

WORK of the SPOILERS

FINEST HARDWOOD FORESTS ON THE CONTINENT RAVISHED.



WASTEFUL METHODS OF LUMBERING



MIXED SECOND GROWTH



NATURAL REFORESTATION

The region in Ohio under consideration constitutes a belt through what was at one time probably the finest hardwood forest in the United States. Here grew, in a high degree of perfection, white and red oak, walnut, hickory, maple, elm, beech, locust, sycamore, wild cherry, cottonwood, poplar, Kentucky coffee-tree and chestnut, not to mention several less valuable kinds of trees. The quality of this timber was the very finest throughout the entire belt.

As in every timber country, the first work of the pioneers in this region was to clear sufficient land in the forest to raise the necessary crops. Much of the finest timber was "deadened," or girdled, and when, after two or three seasons it had dried sufficiently, it was felled in great heaps and burned. Only the straightest most perfect sticks of walnut and oak were used in building the log houses and barns. The sterling quality of this timber is manifest in the remarkably well preserved log structures still standing in considerable numbers throughout the region. The roofs of these buildings were made of clapboards, rived with frow and beedle from only the finest sticks of oak, and it was not uncommon for such a roof to last for 40 years or more.

During the first half of the last century there was a large demand for tan-bark to supply the needs of the growing leather industries of Cincinnati and the neighboring towns. To meet this demand, the oak timber was ruthlessly slaughtered over an area of 75 to 100 miles radius. The fine logs, then useless, were piled together and burned. These old-time log-rollers, with their attendant barbecues, were the festival occasions of the frontier communities.

To the early settlers these forests constituted the arch enemy, to be driven back and destroyed by ax and fire. Little did these men think of the value of the forests. To them it meant only a fight for life and success against the forces and conditions of nature. Unfortunately, this instinct for timber destruction, born of necessity among the pioneers, has developed among their descendants into a blind, unreasoning mania.

Immense damage to the timber of this region has resulted from too close pasture of the woodlands. The writer had an opportunity to keep under observation for several years a tract of fine oak timber in which were kept large numbers of hogs. The soil was constantly overturned by the hogs, and many of the smaller roots of the trees were exposed and destroyed. After a few years the trees began to die at the tops, and the owner was obliged to sell the timber for only a fraction of what it would have been worth at the present time if it had been more carefully preserved. Close pasturing by cattle and sheep has proved equally destructive in many cases.

While the general relation of climate to forests is yet a mooted question, it seems fairly well established that, in the region under consideration, local "blizzards" are more frequent and more severe, while the summer winds are more often dry than they were a generation ago. Spring floods and summer droughts, formerly quite unknown, are growing more common. Many of the hills, denuded of their forests and later of their soil, are now quite barren. Throughout the region the growing of fruit orchards is becoming

increasingly more difficult. This is, no doubt, due, in part at least, to the increased exposure of the trees to an ever more fickle climate, as well as to the more persistent attacks of tree-infesting insects, which are deprived at once of their natural enemies. For as a consequence of the destruction of the forests the insectivorous birds have been greatly reduced in numbers.

The southern four counties in this range have long been noted for their splendid natural water supply. Along every stream valley the ground-water outcrops at frequent intervals from strata of coarse sand and gravel overlying the limestone. Many of these springs for a hundred years never known to fail, have, since the removal of the back-lying forest, become but "wet-weather springs," absolutely dry in late summer. Over large parts of this area the ground-water level has fallen several feet in the last 20 years, so that wells have had to be dug or drilled to a greater depth to insure a constant water supply. At the same time the problem of drainage is growing more difficult. Small creeks and open ditches, formerly well filled with water the year around, now run almost dry during a good part of the summer, and become choked with a rank growth of weeds which must be removed, else the stream will be completely filled with silt at the next flood season.

