painted them all with equal sympathy and pleasure,ugly things and beautiful things, rare things and common things, landscapes and sea views and figures and animals and fruit and flowers, and sometimes stories and satires too; but even in this last case not often for the sake of the story itself so much as for the sake of the picture which that story made before his eyes. He was extremely sensitive to all physical things; and this is what marks the painter born. He was not very sensitive to spiritual things; and this, if you will, is his failing as an artist. If there is one fact proved alike by his life and his work, it is that he did paint for the sake of painting. Whether he chose his subjects well or ill is quite another matter - as is also anything he may have said about his "mission."

With regard to his technical merits, Dr. Coan says: "As pure art, his works have little value outside of their color; but they have a sturdy material verity." With this judgment, too, I think most artists will disagree. He was often deficient in drawing — as have been, at times, so many great painters before and after, including Titian. And for composition he had commonly no care-though here, I think, he sometimes showed a great if unconventional ability. But his handling had a freedom, a fire, an individuality, and an immensity of vigor we seldom find in modern work. A perfect painter he never was - but a great painter, none the less. It is a curious parallel to set him beside Blake, who was not a painter at all, but a draughtsman of very variable skill. Even the more abstract comparison which would mean that he ever failed as entirely in realizing his conceptions as Blake often failed in realizing his, comes nowhere near the mark. And to say that he was a less able practitioner than Martin leads us very far indeed astray. Surely it is not Courbet's color alone, nor the rather rude vigor and verity which Dr. Coan accords him, that have raised him to so high a rank in recent years; nor yet the extrinsic fact that he was a sturdy pioneer who opened up for us a new and fruitful field in art. No; Courbet's works are admired and studied to-day, purchased at immense prices by his government, and hung with honor in the Louvre, because he was a true if not a great artist, and a great if not a faultless painter.

M. G. van Rensselaer.

Progress in Forestry.

To your inquiry in regard to the progress in forestry recently made in this country an encouraging answer may be given. This subject, old and familiar in Europe, is comparatively new in America. But the last ten years have witnessed an advance unequaled in any other country in the same space of time. The movement, though as yet a mere beginning in this country, starts with such an impetus as to insure its expansion over broad areas. The uninhabited plains of the West, described in the old geographies as "the Great American Desert," are fast filling up with an enterprising and prosperous population. Tree-planting is becoming almost universal on the great prairies

finity of things with pleasure and sympathy, and he it once was believed no tree would grow. Many causes have contributed to this remarkable result, prominent among them being the timber-culture act passed by Congress ten years ago, amended in 1874 and again in 1878. Already 93,246 entries have been made, the area covered by them being 13,677,146 acres. Nearly one-fifth of this vast area was "entered" in 1882, which shows the growing influence of the princely premiums offered by Congress and by many of the Western States to encourage tree-planting. The timber act may need further amendment to prevent frauds, but recent inquiries of those who have had the largest experience and observation in Minnesota, Dakota, Iowa, Nebraska, and Kansas convince me that its benefits have been so manifest as strongly to commend it to the people in those States. Many settlers have planted much more than the required ten acres in their one hundred and sixty acres, or "quarter section." Said a Nebraskan: "We have thousands of trees, thirty to forty feet in height and eight or nine inches in diameter, grown from seedlings or cuttings planted less than ten years ago. The fuel problem is settled for many farmers. The trees and land are already worth three times their cost."

> The cottonwood is a prime favorite, on account of the facility of its propagation and rapid growth. The cottonwood, ash, elm, box elder, soft maple, and white willow are well adapted to the soil and climate of the first four of the States above named. These trees planted young and with care are almost certain to grow. A Western forester of large experience said to me: "For economic planting I would not accept as a gift three-year-old trees, when I could buy yearlings. Beginning with such seedlings and with adaptation of kinds to local conditions, timber can be grown at moderate expense and with certainty of success. The old notion that trees could not be grown on the great oceanic prairies has been thoroughly exploded."

> The dreaded grasshoppers deserve some credit for the new interest in arboriculture. In recent journeys in the prairie States, I have found the opinion common that timber-belts form the best protection from grasshoppers and other insects injurious to vegetation. The great grasshopper visitations of 1873 and 1876 emphasized the question how to prevent their recurrence; and the most satisfactory answer to the Western mind was, "The planting and culture of forests." George P. Marsh says, "It is only since the felling of the forests of Asia Minor and Cyrene that the locust has become so fearfully destructive in those countries." Michelet says, "The insect has well avenged the bird. In the Isle of Bourbon, for instance, a price was set on the head of the martin. It disappeared, and the grasshopper took possession of the island." The United States Entomological Commission, appointed by Congress in 1877 to report on the best means of preventing the ravages of this pest, say "that it has its homes or breeding-places in the arid plains east of the Rocky Mountains, and that the progress of civilization and colonization, converting those heretofore barren plains into areas of fertility, will gradually lessen the evil."

The practical appreciation of forestry shown by some of the leading railway companies of the West, especially the Northern Pacific, has made a strong impression as to the economic value of tree-planting. With of Minnesota, Dakota, Kansas, and Nebraska, where a wise foresight, this company has organized a "Treeplanting Department" and made liberal provision -\$80,000 - for its work. Over one million trees have already been planted, and next spring as many more will be set out. In this way the cuts will be protected from snow-drifts, and long lines of "live fences" be secured. It was my privilege to travel on this railway with the experienced forester who is the superintendent of this department. He has the utmost confidence in the success of this work. He lately bought in Bismarck 100,000 trees for \$125, or at the rate of \$1.25 per thousand, which is not an uncommon price for large orders in the great nurseries of the West. One of these nurseries, located on the Missouri River, sells an average of seven million trees a year.

The Northern Pacific Company also offer liberal premiums to land-holders for the best groves, windbreaks, or shelter-belts that may be planted along their lines, and circulate gratuitously among the farmers a pamphlet giving needful information for the procuring and planting of trees; and besides all this, they give free transportation of all trees, tree-seeds, and cuttings that may be planted in any of the prairie regions along their lines. The influence of this wise policy can be best appreciated by observation and personal conversation with the settlers.

Ex-Governor Furnas, of Nebraska, who has both personally and officially shown great interest in forestry, says that over 600,000,000 trees have been planted in that State during the last twelve years, and that they thrive in western Nebraska even beyond the 100th meridian, where it has been so confidently asserted that trees will not grow. Where the rainfall is less than twenty inches in a year, however, tree culture is difficult, and with some species impossible. The amount of rainfall in each locality should be taken into account in the selection of trees to be planted there.

