town, had been spared by the founders when they swept away the forest that occupied the site. This



Photograph by James A. G. Davey

When Winthrop's men came ashore at Salem, they saw across the shaggy wilderness certain trees rising above the rest. So stood the elms then, in open spaces or in river meadows, as if waiting for the coming of the white man. So stand they now—majestic, vase-like and graceful—spreading their green canopy of shade—a benediction to the land and its people.

"Boston Elm" stood alone near the center of the Common "in a rich hollow" and near enough to the natural pond called the Frog Pond so that the tree's roots could derive from that small but perennial source a sufficient supply of water.

It was a handsome tree and much loved by the citizens. The tree had certainly stood there throughout the Eighteenth Century and part of the Seventeenth. It was over-

thrown by a great gale on the fifteenth of February, 1876. In 1825 its height was sixty-five feet, its girth at two and a half feet from the ground was twenty-one feet, eight inches and its spread eighty-six feet. In 1855 its height was seventy-two and a half feet. When it finally fell its largest branch was sawed off and its growth-rings counted; they numbered 199. If this represented the age of the tree, it could not be assumed that it had been standing when the town was settled, because 246 years had elapsed. It may have dated from 1640 or 1650. It was already known as the "old elm" or the "great elm" when the Nineteenth Century dawned, although both these terms were sometimes applied to the "Liberty Tree," which stood on Washington, the principal street, near the south end of the town, under which the fomenters of the Revolution met, and which was cut down for fuel by the British, who left behind them no record of it except to say that they got fourteen cords of wood out of it.

A more famous tree than the Great Elm of Boston Common and also one whose early history is better attested, was the Washington Elm, on the edge of the Common at Cambridge. This tree, probably the most famous of American elms, was undoubtedly of the original forest growth. It was in its maximum glory when the American Revolutionary Army assembled at Cambridge, in 1775, and it was under its spreading branches that Washington took command of the army on July third of that year. On the spot on

the street opposite the tree, where afterward a stone church was erected, then stood the residence of the Moore family. The whole ceremony was witnessed by the members of this family. A daughter of the family, who saw the whole scene, lived in good health for seventy-five years after, and pointed out the tree quite positively in 1848. The statements of other eye-witnesses have left no doubt of the circumstances. The tree itself stood in fairly good condition until quite lately. The writer saw assembled in its shade

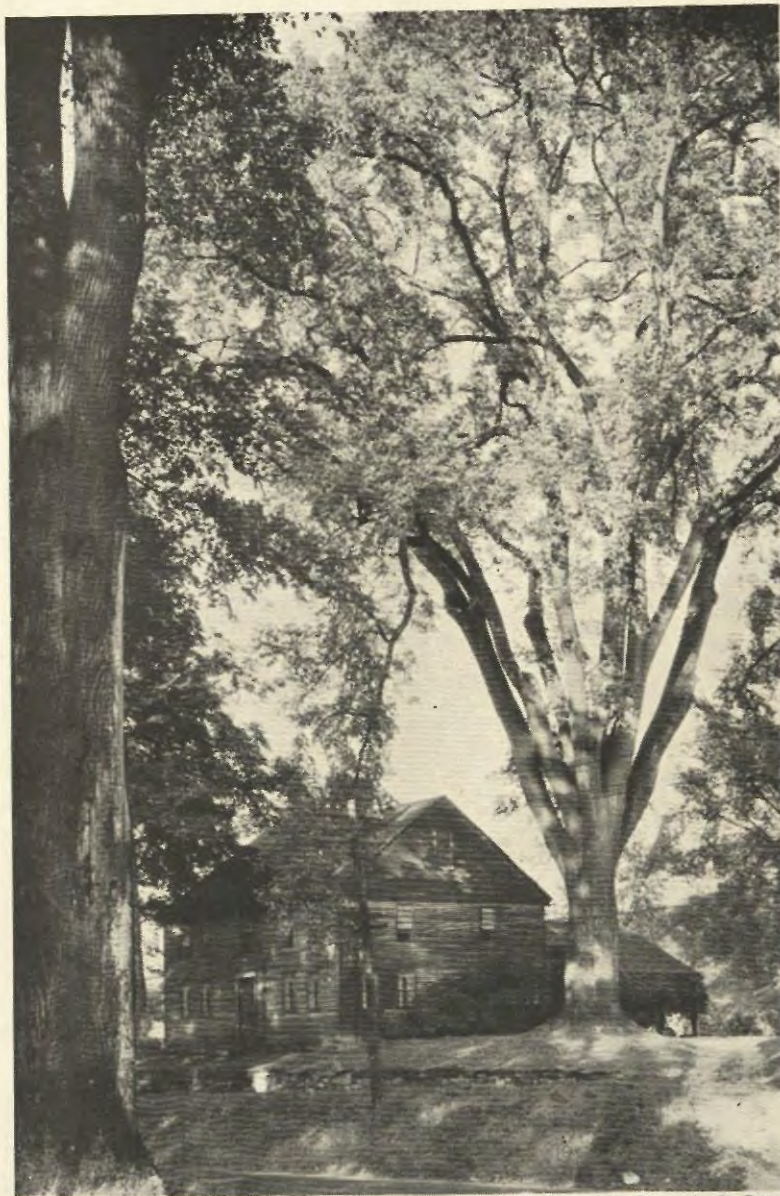
soldiers of the World War, who were quartered in barracks erected on the adjoining Common.