As stated before, however, there is but little if any interest shown by the people in the matter of tree planting. It is true that shade-trees are quite commonly planted along the streets of towns and villages, and in public grounds generally, but this practice has not yet extended to the public highway, or even, to any extent, to the rural school-grounds. Most of the counties report a growing interest in Arbor day among the schools, but that interest seems for the most part to be only short-lived and ineffective. The trees most commonly planted for shade and ornament are soft maple, American elm, and Carolina poplar. Fortunately most of the region has gotten over the craze for the unsightly Catalpa bignonioides. Evergreens are but little known, except for cemetery and lawn decoration. Juniperus communis grows native to some extent as an insignificant shrub. No doubt the more useful oaks and walnuts would be more generally planted if the people knew how to handle these less tolerant trees successfully.

In no region is there more urgent need of popular education in matters pertaining to forestry and timber supply. For generations these people have been learning and practicing the art of forest destruction. Before they can be expected to show an active interest in the preservation and renewal of forests, there must be created in their minds a totally new conception of the whole problem. Very few of the land owners give any attention to preserving and making the most of the farm wood-plot. No precautions are taken to prolong the usefulness of fence posts and timber. From sheer necessity, substitutes for wood in house construction are being introduced. Brick, stone and concrete blocks are slowly coming into use for this purpose. A. B. PLOWMAN, Department of Botany, Beaver College.

What's the good of being good if you don't let people know it?

WHAT GHOSTS ARE MADE OF

Washington Professor Says They Can Be Made Artificially.

Science, exact and practical, has come to the aid of the "psychical research" investigators with an entirely new theory in regard to ghosts. The discovery, though as yet only hypothetical, is that such phantoms may in fact exist, and that they are sufficiently material in their nature to admit of study, and even of detailed analysis. According to this idea, indeed, the ghost of reality is properly to be regarded as a chemical phenomenon. It has a recognizable substance, however tenuous and intangible, and may actually be reproduced experimentally in the laboratory.

For authority on this point the writer is permitted to refer to one of the foremost of living chemists, Prof. Charles E. Munroe, dean of the George Washington university, in Washington. He is not only a believer in ghosts—at all events, in the possibility of such phenomenon—but

he says that they can be made artificially. It is, he thinks, not at all unlikely that the laboratory process for making counterfeit specters is merely a reproduction of nature's own method of ghost manufacture.

Apparitions, of course, are usually associated in one way or another with tragedies. Somebody, for example, is murdered under exceptionally distressing and picturesque circumstances, and—the corpse being hidden by the perpetrator of the deed—the ghost thereafter haunts the scene, forlornly striving to attract sympathetic attention, and unable to find rest until the body shall be discovered and provided with Christian burial.—Rene Bache, in Technical World.

But Plain? Mayne—It was so silly for me to quarrel with plain; sometimes I think I'm just a plain fool. Grave—You're too hard on yourself, dear; I don't consider you the least bit of a fool.

SHED LIGHT ON DARK PLACES OF THE EARTH

CONTINENTS ARE BEING MAPPED

Marvelous Results Achieved by Systematic Exploration

Tremendous Tracts Have Been Opened Up in the Last One Hundred Years—Northern Asia Still a Field for the Venturesome—Peary Now Undertaking One of the Greatest Feats.

PEARY'S new expedition to the north pole opens up an interesting field of thought, writes Edmund Noble in the Boston Sunday Herald. It emphasizes some of the inconsistencies of human achievement. This is an age of scientific marvels. Man has harnessed nature to do his bidding, and is daily discovering new forces or new ways of utilizing them. After penetrating to the depths of the sea, he is already aspiring to the dominion of the air. He weighs planets and suns in his balances, and writes down their composition in the unerring formulae of the chemical laboratory. His telescopes and prisms fetch exact information from the very "confines of the universe." He has not yet completed the survey of his own planet. The night skies have become to him as an open book, yet there are worlds at his very elbow which the most recent geographical science is compelled to class as "unknown."