Forestry associations, state and national, have awakened new interest in sylviculture. The State Forestry Association of Minnesota was organized in 1876, under the lead of Leonard Bacon Hodges, the pioneer in the forestry movement in that State and the secretary of the association till his death in April last. This association prepared an excellent manual on treeplanting, and distributed over ten thousand copies among the settlers and land-owners of the State. Many farmers were thus led to become their own nurserymen. Similar associations have recently been organized in other Western States, and with like promise of usefulness.

The American Congress of Forestry is strongly pushing on the same work. Its annual sessions at Montreal, St. Paul, Washington, and Saratoga were attended by the most experienced foresters of the country. The United States Commissioner of Agriculture, for two years its president, is encouraging this movement by his strong personal and official influence, having given an elaborate address at each of its annual meetings. The proceedings of the meeting in Montreal were published by order of the Legislative Assembly of Canada and widely circulated. The Hon. J. G. Joly, of Quebec, a practical forester, who has under his control over 100,000 acres, and has had large experience in re-foresting denuded lands in the Province of Quebec, says that these discussions led to important legislative enactments for the increase and protection of forests, and among them, one authorizing "the Lieutenant-Governor in Council to appoint an Arbor-day for the planting of forest trees."

In the Western States, the Arbor-days appointed by the respective governors, usually with the sanction of the legislature, have greatly promoted economic tree-planting. In Minnesota, for example, the number of acres planted on Arbor-day in 1878 was 811; in 1882 the number was 1184; and the whole number of acres planted increased from 18,029 in 1878 to 38,458 in 1882. Similar work has been done in Nebraska, Kansas, Iowa, and Dakota, and to some

extent in Michigan, Illinois, and Ohio.

According to official reports, the acreage of cultivated woodland in Kansas is 107,000; while in Nebraska it has reached 244,356 acres, besides over 12,000,000 fruit trees and nearly 3,000,000 grapevines. The large bounties offered for tree-planting secure the collection of such statistics. The abundance and excellence of the fruit, and especially the grapes, in Nebraska was a surprise to me. Ex-Governors Furnas and Morton, the pioneer tree-planters there, are now recognized as the benefactors of Nebraska by their advocacy of arboriculture, alike forest, fruit, and ornamental. It is due to their influence that Nebraska is the banner State in tree-planting. Around "Arbor Lodge," the mansion of Ex-Governor Morton, near Nebraska City, are fine groves of black-walnut and other forest trees, most productive orchards, grape and other fruits, where twenty-seven years ago was a treeless prairie, on which he was told "trees would not grow." I am soon to plant in Connecticut a bushel of nuts grown this year on the trees which sprang from the nuts planted by the hand of Mr. Morton. He was the originator of Arbor-day twelve years ago, when, through his influence, the second Wednesday of April was officially appointed for tree-planting; and so influential was his advocacy of this plan, both by pen and tongue, that over 12,000,000 trees were planted on that one day. The Nebraskans justly view their extensive tree-planting as a great achievement, and by enlarging this work from year to year they are determined to maintain this preëminence. Each governor since 1872 has formally recognized Arborday, and now it is observed in schools. Such a day has been set apart in Michigan, Ohio, Indiana, Colorado, and West Virginia, and with the happiest results in improving and adorning the grounds around the homes as well as the schools. The National Educational Association at its late meeting in Wisconsin, with an attendance of over five thousand, recommended the appointment of such a day in every State. The Wisconsin Teachers' Association, held the same week, passed a similar resolution and appointed an efficient committee to carry out the plan. The Indiana Association initiated a similar movement last spring.

The following resolution was unanimously adopted at the Forestry Congress in St. Paul, which included representatives from Canada: "In view of the wide-spread results of the observance of Arbor-day in many States, this Congress recommends the appointment of such a day in all our States and in the provinces and Dominion of Canada."

At its late meeting in Washington, this Association appointed a committee to present the subject to the governors of those States where no such appointment has been made. The cordial response received from every governor whom I have since met warrants the hope that instead of eight there will be twenty-eight States observing Arbor-day next spring.

B. G. Northrop.

About People.*

In the little volume in which Mrs. Kate Gannett Wells brings a great deal of fresh and honest thinking to various social topics, there are two essays that I find peculiarly interesting. I do not remember seeing elsewhere the "Transitional Woman" dealt with as a fact so intimately and frankly; and the phenomenon of "Caste in American Society" is viewed from a point not hitherto seized. The word caste always suggests to the readily heated imagination of the sympathizer with toil and poverty their oppression by a superior class through invidious social distinctions, if nothing worse. This is the recognized form of caste, and it is perhaps the most odious, but it is not, certainly, the most ridiculous. There is another phase of the same iniquity, which Mrs. Wells's practical relation to questions of social reform has enabled her to study with singular advantages. In every age and in every country the manners, customs, and prejudices of the more enlightened have descended to the less enlightened, like cast-off clothes; and they sit on their possessors at second hand with the edifying grace of old coats and rumpled gowns. In this way it happens that at a moment when cultivated people who think seriously of the matter think with shame and misgiving of the social distinctions which are not based on character and achievement, the lines have never been more sharply drawn between the different sorts and grades of labor. As Mrs. Wells has learned:

"The lower we descend in what is called social life, the more perceptible become its demarkations. . . . A marriage between a laundry maid and a washerwoman's son is contrary to all the rules of propriety, and ends in family feuds. The regular visitant at hotel cupboards who receives pie is further removed from the tattered mendicant at back doors than a member of the diplomatic corps from a native of Washington. . . . Among the working-women is a feeling of exclusiveness most noticeable, while with working-men it is no more prominent than with professional men. 'It is this spirit of caste,' says a working-woman of fifty years, which keeps us all down. If we could nag one another it would be some gain; but we avoid one another instead. There is no union among us; never was, except for a little while through the French International Association, which has died out. We never can raise ourselves from the bondage of ill-paid labor till we combine, and most of us would rather starve to death than associate with those beneath us.' Another one complains that 'the skilled workwomen pride themselves too much upon their skill to be willing to pull up the unskilled; just as in the professions a good lawyer or physician will not take a poor partner. It is social ambition, caste, that rules us; it begins with

us, and goes up and up to kings and emperors. A woman with many servants despises her with one; and she with one despises the woman who does her own work; and she who does her own work looks down upon her who goes out to work; and the one who goes out to do special house-work scorns the scrub-woman, who is the end of womankind.' . . . In a conversation with several of them, it was asked: 'What is the real grievance of the working-women?' And the general answer was that it was due to the spirit of caste, which prevented combination and cooperation, the two agents that could lighten the burdens of ill-paid labor; yet they had sufficient intelligence to see that social union among themselves must first be effected. The stern self-restraint, the power of self-sacrifice, the delicacy of taste, refinement of feeling, appreciation of knowledge, and acts of touchingkindness to one another that are found among hundreds of them, do not negative the statement that the social line, based on kinds of labor, is closely drawn among them.