Never were there nobler elms than those of early origin of spontaneous growth in the Connecticut valley; and of those which stood until a recent date in Springfield and Deerfield, Massachusetts, and at other places northward to the upper river in Vermont and New Hampshire the

writer has many recollections. So has he of the "Pratt Elm" known as the "Great Elm at Concord," loved of Emerson, Hawthorne and Thoreau; this tree is believed to have been set out in 1700. The last time the writer was at Hingham, Massachusetts, the Old Elm at Rocky Nook, known to have been transplanted to its present position by Stephen Cushing in 1729, and one of the most shapely and luxuriant elms in New England, was still standing in perfection.

The writer knew well the elm which he regards as the most beautiful of all the trees that ever sprang from American ground, the Dexter Elm at Malden, Massachusetts—a tree whose majesty among trees was that of Washington among men. This was the tree which Lorin L. Dame and Henry Brooks, in "Typical Elms and Other Trees of Massachusetts," deemed most worthy to be accompanied by Walt Whitman's fine line, "Why are there trees I never walk under but large and melodious thoughts descend upon me?" It certainly must have been an American elm that inspired this thought in the poet's brain. No other tree is so inspiring, or so suggestive of nature's

melody. In point of size and pure grandeur all the trees that have been mentioned here yielded to a tree which has simply been known as "the Big Elm of Lancaster," which as long as it stood was the greatest elm in New England. In a northern township of Massachusetts, otherwise famous for its trees, this elm rose in 1890 to a height of ninety-five feet with a girth seven feet from the ground of twenty-four feet, one and a half inches and a spread of 114 feet. At that time and for twenty (Continuing on page 230)



Photograph by James A. G. Davey

The elm is a domestic tree—all its suggestions are happy. Here it stands—a guard of beauty—dappling the old place with its kindly shade. **Think what a national catastrophe the loss of our elms would be,** and take up arms in support of the warfare against the destroying Dutch Elm disease.

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TO ARMS FOR THE AMERICAN ELM

(Continued from page 199)

years afterward there was not a dead limb or twig upon it, nor any loose layer of bark. It was of the vase type, perfect in form. People came from long distances to hold picnics and celebrations under its towering height. There was no tradition of its age, for the tree stood alone in an open pasture, with no human habitation near it to carry its story, but certainly for more than a century and a half it had been the grand model of the American elm. Perhaps its successor in leadership and grandeur is now growing on the campus of some prairie college in the West.

All this might be written of many hundreds of American elms. But we can rejoice that before these Presidents of the forest were gone, the American people awoke to a consciousness of the splendor of their inheritance, and learned to plant and cherish them throughout the radius of their growth, and to sing the praises of their great trees as they do those of their great citizens.