This delay in mapping the earth is less surprising when it is remembered that geographical science could begin only at a late stage in the evolution of man. For its very possibility, systematic exploration of the planet needed highly civilized peoples, good at conquering, as well as in trade and travel. The earliest promoters of geographical knowledge were thus peoples like the Babylonians, Assyrians, Egyptians, Phoenicians and Greeks. None of them knew the shape of the planet on which they lived; many of them believed it to be a flat plane, diversified by hills and valleys; some pictured the territory of their "known world" as surrounded at distance by a wide river called ocean.

Five hundred years B. C. this nucleus of culture, from which modern civilization was to come forth, comprised a patch of territory considerably smaller than the United States, reaching from the confines of the Persian empire on the east to the west, the whole bounded to the north by the "Hyperboreans." The subsequent expansion of these limits up to the beginning of the Christian era was mainly the work of the Greeks, the Carthaginians and the Latins. The "known world" of the Roman empire reached

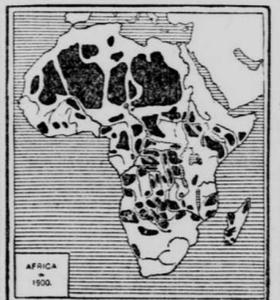
Africa and Siberia. Columbus reached San Salvador in 1492, and his succeeding voyages revealed Jamaica, Trinidad and the Orinoco. Amerigo Vesputci coasted down the continent of South America in 1498, and Magellan discovered Patagonia and Terre del Fuego in 1520. Mexico was added to the map in 1518 by Grijalva and California visited in 1532 by Cortez. For 300 years thereafter the work of exploring the Americas proceeded by leaps and bounds, yet in 1800 more than half of their territories remain geographically unknown. The whole region west of the Mississippi was then a blank on the maps, and Alaska utterly untraveled. There are still patches of North America which need description, and vast areas of South America on which the zeal of the explorer is yet to cast light.

DEVELOPMENT IN AFRICA. Great Continent Has Only Recently Been Opened Up.

AFRICA is another great continent with which the world made late acquaintance. Egypt, the "shepherd kings," the Nile, the pyramids, make up its classic period. Modern Africa began for geography when, about 450 A. D., Hanno, the Carthaginian, sailed down its west coast as far as Sierra Leone, and the knowledge of it was advanced a further stage when in the fifteenth century Portuguese explorers, including Vasco da Gama, rounded the cape. In Africa, exploration has followed the flow of the great rivers, and will ever be associated with such names as Livingstone, Mungo Park, Bruce, Baker, Stanley, Speke, Schweinfurt, Du Chailu, Serpa Pinto, Wissmann and Donaldson. The Niger had its course determined in the early part of the nineteenth century. "Today," says a geographical expert, "the Nile has been scientifically explored for its entire length of 3,400 miles; the Niger, with the exception of a small portion of its middle course, for 2,600 miles; the Zambezi for 1,500 miles; and the Congo, which in volume is exceeded only by the Amazon, for nearly 3,000 miles." In Africa, where vast areas are still "dark" for geography, the politician has sometimes followed, has now and then accompanied the explorer. This immense continent first fed the demand for slaves, then satis-



Africa as Known in 1800.



Africa as Known in 1900.

from Britain to India and China. Germany had then come into view, and Scandinavia was outlined. The northern fringe of Africa had widened somewhat, but the ancients continued to style northern Asia as "Schythian," by 1,000 A. D. Iceland and Greenland were talked about; "Russia" had taken the place of "Sarmatia"; Mongolia and Manchuria found mention on the maps; and there were recorded "landfalls" on the coasts of North America.

It took 500 or 600 years more to trace out the general features of the seas, islands and continents. The chief steps in this advance, which included the brilliant exploit of Magellan, whose ship, the Victoria, first circumnavigated the globe, were the discovery of the Americas and of Australia, and the partial exploration of

the greed for territory. Unlike China, it was not coveted too late to be partitioned, and to-day, outside Morocco and Abyssinia, there is not a square mile of its area which is not claimed and owned by one or other of the European powers.

AREA STILL UNEXPLORED. Vast Extent of Unknown Territory in Northern Asia.