"Here is a classification given by one who understands, works, and aids others in various ways: 'Employments of working-people are either subjective or objective; one cannot consort with another. Under the first are included (1) the stenographer, (2) the newspaper hack, (3) the type-writer, (4) those engaged in life-insurance business and in any sort of nursing; the second division embraces (1) mercantile women, (2) saleswomen, (3) tradeswomen, and (4) servants, who are Pariahs, so to speak, in the eyes of all other working-women."

These are curious and novel aspects of our democratic civilization; but I suspect that further observation would develop more facts of the same kind. I remember hearing a gentleman who had some official relation to the construction of a large public building, where the workmen were lunched on the premises, say that three different tables were necessary to preserve the different sorts of artisans and laborers from contact at their meals. It is all very droll when it gets down to this, and exclusiveness among carpenters and bricklayers is no more impressive than it is among lawyers and doctors, or their ladies. Perhaps it is even less so, being in the nature, as I said, of a cast-off garment with these humbler swells. The fact shows, however, that we are still indefinitely remote, in every grade of life, from the democratic ideal, which is also the Christian ideal. Very likely the comparative method of observation would discover far greater liberality and generosity in the higher society - even in the thin air of the heights where Fashion sits - than in the world of hunger and hard work, in which we have hitherto taken it for granted that fraternity and equality reigned. We ought,-I am talking as if I were myself a social magnate, whereas I have my pocket full of wholesome snubs of assorted sizes, - in the interest of these poor fellows and silly women who think they elevate themselves by trampling upon those of a lowlier trade, to get rid of what exclusiveness is left us, and let our light down among them. Then, in another generation, we should have a bricklayer eating at the same table with a hod-carrier, and feeling no sort of contamination. But in the mean time let us not smile at the tinsel of his tawdry distinctions; ours are not more genuine or valuable.

^{*} About People. By Kate Gannett Wells. Boston: James R. Osgood & Co.

surrender the shadow, if not the substance, of the national republic? - for which, in every country, the awakening human mind longs as a higher privilege than any national system can give? This privilege has been extended by the American system of selfgoverning States, without a struggle, without the repression of a single revolutionary throe of humankind, with the very minimum of human unhappiness, from the Atlantic to the Pacific, over all central North America. Surely no political result has ever furnished more conclusive evidence of the advisability of leaving a people to work out their own natural solution of their own political problems. It is this crowning success of the American system, in some respects the crowning success of the century, which is summed up and embodied in the growth from thirteen to fortytwo States. And Americans have a right to be proud of it.

There is, perhaps, a technical question whether the admission of the new States is so far accomplished by the mere Enabling Act that their representative stars may properly be placed on the flag for the approaching Fourth of July. It is not probable, however, that the question will ever assume any practical importance. The older States of the Union will not be apt to cavil on points of etiquette in the welcome with which they meet their new sisters, or to stickle on the exact location of the threshold. The field of forty-two stars may not be legal for Federal agencies until next year, but there is assuredly nothing illegal in the prior recognition by States and private persons of the practical relations of the new States to the remainder of the Union. Such a recognition would be at the worst but a brief and passing irregularity; and that is hardly to be placed in the scale opposite to the comity of States. The fortunate design of our national flag enables the older States to signalize at once the cordiality with which they add to the roll of their sisterhood the names of North Dakota, South Dakota, Montana, and Washington.

How to Preserve the Forests.

A PLAN for the conservation of the forests on the lands which belong to the nation has recently been presented by "Garden and Forest." Almost the only forests remaining on the public lands are those of the mountain region of the Pacific States, and these forests have a special interest and value because of their relation to the agricultural capacity of a vast extent of country lying along the streams which have their sources in these mountain woods. These regions adjacent to the streams, or near enough to be irrigated from them, are not fertile in their present arid condition, but they are capable of great productiveness. All the elements of fertility are in the soil in abundant proportions, except water. This can be supplied only by irrigation. It does not come to these thirsty lands naturally, by rainfall, but must be assisted by the ingenious devices of man on its way to thousands of fields which will thus be made to blossom as the rose, where nature, unhelped, leaves wide expanses desert and unproductive. This water, which is the magical element by which this wilderness is transformed into a fruitful and populous country, is stored in the everlasting hills, where the rivers have their springs, and the forests are its natural

custodians and distributers. The water supply is abundant, and while the forests stand guard around the sources of the rivers, their flow is as everlasting as the hills themselves.

A mountain forest has more functions than most people have considered. It covers the hills with a vast mat or net-work of living root-fibers, and holds in place the ever-accumulating mass of mold and decomposing vegetable matter, which absorbs and retains the water of the rainfall and the melting snows. Such a forest is a great sponge, which receives all the water that falls on the mountains, and allows it to escape gradually, so as to maintain the steady flow of the rivers which it feeds. A forest is thus a natural reservoir for the storage and distribution of the water which falls upon it; and it is far more efficient, as well as far more economical, than any system of artificial storage reservoirs that can be substituted for it. If the forest is removed, this mighty sponge is destroyed, and there is then nothing to perform its function of holding back the water, which will rush down in overwhelming floods and torrents.

The first thing to be noted is that the water will thus all run away at once, at a time when but little of it is wanted, and there will be little or none of it left for the season when it is most needed. The rivers which have been fed by the mountain springs will soon be dry a

great part of the year.

The next thing to be observed is that when the forests are destroyed the hills themselves are not everlasting. When the great sponge-like mass or cap of living root-fibers, mold, and decaying vegetation which the forest held in place as a crown for the hills is destroyed, the mountains themselves begin to crumble and melt away. The soil which for thousands of years has been meshed and matted along the steep slopes and around the shoulders of the hills has now nothing to keep it in place, and it begins to slip and sink away. When it is heaviest with accumulated water whole hillsides are dislodged from their supporting framework of rocks, and descend with resistless force to the plain below, carrying ruin in their path, and leaving the once beautiful face of the mountain seamed and scarred. The rivers are choked, their channels silted up, and the valleys and adjacent plains are buried irrecoverably beneath the vast accumulations of sand, gravel, and débris which the resistless annual floods bring down from the dissolving hills.

All this has been tried in every part of the civilized world, with the same unvarying result. There appears to be serious danger that these disastrous and fatal experiments will be repeated in our treatment of the mountain forests of the western part of our country; but as the forests now belong to the nation they should be effectively guarded against the short-sighted selfishness which would thus ruin them, and, by destroying them, forever prevent the development of the regions along the course of the streams below.

The plan proposed by "Garden and Forest" for the protection of these important forests embraces three essential features.

The first is the immediate withdrawal from sale of all forest lands belonging to the nation.