As a shade, an ornamental and a monument tree, as a component of fine avenues for our cities, towns, villages, as a pilgrim of our parks, college campuses and country roads, the elm has moved steadily from east to west, and possessed itself of the land. Really indigenous to the greatest part of the country, it has adapted itself to regions where apparently it is not native. Once the special pride of New England and of the Hudson and Mohawk valleys, it has now passed into the use and affection of the people beyond the Mississippi. A few years ago the writer had an opportunity to witness an illustrative development in this westward march of the elm tree. Visiting in Topeka, the capital of Kansas, he noticed with pleasure many young elms growing by the side of the streets and in the parks and yards of residences. Calling on F. D. Coburn, the secretary of the State's Board of Agriculture, and a great influence in the State's agricultural and horticultural development—the man who made two bushels of corn grow in Kansas where only one grew before—the writer congratulated him on the appearance of the young elms on the city's streets.

"You are making Topeka a city of elms," I said.

Mr. Coburn smiled. "If you had seen what a job I had to get the first elm started here, you would indeed wonder now," he replied.

Coburn had emigrated to Kansas in an early day from southern Wisconsin, where he was born, and where the elm grows. He had brought one small elm after another to Topeka and planted it. No result! For a long time not one elm would grow in the unaccustomed habitat. He struggled on with them. From Whitewater, Wisconsin, he brought elm seeds and planted them carefully. No success! But at last a seed sprouted and took root. He nourished it. He had an elm! Then another and another. They took courage from one another—a principle of nature; as the Arab says, "the date tree, looking on the date tree, bears fruit."

"And now," said Coburn, "elms are growing like weeds all over Topeka and its neighborhood." They could indeed be seen springing up on the vacant lots. Among all the elms that now decorate the streets of the capital of Kansas, the old Pilgrims who dug up the little elms in the hinterland of Plymouth and planted them where some still stand, might see in the city the dutiful grandchild of the town they built in the wilderness as a shrine of faith.

This is the affirmative side, the triumphant side, of the history of the American elm. An

invincible tree—that is what it has been. The farmer says, "You can't kill an elm tree. If you disturb the soil around a maple you may kill it; if you disturb the ground about an elm you increase its growth. The tree has had its pests, but it seems to have overcome them all. The beetle and the borer have attacked it—but leave it alone, it will come out all right."

That seems to have been, on the whole, its history. But now a deadly enemy has broken through its lines and threatens not only to destroy fine individual trees, but possibly wipe out the whole species. What an unspeakable calamity that would be! In the chestnut, we have had evidence of what happens when a useful tree—a whole species—is taken by disease from great sections of the continent. In the early years of this century the American chestnut in the neighborhood of New York was attacked by a fungus disease, introduced from Asia, which in two or three years killed each tree attacked. The disease rapidly spread over all the eastern states, until now but few chestnuts remain in northeastern America. I have said we started war on the chestnut blight too late. We were handicapped not only by a too late start but also by lack of knowledge of the life history of the blight, how it worked and how best to combat it. We were unprepared. Let us not repeat that mistake.

Grievous as the loss of the chestnut was, from an esthetic standpoint it was inferior to the calamity which a similar destruction of the elm would inflict. Imagine the wiping out of the beautiful avenues of elms that shade and decorate our streets and parks and roads, which stand in monumental grandeur at the doors of millions of homes, which constitute one of the greatest charms of our life! Without the elm the charm not only of New England but of great regions farther west and south, where the elms have become as much a matter of pride and joy as they ever were to the people of the Connecticut or Merrimac or Hudson valleys, would be lost. The destruction of our elms would be a bitter and calamitous loss.

Now is the time for all who would save the elm to take the measure of the Dutch elm disease and become scouts and soldiers in the war against it. For the disease is a ruthless enemy. First discovered in The Netherlands in 1919, here is what Mr. Curtis May, of the United States Bureau of Plant Industry, in 1930, eleven years after its discovery, said of its work in Holland:

"In Rotterdam there were something like 30,000 elms known, and of those 30,000, in the last eleven years, 17,000 have been cut down because they died from this disease. It is reported that Nuremberg had over 30,000 elms taken out since the disease appeared. Near Baarn, Holland, I saw a road of elms, approximately four miles long, planted double on both sides, being cut from one end to the other. All had died the previous summer from the Dutch elm disease. In the city of Baarn, where the Pathological Laboratory of the University of Utrecht is located, there used to be a large number of elm trees. I was told that only two elm trees were left in that town, and both these were infected."

From Holland, whence the disease received its name, it soon spread to Belgium, Germany, France, and England and caused widespread destruction of elms. It has also spread into Norway, a cool climate, and into northern Italy, a warm climate, indicating that weather conditions may be no barrier to its advances. It is believed that all species of the elm except the Chinese elm—most certainly European,

English and Northern American species—are susceptible to it.