THE great territory of northern Asia, out of which Chinghis Khan emerged with his Tartar-Mongols in the thirteenth century to be the terror of Europe, has resisted the geographical investigator longest of all. From Marco Polo to Prjevalsky and Sven Hedin, a succession of explorers has been at work in this still mysterious section of the earth's surface, ren-

dered all the more inaccessible by strange languages, stranger customs, and rooted distrust of the "foreigner." It was the Russians who were first shown the way from Europe to the Pacific, for after Yermak had reached Siber in 1579, the successive stages of their advance could not but end in the regions of the Amur, the Sea of Okhotsk, Kamshatka and Behring straits. Central and southern Asia have been actively explored for two centuries past, yet there are still unknown areas of considerable extent in Burma, Tibet and China.

Australia, now the home of a civilized people living below the equator, is of peculiar interest to Americans. Prior to the sixteenth century this immense continent, with its population of over 6,000,000, was totally unknown to the world. The Spanish, following in the wake of Magellan, were the first to sight it; the Dutch explored its coast lines, and after the voyage of Capt. Cook in the latter end of the eighteenth century, the English took up the work of colonizing and exploring what was originally called "New Holland." Even in 1800 it was an unknown waste, peopled by savages interesting to the anthropologist and supporting flora and fauna of considerable value for the purposes of descriptive natural history. But by and by settlers appeared, and a few populous cities and towns sprang up. Thanks to the efforts of men like Wentworth,

had been offered by the British parliament in 1783. By an equally successful feat in 1878-79, Baron Nordenskjold, the Swedish scientist, made the northeast passage in the Vega by passing from Norway along the Asiatic coast into the Pacific ocean.

FRANKLIN'S FATAL JOURNEY. One of the Most Terrible Episodes of Arctic Exploration.

ONE of the most terrible episodes of Arctic exploration was the loss of Sir John Franklin and his crew of 129 men. He began his voyage in May, 1845. A year later his vessels, the Erebus and Terror, became ice-bound near King William Land. After the death of their commander in June, 1847, the crew made a vain effort to fight their way over the ice to Great Fish river. Many expeditions were sent out, both by land and sea, to search for the missing, but they succeeded only in finding three graves of men who had died at an early stage and had been buried in Beechey island. In 1854 Rae met a young Eskimo who told him that four years previously 40 white men had been seen dragging a boat to the south on the west shore of King William Land, and that a few months later he had found the bodies of 30 of these men. In 1858-59 McClintock discovered in King William land a human skeleton lying on its face, and his companion, Hobson, found a record of the Frank-



Arctic Regions as Known in 1800



Arctic Regions as Known in 1900.

Evans, Sturt, Burke, Willis, Warburton, Forrest and Giles, a large part of the interior has been explored.

EXPEDITIONS TO POLES. Last Portions of Planet's Surface to Be Reached.

THE last portions of the planet's surface to be reached and explored are the poles, both of them more or less ice-bound. The south pole, especially remote from the great centers of civilization, has never attracted more than a scientific interest. The first work done in the geography of the arctic was done by the discovery of the South Shetland islands in 1816 by Capt. Smith. Various "lands" have since been revealed—among them Enderby Land and Graham Land by Bischope in 1831, Wilkesland in 1840, by Wilkes, and Victoria Land by Sir James Ross, two years later—but it is not yet definitely known whether there are mere islands or parts of a continent. Extensive land areas around the south pole are meanwhile suggested by the slope of the ocean floor and by the character of the antarctic icebergs. The coasts are fringed with glaciers, which project for long distances into the sea, showing that if an antarctic continent exists it must be covered everywhere by immense sheets of ice. Ross passed an ice front 200 feet high and 150 miles long; he saw great mountain ranges on Victoria Land, including two volcanic peaks whose height he estimated at from 7,000 to 15,000 feet. One of these was in eruption, pouring forth its lava upon the surrounding snow. The supposed antarctic continent, if one exists, has been estimated at nearly 4,000,000 square miles. Up to the present, and in spite of several recent expeditions, navigators are much farther from the south than from the north pole. In 1842 Ross reached 78 degrees 10 minutes, one of the latest records is that of Borchgrevink, who in 1899, gained 78 degrees 50 minutes by using sledges in a dash over the ice.