The second step is to commit to the United States army the care and guardianship of the nation's forests. It is shown in the article referred to that there is in time of peace no other work of national defense or protection so valuable as this which the army can perform, and that the national forests cannot be adequately guarded and protected by any other means. It is obvious that the measures which have been tried, including those now in operation, or nominally in operation, have proved almost entirely ineffective. The officers of the army are picked men, educated at the expense of the nation, and already in its paid service.

The third step in this plan is the appointment by the President of "a commission to make a thorough examination of the condition of the forests belonging to the nation, and of their relation to the agricultural interests of the regions through which the streams flow which have their sources in these forests, and to report with the facts observed a comprehensive plan for the preservation and management of the public forests, including a system for the training, by the Government, of a sufficient number of foresters for the national forest service. . . A National School of Forestry should be established at a suitable place in one of the great mountain forests on the public lands, and its equipment should be as thorough and adequate for its purpose as is that of the National Military Academy at West Point."

The plan thus proposed has the merit of being practical, and of providing the means and instruments for its own effective and successful administration.

Nothing else at once so direct and efficient, and so thoroughly adapted to accomplish these most important objects, has hitherto been presented for the consideration and action of the American people in connection with this department of our national interests. It should be adopted and put in operation as soon as possible.

The Dark Continent.

From the beginning of time, men have been accustomed to associate with the name of Africa only such conceptions as darkness, ignorance, helplessness, and the opportunity of oppression. Sir John Hawkins and the Roman conqueror of centuries before may have had little else in common, but they agreed in their belief that Africa and the Africans were fair game, the storehouse from which were to be drawn supplies of slaves, and in which Rob Roy's was the only law.

Since the Pharaohs' kingdom, with its supplies of grain to the Mediterranean region, and Carthage, with its more universal commercial intercourse, international relations have for centuries felt hardly any disturbing influences from the side of Africa, with the exception of the den of pirates so long permitted to exist in the Barbary States. Lord Salisbury's recent invidious speech about "black men" and their implied incapacity for national or international affairs, though applied to Hindus, was merely another curious survival of the feeling of absolute contempt bred from centuries of supreme international indifference to everything African except the plunder of Africa. This indifference was the product of the feeling that international interests and the balance of power were purely European affairs, a feeling which does not really date from the struggles of William and Louis, but from time immemorial,-from that time, at least, when the headlong retreat of the Persian from the shores of Greece

gave the first great shock to rudimentary international relations. From that time international law has virtually been founded on the notion that international rights were confined to the nations of Europe, while the nations of other continents had at best only international privileges.

One may well fancy the rudeness of the shock that would have been given to this notion by the appearance and geometrical increase of the great American Republic but for the self-control of the latter power. Silas Deane's wish for three thousand miles of fire between Europe and America has been pretty fairly fulfilled so far as international law is concerned; and diplomacy has been permitted to assume that the center and circumference of all its real rights and interests are in Europe. It has often been wondered that American diplomacy should have been so constantly successful; perhaps the wonder would be less if one could weigh exactly the natural desire of the diplomacy of the old school to maintain the status quo in order to neutralize its American rival by granting all the latter's reasonable demands, and thus to retain to itself the appearance of its ancient exclusiveness.

Circumstances seem to be forming new combinations to shock the solidity of the status quo. Not only are torpedo-boats, iron-clads, and perfected weapons and munitions at the service of any government that has money to buy them, but some governments, once accounted only barbarous, have come to know and value these tools of destruction and to use them as a defense. The Japanese army and navy must now be reckoned with by Russia and England in any general war in which these two rivals take part. China, which once relied on junks, gingals, and stink-pots for the extermination of the foreign devils, now patrols her own seas with well-appointed squadrons of ironclads, and doubtless will not wait for European permission to take advantage of the earliest opportunity to settle up several long-standing accounts. Cases of the kind are numerous and striking, though those who talk so glibly of a "general European war" seem to ignore them and to imagine that international circumstances have not changed since the general European peace was made in 1815.

The share of the Dark Continent in the new circumstances thus far has been mainly commercial. He who can teach the black man to want and wear one shirt where none was worn before brings a wide and welcome increase to the markets of European producers; and it is shameful to be compelled to add that Christian nations have found a still richer mine in fastening upon Africa the love for distilled liquors. Under such auspices the Congo State has been born; but is it certain or probable that this is to be the end of all for Africa? Everything seems to portend an epoch of European colonization in the Dark Continent, modeled on the Congo State; but there are some considerations to the contrary.

Africa, like every other continent, has races of every type. It has its races of cowards, and its militant, conquering peoples. In the natural process, the former should go down and the latter come to the surface of things. We are apt to judge all Africans by the former type. But Lord Wolseley should know the black man as a fighter, if any one does; and he has recently

Vol. XXXVIII .- 41.

TOPICS OF THE TIME.

"The Century's" Twentieth Anniversary.

THE first number of this magazine (under another name) bears the date of November, 1870. If this were not an unescapable fact it would be hard for those of us who have worked in the editing and publishing of it from the beginning to realize that twenty years have elapsed since, with how much of strain and anxiety, of enthusiasm and honest pride, the initial number was at last made up, printed, bound, and issued to the world!

It has seemed to us as perhaps more modest, as well as more feasible, not to attempt at this time a detailed review of the literary and art accomplishments of THE CENTURY, but instead to dwell upon the mechanical phase of magazine development in our day; and to this end we have asked Mr. Theodore L. De Vinne to describe the evolution which has taken place in his own printing house in connection with periodical printing. Mr. De Vinne was not the first printer of the magazine; but early in its history he took hold of it, and the progress made during the lifetime of THE CENTURY has been owing very largely to his own skill, energy, and patience in experiment. In the interesting article he has written, and which is published in this number, nothing is said of this; but it would ill become us not to make here and now such public acknowledgment. With a printer less conscientious, less open to new ideas, it would have been easy to block or delay the advance in magazine illustration which has been urged forward by the Art Department of The Century Co. and the artists and artist-engravers who have so ably worked for this magazine and for its companion ST. NICHOLAS. It is gratifying to be assured that the above statement will not be set down as a strained form of self-glorification, but that, on the contrary, it only expresses the opinion of nearly all, either at home or abroad, who have watched the development of modern illustrated periodicals.

It would be an agreeable task to speak here by name of the various members of THE CENTURY force, in all the various departments, who have worked with devotion to a single end, during a large part, or the whole, of the past twenty years. But omitting this we may, and should surely, speak of one who is no longer with us. Dr. Holland, besides being one of the founders, was editor-in-chief of the magazine during eleven years of its existence. The aims and methods and general character which he gave it are strongly impressed upon THE CENTURY; while, in sympathy with the times, it has continued, and doubtless will continue, to expand in new and important directions.