The presence of the disease in America was first discovered in Cleveland and Cincinnati, Ohio, in 1930. In 1933 it was found in New Jersey and New York State around New York City where about 1,500 diseased trees had been found by the end of March, 1934. Two elms harboring the disease have also been discovered just across the line in Connecticut.

The Dutch elm disease like the chestnut blight is due to a fungus going by the name of *Graphium ulmi* Schwartz, which grows principally in the young sapwood of the elm and rapidly extends up and down the branches even down into the roots of the tree, causing its early death. The spread of the disease from tree to tree in the United States is by means of an elm bark beetle, *Scolytus multistriatus*, which carries the spores of the fungus and which plants them in the wounds made when it feeds on the twigs. Another related beetle, *Scolytus scolytus*, is also known to carry the disease in Europe but it is not known to have become established in America. The adult beetles emerge from the tree where they were hatched in the spring and fly to adjacent elm trees where they feed upon the young crotch wood, making short grooves in the bark and infecting the trees from the fungus spores which they carry. When the beetle is mature it selects a weakened elm tree in which to bore and lay its eggs. Feeding and egg-laying continue throughout the growing season although there seem to be two fairly distinct broods.

An elm infected with the disease soon shows certain well defined symptoms. "Usually the first symptom of the Dutch elm disease," says Dr. May, "is the sudden wilting of the leaves of a part of the crown of the tree, of the entire tree, or of the tips of some of the side branches. Drying of the leaves and defoliation of the affected parts may follow. The wilted leaves often turn yellow or brown before falling, and the affected parts stand out in color contrast with the rest of the tree. At times the wilted leaves remain green and crisp and cling to the twigs. The one or two end leaves frequently persist longer than the others, and the tips of the twigs bend, giving a characteristic appearance, which may be of value in detecting affected trees in winter. At Cleveland wilting appeared on all three of the trees in the later part of May, but in England the trouble rarely is evident until June and frequently not until July or August. The progress of the disease on individual trees varies. One limb may wilt one year and others in succeeding years, or the whole tree may die in a single season. In all three of the cases in Cleveland the first wilting was followed in the same season by that of additional parts of the trees. On some affected trees the twig growth is short, the leaves fail to reach normal size, and the foliage is thin."

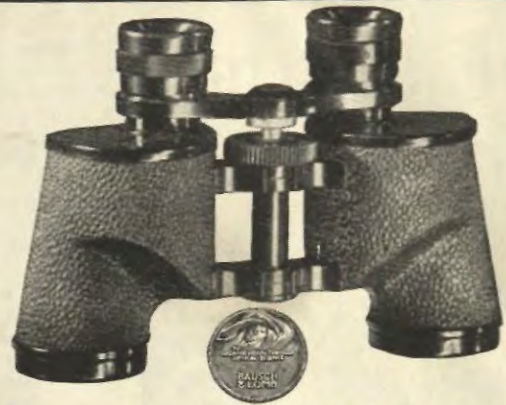
For effective warfare against the Dutch elm disease our men of science—plant pathologists and foresters—men under the authority of the United States Government, the state forestry and conservation departments, and the state and federal experiment stations, must be our shock troops. They are already on the battle line specializing in knowledge of the disease and methods of controlling and eradicating it.

What can we who are just plain citizens with the love of the tree in our blood do to help win this fight? First and foremost, we must be the soldiers behind the lines upholding the efforts of the specialists fighting to control and eradicate the disease. This means that we must do our part in seeing that the states and the federal government provide adequate finances for dealing with the enemy in an adequate way. The Congress of the United States has recognized its potential seriousness by appropriating last month \$150,



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000 for control work and \$50,000 for research work. This sum is only one-fourth the amount the federal experts feel should be available for this season's essential work. Here is one place we may strike and strike hard by making it clear to our local Congressmen that the American public wants no penny-pinching in dealing with the disease in its incipient stage. By such a policy the cost may be increased manyfold and our elms may be lost to boot.