The romance of polar exploration—of its perils and its heroism—centers in the north. The arctic pole is much nearer to civilization than the antarctic, has a closer connection with the great continents, and is or ought to be somewhat in the line of the world's travel. The movement northward began with the discovery of Greenland by Gunbnorn at the beginning of the tenth century, and with the planting of colonies on its shores by Eric the Red in 985. Nearly ten centuries thereafter were spent by explorers, first from the Asiatic, then from the American side, in discovering and defining the contours of the Arctic coasts. Both mercantile and scientific aims were in evidence. On the one hand was the search for the northwest passage by Davis, Froisher, Hudson and Baffin; on the other the no less eager pursuit of the northeast passage by Havelock, Chancellor and others. In 1850-54 McClure successfully accomplished the northwest passage, and gained the reward of \$50,000 which

lin expedition, stating its history between 1845 and 1848. Further searches were continued up to 1879, in which year Lieut. F. Schwatka of the United States army, discovered several graves and skeletons.

The northward movement, after exhausting mercantile, exploratory and humanitarian motives, finally became purely scientific and culminated in the "dash for the north pole." In 1827, with the aid of sledges, Parry reached 82 degrees 45 minutes. Nearly 50 years later Markham raised this record to 83 degrees 20 minutes. In 1883, as a member of the Greely expedition, Lieut. Lockwood succeeded at 83 degrees 24 minutes in coming within 450 miles of the pole. The year 1895 marked the attainment of 86 degrees 14 minutes by Nansen, who had adopted the "drift" method of attack. The Abuzzi expedition came in 1900, when Cagni raised the figures to 86 degrees 33 minutes.

"Farthest north" is now 200 miles from the pole. It was attained by Commander Robert E. Peary in his last expedition of 1905-6. Leaving civilization in the Roosevelt, Peary spent three weeks in boring through the narrow ice-swept channel between Greenland and America, only to have his ship driven ashore into winter quarters at Cape Sheridan. In a subsequent sledge trip over the ice, the explorer was cut off from his supporting parties. The final dash, with eight men and six teams of dogs, enabled him to reach 87 degrees 8 minutes, where the condition of the ice and lack of food compelled immediate return.

Caught on the Rebound. "John, dear," said Mrs. Skimpem, as she poured the coffee at the breakfast table, "if I remember rightly, you have often said you disliked to see a woman constantly getting herself into print."

"That's right," rejoined Skimpem. "You consider it indelicate and unwomanly, don't you?" "I certainly do."

"And you don't think a sensible man would allow his wife to do anything like that?"

"Most assuredly not."

"Well, John, I'm glad you have such radical views on the subject, because they justify me in asking you for a new silk dress."

"W—what?"

"You heard what I said, John. For the last five years I've had nothing but bargain counter calico, and I'm tired of getting into print."

And what could poor John do?

Dentists Will Rejoice. Comment is being made in the public press on the fact that in recent photographs of public persons most of them are represented with their mouths open and quantities of teeth showing. As it happens in most of the cases referred to the effect is very good, but it will not do for the public generally to have itself so photographed.

when some one tumbled to what he was doing. About this time the tall marshal came along and said: "Mr. Man, you'll confer a favor upon the Glidden tourists who are touring 1,500 miles in competition for the Glidden and Hower trophies in the 1908 tour of the American Automobile association if you in your capacity as rubbish gatherer would allow the paper to remain where it has been deposited until the last automobile has proceeded through this municipality. I hope that you will have no supersensitiveness regarding this request for it is essential that this trail remain test the automobiles might make a detour about this city and eventually become lost in anthropomorphic ability."

"I'm only doing my duty," responded Mr. Schofield.—Biddleford Record.

Equally Unpleasant. A Pennsylvania man while eating pie swallowed his knife. This wasn't good form, but it may be some comfort to the victim to realize that swallowing a fork would be equally unpleasant.