If some other writer were reviewing the twenty years of this magazine we would wish him to examine the record of these pages as to printing and wood-engraving; to note the relation of The Century to American literature, painting, sculpture, architecture, landscape gardening, science, and invention, and to the various reforms that have been made or are in progress

in religious teaching, in education in general, in charitable enterprise, in the industrial world, and in governmental administration.

If there is any one dominant sentiment which an unprejudiced reviewer would recognize as pervading these forty half-yearly volumes it is, we think, a sane and earnest Americanism. Along with and part of the American spirit has been the constant endeavor to do all that such a publication might do to increase the sentiment of union throughout our diverse sisterhood of States—the sentiment of American nationality. It has always been the aim of THE CENTURY not only to be a force in literature and art, but to take a wholesome part in the discussion of great questions; not only to promote good literature and good art, but good citizenship.

The kind of Americanism which THE CENTURY has desired to cultivate is as far as possible from the "antiabroad" cant of the political, literary, or artistic demagogue. It is the Americanism that deems the best of the Old World none too good for the New; that would, therefore, learn eagerly every lesson in good government, or in matters social or esthetic, that may be learned from the older countries; that would abolish entirely the stupid and brutal tax on foreign art, but is not so besotted in Anglomania as to wish, as do some American congressmen, to steal bodily the entire current literature of Great Britain for the benefit of American readers.

In working on the lines above briefly mentioned THE CENTURY has had the encouragement of a following of readers remarkable as to numbers—we believe in the same field unprecedented; remarkable also for generous appreciation. Mistakes have been no doubt made, some of them the result of that very spirit of experiment and desire for improvement which must characterize every live periodical—that spirit and that desire which if once lost would soon lose to us the immense and inspiring audience which it is THE CENTURY's privilege and responsibility to address month by month and year by year.

Forestry in America.

What is the present stage of development and discussion of forestry interests and subjects in this country? We have not, as yet, any realforestry in America; and we can have, therefore, only talk and writing about it, consideration and discussion, or, at best, efforts to arrange and prepare means and conditions for practical forestry. Some of the States have forestry commissions, and all should have, each with one paid officer to devote his time to the promotion of popular intelligence regarding the care of wooded lands and of the sources of streams, tree-planting, and the relation of forests to the fertility of the soil and to the agricultural prosperity of the country. We have also several State forestry associations, voluntary, unofficial organizations of public-spirited men and women who

wish to stimulate popular attention and interest regarding forestry matters. Their work is useful, but it might be made much more effective. Meetings, addresses, and newspaper writing are indispensable in the earlier stages of any movement requiring popular intelligence and coöperation, but systematic and continuous effort soon becomes necessary, and this can be commanded only by employing and paying a competent agent or secretary. Many good things have had their origin in gratuitous missionary labor, but the time comes when the work of carrying them forward must be paid for.

Effort in behalf of forestry interests takes different directions in different parts of the country. The State of New York has nearly a million acres of mountain forest lands, not in one compact body, but in scattered tracts separated by private holdings. In this situation the property of the State cannot be adequately protected from spoliation, nor properly administered as a source of revenue. Those who have given attention to the matter in this State therefore favor disposing of outlying tracts, by sale or exchange, and the acquisition by the State of sufficient additional territory to constitute a large State park, or forest reservation, around the sources of the Hudson River and the other great water-ways of the State. This plan was presented in a message from the governor to the Senate during the last session of the legislature, and by the concurrent action of both branches of that body was committed to the present Forest Commission for thorough investigation, the finding to be reported to the legislature at its next meeting. This is one of the most important forestry enterprises ever undertaken in this country. The business and commercial prosperity of the city of New York depends in very large measure upon the permanent maintenance of forest conditions around the sources of the Hudson River, and the interests of large portions of the interior of the State are also closely connected with the destiny of the North Woods. No part of the Adirondack Mountain forest region is adapted to cultivation. It is naturally suited to the perpetual production of timber, and to this crop alone. The five or six millions of people who will soon be dwellers in the great city which is so rapidly growing up on and around Manhattan Island will need the whole Adirondack wilderness for an outlying park and forest playground for their summer rest and recreation. The movement to preserve these mountain forests, and to make the region a public possession, should have the cordial support of all civilized anglers and huntsmen, of lumbermen and owners of timber lands, and of public-spirited citizens in general. At present large portions of the region are being rapidly and irretrievably ruined.

There is a recent movement in Massachusetts to secure the incorporation of a board of trustees empowered to hold any parcels of ground which may be conveyed to them on account of historic interest or beauty of scenery, and to open them as parks or commons for public use, under suitable regulations and on condition of police protection. This beginning is of great importance. All the pleasant and convenient portions of the coast of New England will soon be crowded with buildings. There will be an almost continuous town, with few places left where men can walk and meditate by the sea without being intruders upon

private grounds. Land should be secured while it is obtainable for seashore commons, parks, and open spaces, with wise foresight of the conditions which will soon result from the increasing density of our population. Unless there is prompt action in this direction our children will probably live to see the shore lands everywhere inclosed, and in many places a fee demanded for a good view of the ocean, as we had to pay to see Niagara until the State of New York made that scene of beauty and grandeur a public possession and forever free to all.

It is desirable that all such efforts as this one just organized in Massachusetts should be made broad enough to include all the various public out-of-door interests which require the attention of the people, the care of beautiful scenery, of forests, streams, and wooded lands, historic sites, fish and game preserves, the purity of the water supply for towns, the treatment of roadsides, of parks, open spaces, and public grounds of all kinds. Such movements are apt to fail of full development and efficiency unless the cooperation of all classes of out-of-door people is secured. Plans for similar objects are under consideration in New Hampshire, and we hope they may be carried into effect in the preservation of the wonderful natural beauty of the White Mountain region. The scenery of New Hampshire is one of the most valuable pecuniary possessions of the people of the State. Good work has been done in Ohio and in other States in securing the preservation of important historic sites or of tracts of unusual natural beauty. California has been especially fortunate in this respect. One of her citizens, Col. J. B. Armstrong, has offered her a gift of six hundred acres of fine redwood forest to be set apart for the public use. Congress has passed the bill reserving for the public use the Tulare Big Trees, and there is every expectation that the bill for the establishment of the Yosemite National Park will also be passed. The endeavor to rescue the present Yosemite reservation from impending injury should attract and inspire all lovers of natural beauty and of the peace and joy which it nourishes. and should appeal especially to the pride and enlist the active cooperation of Californians. There is room and need for much more effort for similar objects. The people who are interested in forestry are acting wisely in organizing and carrying forward such movements. In many of the States of our country there is no opportunity for forestry in the proper sense of the term, but there is everywhere imperative need of popular education in the care of woodlands, trees, roadsides, and open spaces, and in appreciation of the value of change of scene and environment for all who live and work under the conditions of our modern life.