Another thing we soldiers for the elms can do behind the lines is to exercise eternal vigilance for symptoms of the disease and when we find them report them promptly to the nearest forest officer or experimental station. If neither is available, report them to the state forestry and conservation department. "Not every sick elm has the Dutch elm disease," caution the experts. "Watch your elms for wilting leaves, or yellow leaves, or brown leaves accompanied by brown streaks in the young wood. If you find this combination, send twigs the size of a lead pencil which show the brown streaks to the Dutch Elm Disease Laboratory, Care Agricultural Experiment Station, Wooster, Ohio. With the specimen send a statement of the exact location of the tree."

If you are the owner of elm trees here are some other things you can do that may prove to be wise precautions. Keep your trees in a healthy condition even though pathologists are not yet sure, or at least agreed, whether or not a healthy tree will withstand the attack of the

Dutch elm disease better than an unhealthy tree. It seems reasonable to presume, however, that such is the case. The health of your elm trees can be helped by having dead limbs and thin live branches, if thickly grown, removed to allow for better circulation and ease in spraying against ordinary insects that attack and weaken the growth of the tree. Spraying with lead arsenate when leaves first show in the spring and again three weeks later will serve to control the insect pest peculiar to the elm. Proper care should be given to decayed cavities if they exist. If the tree is old and the soil in which it stands is impoverished, its health and strength will be improved by fertilization. In case of drought lack of normal water should be supplied.

In Europe investigators report that elms fifteen to forty years old are most subject to the Dutch elm disease, but whether this is true in America has not yet been established. The disease here has been found in at least fifty elms more than forty years old. Nevertheless, the younger trees will bear careful watching. But whether your trees are young or old, special vigilance should be exercised to detect promptly wilting, yellow, or brown leaves with brown streaks in the young wood. If this symptom is noted follow the instructions already given.

Whether we own elms or not let our watchword be "We have just begun to fight for the American Elm."

FROM THE DIARY OF A TRAIL RIDER

(Continued from page 215)

left and ahead—indeed the view will be unforgettable to us all. Far away shone the peaks of Glacier Park, before us the Continental Divide, and at the right the Chinese Wall. The South Fork Primitive Area, nearly 700,000 acres of wilderness, lay before us—and we were the first trail riders to penetrate into that area. The thrill of being pioneers!

We now knew that we would go home touched by the unadulterated beauty of nature, carrying in our hearts an un fading remembrance of happy unperturbed days full to the brim with impressions, thoughts and dreams, flowing out of an absolutely simple, almost primitive life.

Another thing we took very seriously. We had ridden in the morning through a region devastated by forest fires. While young trees were growing up almost to sufficient height to give us shade, the black trunks were rising against the sky for many miles, an accusation against the injustices of fate, a reproach to nature and man. At the Foolhen Fire Lookout, Soursley explained that the majority of fires were caused by lightning, but many others were started by a cigarette carelessly thrown away, by lighted matches, or by campfires not completely deadened. All of us understood, all of us felt a responsibility. After a fire it would take a century for the trees to grow to the height of the destroyed forest.

It was a long way down the mountains to our night quarters at Danahar Creek—eighteen miles in all during the day. But what an eighteen miles! So far we had seen no animal life, but plenty of unknown flowers. On my way I counted forty-nine varieties, some which I had seen on European Alpine meadows; others, such as the high-growing, blooming bear-grass, were completely new to me.

In the valley the advance guard set the horses into a gallop—our first wild dash during the trip—and we reached camp near the South Fork of the Flathead River. Tired though we all were, and hot, we ran down for a swim, the entire group this time. Yes, we were a group by now. I have often wondered what force made these individuals, most

of whom had not known one another a week—even a day ago, a well-rounded group. We had all come for different reasons, with different interests—some because of the scenery, others for the adventure, still others because they enjoyed sports, liked camping and outdoor life; a few in an attempt to escape from the artificiality of civilization into a simple, healthy, strong and beautiful life.

In the evening we again gathered around the fire and listened to Soursley's tales of wild animals and the Big Prairie district in winter. The next morning we divided into two groups, those with impatient natures or impatient horses riding ahead. A seventeen-mile ride that day on a very narrow path on the mountain slope following the bed of the green Flathead River below. Who can describe the impressions of that day? We crossed wide open grass-covered places with old, perfectly shaped pine trees here and there. The bark of these trees was of a burning orange-brown, as though the setting sun was gilding them; but it was midday and over the long pine needles streamed the sunshine.