DID HIS DUTY AS HE SAW IT.

But Still Some of the Automobile Tourists Might Have Got Lost.

The Glidden trail up Main street in Saco was lost the other day because of the agility displayed by Charles Schofield, head pusher of the refuse department. He is employed in picking up paper, sticks, and rubbish that collect on Main street. He looks after this branch of work with such faithfulness that a piece of paper larger than a postage stamp cannot be found along the principal thoroughfare.

Recently when the advance guard of the Glidden auto tourists passed through Saco they left a trail of confetti. This was for the benefit of those who followed. The city man saw the streak of paper bits on the pavement and immediately got busy.

"Confound the scamps who dumped this rubbish!" he muttered as he worked. "If I knew who the culprit was I would notify City Marshal Wiggin." He had destroyed a good part of the white trail on the pavement

Truth and Quality

appeal to the Well-Informed in every walk of life and are essential to permanent success and creditable standing. Accordingly, it is not claimed that Syrup of Figs and Elixir of Senna is the only remedy of known value, but one of many reasons why it is the best of personal and family laxatives is the fact that it cleanses, sweetens and relieves the internal organs on which it acts without any debilitating after effects and without having to increase the quantity from time to time.

It acts pleasantly and naturally and truly as a laxative, and its component parts are known to and approved by physicians, as it is free from all objectionable substances. To get its beneficial effects always purchase the genuine—manufactured by the California Fig Syrup Co., only, and for sale by all leading druggists.



THE "LESS" AGE. Cholly—it's wonderful, bah Jove! Riding without harness, telegraphing without wires, and all these things. Maude—Yes and thinking without brains.

THE TIME TEST. That is What Proves True Merit.

Doan's Kidney Pills bring the quick relief from backache and kidney troubles. Is that relief lasting? Let Mrs. James M. Long, of 113 N. Augusta St., Staunton, Va., tell you. On January 31st, 1903, Mrs. Long wrote: "Doan's Kidney Pills have cured me" (of pain in the back, urinary troubles, bearing down sensations, etc.). On June 20th, 1907, four and one-half years later, she said: "I haven't had kidney trouble since. I repeat my testimony."

Sold by all dealers, 50 cents a box. Foster-Milburn Co., Buffalo, N. Y.

Cruel Kindness. Aged Belle—You know, Mr. Seymour, I have always had the greatest horror of growing old. Green Youth—But I hope, dear lady, that you have not found it as bad as you anticipated.

Smokers have to call for Lewis' Single Binder cigar to get it. Your dealer or Lewis' Factory, Peoria, Ill.

It's sometimes easier to catch on than it is to let go.



This woman says that after months of suffering Lydia E. Pinkham's Vegetable Compound made her as well as ever.

Maude E. Forgie, of Leesburg, Va., writes to Mrs. Pinkham:

"I want other suffering women to know what Lydia E. Pinkham's Vegetable Compound has done for me. For months I suffered from feminine ills so that I thought I could not live. I wrote you, and after taking Lydia E. Pinkham's Vegetable Compound, and using the treatment you prescribed I felt like a new woman. I am now strong, and well as ever, and thank you for the good you have done me."

FACTS FOR SICK WOMEN.

For thirty years Lydia E. Pinkham's Vegetable Compound, made from roots and herbs, has been the standard remedy for female ills, and has positively cured thousands of women who have been troubled with displacements, inflammation, ulceration, fibroid tumors, irregularities, periodic pains, backache, that bearing-down feeling, flatulency, indigestion, dizziness or nervous prostration. Why don't you try it?

Mrs. Pinkham invites all sick women to write her for advice. She has guided thousands to health. Address, Lynn, Mass.

SICK HEADACHE

Positively cured by these Little Pills. They also relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating. A perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coal-blasted Tongue, Pain in the Side, TORPID LIVER. They regulate the Bowels. Purely Vegetable.

SMALL PILL. SMALL DOSE. SMALL PRICE.

Genuine Must Bear Face-Similar Signature. REFUSE SUBSTITUTES.