Our natural interest in forestry is connected chiefly with the problems of the management and destiny of the forests on the public domain. These forests, and the lands on which they stand, belong equally to the people of the whole country. They are as much the property of the inhabitants of New York and Virginia as of the people of the States in which the nation's forests and lands are situated. They should be at once withdrawn from sale, and the army of the United States should guard them from spoliation until a commission of competent men examines them and decides what portions of them should be kept permanently in forest for the protection of the sources of important

rivers. At present these invaluable forests are pillaged and devastated without scruple or limit by people who think it fine business to appropriate to themselves without cost the property of the nation. They have been doing this so long that they appear to claim the right to continue their ravages permanently, and are · indignant at the suggestion of any interference by the owners of the property. Extensive tracts of these forests are destroyed by the pasturage of sheep owned by men who have no right whatever on the nation's land. Other great areas are desolated by fires, many of which are purposely started. Now these are the plain facts regarding mountain forests and their functions which are known to all persons of intelligence who have given any serious attention to forestry subjects. The sponge-like mass of roots, soil, leaves, and other vegetable matter which forms the forest floor acts as a natural storage reservoir, and holds back the water of rainfall and melting snow, allowing it to escape and descend but slowly to the channels of the streams, which are thus fed with comparatively equable flow all the year around. If forest conditions are destroyed, if the network of living root-fibers which holds the soil together and in place on steep slopes and around the shoulders of the hills is killed out by fire or pasturage, the soil soon begins to break and slip down from the hillsides, carrying away the sponge-like stratum which before had held vast quantities of water in store in a natural reservoir spread all over the surface of the hills. After this the water rushes down the hillsides in destructive torrents; and it soon scoops out great chasms and gullies, choking the streams and covering the fertile lands of the valleys below with inert sand and gravel.

The forests on the public domain have a special interest and value for the people of this country because they guard the sources of rivers which can be used to redeem and fertilize millions of acres of arid lands. A territory large enough for a great empire can be made marvelously productive by means of irrigation, if these forests on the nation's land are protected and preserved. If forest conditions are destroyed on these mountains, many millions of acres in the arid regions below must forever remain desert and uninhabitable. The timber of these forests can be fully utilized without impairing forest conditions, or affecting in any degree the permanent flow of the streams which have their sources in them. Artificial storage reservoirs will doubtless be found necessary for purposes of irrigation, to supplement the function of the natural reservoirs, the mountain forests, but if the forests are destroyed the reservoirs will be filled up with sand and gravel, dams will be broken and swept away, and there will soon be but little water available for use in agriculture. Besides, if the forest covering of the mountains is destroyed, the mountains themselves will soon begin to change. They depend upon the forests for their permanence. If they are deprived of their indispensable vital integument, "the everlasting hills" are torn away and dragged down by rushing torrents of water and storms of wind. The rivers perish because their sources are destroyed. As much water may fall as before, but it becomes destructive instead of vivifying. It rushes away in uncontrollable fury and is lost.

All this is known. It is not a matter of theory, probability, or opinion. It has been incontrovertibly

established by repeated observations in all the mountain countries of the Old World and in our own country. The results are uniform. No exceptions have been observed, and there is no question or doubt regarding these destructive tendencies and effects among those who have observed the facts which are everywhere palpable in this department of nature and of human experience. Those who know anything of the subject are agreed that, in general, the forest-clothing of mountains cannot be permanently removed without far-reaching evil results. But the interests which are opposed to the protection of the nation's forests, and which are nourished by their constant and enormous spoliation, are strong and determined.

A Duty of Congress to Itself.

THE defeat of the International Copyright Bill on the 2d of May has illustrated the saying that next to a victory the best thing for a good cause is a defeat. The movement for honorable treatment of literary property has shown its vitality since that vote as never before; has, in fact,

Sprung harmless up, refreshed by blows.

The indignant protest with which the unexpected rejection of this measure was greeted by the press and by the opinion of educated people in general cannot be mistaken: it clearly demonstrates that whatever stigma the House of Representatives may be willing to put upon itself, the people of the United States do not deserve to rest under the charge of being "a nation of pirates." Never was public sentiment more outraged or more ill-divined than by those Representatives who concluded that their popularity was to be enhanced by voting for what they erroneously supposed to be "cheap books." There has never been presented the slightest evidence that any considerable portion of our people oppose this reform, while the Copyright Committee has poured in upon Congress petitions for its passage from hundreds of the most distinguished Americans in all walks of life. The luster of these names should have challenged the attention of Representatives and plead for the importance of the measure. As it is, the House has put itself in a most disgraceful position - disgraceful to the country, but chiefly to itself. Happily there is yet an opportunity in the present Congress for righting the record. Should the present long session terminate without the redress of this time-honored wrong, let it be a solemn obligation upon every reader of these lines to urge upon his Representative during the recess his duty to the cause of justice, to the opinion of intelligent sentiment everywhere, and to the collective and individual reputation of members of Congress.

To Representatives who do not recognize an ethical obligation to set the official seal of criminality upon an offense which has incurred the condemnation of the civilized world, appeal may be made — indeed has unceasingly been made — in the name of the prosperity of American literature. It is humiliating to have to urge upon lawmakers so elementary a consideration as the value of a national literature — that literature is the phonograph of national life, preserving and reproducing what is most worth record; that it is a standing

TOPICS OF THE TIME.

Some Christmas Reflections.

PERHAPS our readers may find as much of the true Christian feeling in Dr. Abbott's article, and in the article on the Record of Virtue, as in the more ostensibly Christmas "features" of this number of THE CENTURY. Good people of other religions sometimes resent the Christian habit of insisting that all the modern and civilized agencies and enthusiasms for the bettering of humanity are essentially Christian. We can imagine the smile that must have illuminated the countenances of some of our Hebrew friends when, after the death of Montefiore, certain Christian doctors of divinity generously undertook to overcome, in various learned essays, the theological difficulties as to the entrance of that great benefactor into the rewards of Heaven. It was, we remember, the kindly and timely enterprise of one of our religious weeklies that set these good doctors to work; and we have no doubt that St. Peter of the Keys was greatly indebted to them for promptly pointing out a legitimate escape from an extremely awkward situation.