We stopped three miles before camp to climb down to a spring for a drink, and reached the Big Prairie Ranger Station early in the afternoon. Scoop, a tall and strong man who seemed to personify good humor itself, stood in the doorway announcing that there was ice-cold lemonade for the weary riders. We were delighted! Here was a place in the middle of the wilderness with all conveniences of civilization—these same conveniences we had scorned a day ago. There were showers with hot and cold water and we took a thorough scrub; there was a kitchen.

Hutch and his son Bill went fishing. Apparently the fish were unaware of the danger of human beings with hooks, for in a short while they had caught sufficient trout for all of us for supper. That happy fate was with us day after day. It seemed to us as though we had never tasted more delicious fish. This evening, too, we sat around the fire, singing. Mr. Alderton's voice carried the tune; one of the rangers had a guitar. But soon we would



EDITORIAL

Saving the American Elm

MR. CHAMBERLIN'S article on the American elm, published in this number of *AMERICAN FORESTS*, arouses a poignant realization of the tragedy in store for hundreds of communities and thousands of homes if the Dutch elm disease, now in an incipient stage in eastern states, is not stamped out promptly and completely. The tragedy assumes a national aspect when one visualizes all America bereft of its elm trees. That is the shadow that the Dutch elm disease has thrown across our land, for the disease is a fatal one to the elm and once out of control the country's most illustrious tree is doomed. In neither Europe nor America, the United States Department of Agriculture states, has any cure been discovered for a tree infected with the Dutch elm disease.

This country is rich in the number, variety and magnificence of its native trees. With over a thousand native species the question might be asked, what difference does one species more or less make? We have lost the chestnut, at least over a large part of its natural range, and other trees are taking its place. Why worry about losing another species—the elm? No one will ask that question after reading Mr. Chamberlin's appreciation of the tree and the part it has played and is now playing in the life of our country. He awakens the mind to what all America must feel when it stops to consider—that no tree can replace the American elm in the hearts of our people. The tree, he points out, has become all but sacred to our land not merely because it is a beautiful, gentle, hospitable tree, but because it has entwined its roots and limbs, its whole living being into the family and community life of millions of our people. And by individuality and long association it typifies as no other tree does the finest things in American life. No substitute greenery however luxurious could hide the scars that would be left by the loss of the elm.

There is no necessity of losing the American elm. It will be saved if the American people rally to its defense. Of all the trees worth fighting for, Mr. Chamberlin reminds us, the elm comes first. The disease which now threatens it is a deadly enemy that calls for our best fighting spirit, a spirit that gives no ground and wastes no time. With the experience of the chestnut freshly in mind,

our course of action should be clear. The Dutch elm disease is in its beginning stages, when it can be most easily and economically eradicated. The forces competent to do the work are the experts in the federal and state services. If they are provided with needed assistance and funds to wage effective warfare before the disease gets out of hand, the elm will be saved.

They are already alert and in the field. The Department of Agriculture through its Division of Plant Disease Eradication and Control has organized the work in cooperation with state, county and local authorities. Infected trees are being located and destroyed as far as possible, because such trees will die within one or two years and may cause infection of healthy trees. These forces of control need and desire the cooperation of persons everywhere in detecting signs of the disease and in carrying out the inspection and eradication work. The greatest contribution we believe the general public can make in saving the elm, however, is in demanding that the control forces be provided with adequate funds with which to deal with the menace. Failure on this score at the outset will be fatal.

Herein lies the most alarming phase of the situation at the present moment. Congress already has shown a tendency to squeeze dollars in coping with the elm menace. The Department of Agriculture after taking the measure of the Dutch elm disease as it now threatens asked to be armed with an authorization of \$600,000 upon which it could draw as needed to assure adequate handling of the situation. Congress, however, granted only \$150,000. If the emergency calls for additional amounts this summer to hold the disease in check, the only recourse would seem to be to Public Works or Civil Works Funds. It is to be hoped they may be available; otherwise the battle will have to wait until Congress meets next winter.

The best insurance, we believe, against losing the American elm is a demand expressed in no uncertain terms by the American people, individually and collectively, upon their representatives in Congress and in the state legislatures that the elm must be saved. The time for the people to act is now, and all the time until their representatives are able to report back that the elm is saved.