But Christians should not be blamed, after all, for finding in their religion the potency of all good. It is the distinction of Christianity that spiritual progress and good works go hand in hand in its system, rightly understood. The solitary, selfish, soul-saving, hermit view of the Christian life is a remnant of other religions and as far as possible from the true "imitation of Christ." In Professor Drummond's remarkable sermon on "The Greatest Thing in the World" perhaps the most striking passage is this: "Have you ever noticed how much of Christ's life was spent in doing kind things - in merely doing kind things? Run over it with that in view, and you will find that he spent a great proportion of his time simply in making people happy, in doing good turns to people." We know of a good man who would probably deprecate the title of "Christian," yet who, when thanked for some notable act of thoughtful kindness to a whole schoolful of boys, said that he deserved no thanks at all, because he had only acted on the principle he had long ago discovered, that "if you want happiness yourself in this world you must disseminate happiness."

But the Christian idea includes along with the dissemination of happiness also the dissemination of misery - misery to evil-doers. "And Jesus entered into the temple of God, and cast out all them that sold and bought in the temple, and overthrew the tables of the money-changers, and the seats of them that sold the doves; and he saith unto them, It is written, My house shall be called a house of prayer: but ye make it a den of robbers." It was doubtless with a view to this phase of the energy of the highest example of the Christian life that clergymen in the city of New York and in the State of Pennsylvania entered with such zeal into the moral issues of the campaigns of last month. Nothing that our spiritual leaders have done in our day has been more effective in increasing the respect of the general community for their sincerity and godliness. For, let us remember in this Christmas season of beneficence, of mutual kindnesses and of happiness, that Christianity is not only a religion of love, but a religion of hatred—of love for God and man, and hatred of all the evils in human character and in the entire social economy.

Trees in America.

WE spoke in the November CENTURY - and not by any means for the first time - of the meaning of forest preservation and of its importance as a factor in the future welfare of our country. Since that number went to press the proposed Yosemite National Park, described in our September number, has become a reality by the enactment of General Vandever's bill. By this result, for which the people of the country are largely indebted to the activity of Mr. Holman of the House of Representatives and of Mr. Plumb of the Senate, not only an important addition is made to the area of wonderful scenery reserved for public use, but an end is put, within considerable limits, to the depredations of lumbermen and sheep-herders. Another important gain, and one of great practical value, is the protection which this new reservation insures to the headwaters of the San Joaquin, Merced, and Tuolumne rivers - thus not only insuring a larger and steadier flow of the cataracts and falls of these streams, but conserving the water supply of the foothills and valleys below. Not less important was the passage by the Senate of the resolution of Senator Plumb, directing the Secretary of the Interior to make a prompt and careful report in regard to the spoliation of the Yosemite. The Secretary has shown an active interest in the new public reservations of California, and there is every reason to believe that he will make a searching investigation into these only too well proved abuses. In doing this it is greatly to be hoped that he will avail himself of the services of some capable and disinterested landscape architect of reputation. Happily there are several in the country who would meet the requirements of the occasion.

A very important measure is still pending, and should surely be acted upon favorably by the present Congress. We refer to the Act for the Protection and Maintenance of the Yellowstone National Park, which has passed the Senate and is now before the House of Representatives, having been reported favorably from the Committee on Public Lands. This bill, if we are not mistaken, has in fact passed the Senate four times, and is apparently only opposed by a lobby in the interest of a railroad scheme.

Unquestionably a wider and deeper interest in the general subject of forest preservation is now felt than was felt a few years ago, and the nature of the measures, public, corporate, and private, which will best insure the protection of our woodlands is more clearly understood. But much enlightenment, and especially much awakening of enthusiasm, are needed if the nation as a whole is to do its duty in forest preservation and also in the guarding of particularly beautiful passages

of scenery and exceptionally fine pieces of woodland or individual trees. Cold wisdom may do much; a genuine interest in Nature's productions, an enthusiastic love for them, can do more. To keep what will serve us is one motive; to keep what delights us is quite another; and both must work together in this case if we wish not only to do the best for ourselves but to respect the lawful rights of posterity.

Now, really to love a thing we must know it. There is no way in which a vital interest in it can be quickly and surely excited except by changing a vague and imperfect knowledge of its qualities into full and accurate knowledge. It is not the casual summer tourist, but the landscape gardener, who knows how impossible it is to create a bit of landscape like Nature's best, that protests most vigorously against the desecration of such bits. It is the botanist, the dendrologist, the trained student and practised lover of Nature, who cries out most loudly against the folly of mountain denudation - not the farmer or manufacturer, though his may be the material interests immediately at stake. To save our forests and landscapes and administer them wisely we must love them, and to love them we must know them. But those who have traveled farthest among them best understand how difficult it is to gain real acquaintance with them. Who among the other travelers or the residents we meet can tell us about our trees - whether a species is common or rare, what is its natural range, what is its adaptability to cultivation in other places, what the value of its various products, what its relative importance among the score of other species around it? And where are the books from which we can gather such information?

In fact, the first volume of the first book to meet the wants of Americans in this important direction has just been published. But the work promises to be, when complete in its twelve volumes, so adequate to every need, scientific and popular, that it merits an

especially hearty welcome.

The time was ripe for an exhaustive and accurate survey of the arborescent species of our country, but only just ripe. Until the great West had been opened up in all directions by the railway, no botanical collector could feel sure that he had reaped the full riches of its forests, no systematic botanist could regard the families and genera of North American trees as more than provisionally established. Fortunately the advent of the time of full knowledge is now being recorded by a dendrologist who has played an important part in bringing it about. Professor Sargent's connection with the North Transcontinental Survey, his journeys in the service of the National Government when charged with the preparation of that volume of the Tenth Census Reports which treats of the forests of our country, his work in forming the Jesup Collection of Woods in the New York Museum of Natural History, and his present position as director of the Arnold Arboretum, which he has made the richest dendrological collection in America and to which he has given international scientific importance - all these labors furnished him with unequaled opportunities to fit himself for writing "The Silva of North America"; and he tells us in his preface that during them all the intention to write it was steadily in his mind. No one else, at home or abroad, was so well equipped as Professor Sargent to do this special piece of work.

His book, as we have implied, will replace no existing work - it will fill a crying vacancy. All that had previously been written about American trees was either fragmentary or to some degree incorrect; and the best of it was hidden away from the ken of the public in botanical monographs or the files of scientific journals. The only general work which could rightly pretend to the name of a Silva of North America has been the one first published by Michaux in 1810, and supplemented in 1842 by Nuttall; and this, of course, is sadly antiquated - incomplete in scope, and imperfect even as far as it goes. Other Silvas have been begun and not finished, or have been mere incorrect compilations from the writings of various authors. Even local handbooks, like Emerson's "Trees and Shrubs of Massachusetts," have not been numerous or often good. No botanist has hitherto been able fully and accurately to compute, distinguish, and understand our trees. No horticulturist or landscape gardener has had it in his power to select among all the species possible of cultivation in a given locality. No architect or cabinet-maker has had an explanatory list of all the woods he might advantageously use. And the lover of Nature has been perpetually balked of his wish to identify the species he has found in his travels. Nothing was more needed in our literature than a complete and detailed work, written from first-hand observation, which should systematize our trees for the scientific student and explain and illustrate their appearance and qualities for the public.

The Railway Zone-Tariff of Hungary.

The extent to which the nations of the earth are sharing one another's life is illustrated not merely by the economic exchanges which no barriers of hostile legislation quite succeed in suppressing, but also by the contributions of political and industrial experience which each is making for the benefit of all. Some of the most useful of these come from quarters to which we might not have looked for original suggestions. For the method of ballot reform which is so widely adopted we are indebted to Australia; and now from Hungary we have a suggestion of reform in railway management which promises to revolutionize the

passenger business.

The "Zone-tariff," as it is called, was put in operation in Hungary on the 1st of August, 1889. It has, therefore, but a brief experience to justify its practicability; but the results thus far have been so remarkable that its success seems to be assured. The method consists of a division of the territory of Hungary into fourteen concentric zones, Budapest, the capital, being the center. The first zone includes all stations within 25 kilometers - 161/2 miles - from the center; the second, all more than 25 and less than 40; all the zones except the first, the twelfth, and the thirteenth are 15 kilometers, or a little more than 9 miles in width; the three named are 25 kilometers in breadth, and the fourteenth includes all stations more than 225 kilometers from the capital. The fare is regulated by the number of zones which the traveler enters or crosses during his journey. Reducing guldens to cents, the rate is 20, 16, and 10 cents per zone, for first, second, and third class passengers respectively. If one starts from Budapest and crosses three zones he travels, At the moment of greatest apparent prosperity, when everybody believed himself rich and hourly growing richer, the entire system collapsed. It was then discovered that all of the boasted \$30,000,000 of paid-up capital, with the exception of the money that had been borrowed on the bonds of the State, consisted of "stock notes" which had been paid in for capital, the banks discounting them and the proceeds going to pay for stock subscriptions. This was simply an exchange of one form of credit for another. Absolutely no money had gone into the banks except that obtained by the sale of State bonds, and when that was exhausted nothing remained but entries upon the bank records for indebtedness from which nothing was ever to be realized.

In summing up the result, Mr. Henry V. Poor, from whose "Money, its Laws and History" we have obtained much of our information, says:

The \$48,000,000 of loans were never paid; the \$23,000,000 of notes and deposits never redeemed. The whole system fell a huge and shapeless wreck, leaving the people of the State very much as they came into the world. Their condition at the time beggars description. Society was broken up from its very foundations. Everybody was in debt without any possible means of payment. Lands became worthless for the reason that no one had any money to pay for them. The only personal property left was slaves, to save which such numbers of people fled with them from the State that the common return upon legal processes was in the very abbreviated form of "G. T. T.," gone to Texas, a State which in this way received a mighty accession to her population.

The State paid the interest on the bonds issued for the banks for less than a year, when the governor informed the bondholders that the State, "in her sovereign capacity, had refused payment of her bonds." This position the legislature sustained in 1842 by adopting a report of a committee declaring payment of the bonds to be "incompatible with the honor and dignity of the State." The State's conduct was defended on the floor of Congress by Jacob Thompson, afterward President Buchanan's Secretary of the Interior. The bondholders had the question of the constitutionality of the bonds brought before the highest court in the State, and obtained a decision in their favor, the court affirming their constitutionality and declaring them to be binding obligations upon the State; but as no execution could issue against the State, the bondholders could obtain none of their lost money. As late as 1853 some of the bondholders, by persistent efforts, obtained from the legislature an act referring the question of payment to the people. The people voted that the bonds should not be paid, thus adding the final and overwhelming touch to the State's disgrace.

Surely there cannot be found in the long and almost inexhaustible calendar of cheap-money experiments a more striking moral lesson than this Mississippi history affords, for a system which destroys not only the material prosperity of a people, but its moral sense as well, is one that should be shunned like a pestilence.

Attacks upon Public Parks.

THE fight to prevent the injury and impairment of public parks, large and small, appears to be a perpetual one. There is always springing up some new person or persons possessed with a craving, as absorbing as it is mysterious, to get into a park of some kind and do harm to it in one way or another. If the park be a

small one in a great city, the hostile attack takes the form of a request to run a railway across or over a corner of it, or to be granted a section for a railway station or some other semi-public use. Plausible reasons are always advanced in support of such propositions, the chief of which usually is that the public convenience will be greatly enhanced by the incursion. A few years ago it was proposed with much seriousness to run an elevated railway across the Central Park, and it was claimed that the structure might be of such architectural beauty as to constitute an additional charm for the park. Again it was proposed to construct along the entire length of one side of the same park a speedingtrack for horses which should be devoted to fast driving by the owners of blooded horses. In Boston and other cities the proposition is made anew every year to allow the city parks to be used as training- and paradegrounds for the militia.

The attacks upon the great parks, those of the Adirondacks, the Yosemite, the Yellowstone, differ only in degree. Somebody wishes to run a railway into or through them, or to construct a highway across them, or to use portions of them for some kind of private enterprise of a profitable nature. The mere sight of so much property lying idle appears to be irritating to the utilitarian spirit of the age. Men wish to get at it and make it earn something for them. And the first excuse that they make is that their particular project will be a great public convenience. If it be a railway that they propose, they say it will not injure the park, but bring its beauties and delights within easy reach of thousands of people who otherwise would never be able to enjoy them. If they wish to cut down trees, they say they only desire to do so in order to improve the views, to "open vistas" from hotels and thus increase the enjoyment of visitors. "Opening vistas" has long been the favorite device of park desolators all the way from New York city to the Yosemite Valley, and is one of the most extreme and violent forms of park vandalism ever invented.

All these attacks are open to the same objection, which is unanswerable, that they remove, in part if not entirely, the very qualities which are essential in a park. The prime essential of a park in a great city is that the noise and turmoil of the streets cease at its gates, and that within is quiet, an opportunity to enjoy nature in its cultivated aspect, and a certain freedom of action within limits which are prescribed only for the greatest good of the greatest number. Every respectably behaving person has as much freedom there as if he were in his own grounds. All is as free to him as it is to every one else. A railway across or over such a park, or a use of any part of it for a semi-public purpose, destroys both its quiet and its democratic equality, and its main charm has been taken away.

In the case of a great park like the Adirondack, or the Yellowstone, or the Yosemite, the essential quality is that of a solitude, a wilderness, a place of undisturbed communion with nature in all her primitive beauty, simplicity, and grandeur. For such a solitude vast domain and practically complete separation from the developments of civilization are indispensable. Run a railway into such a place, and it ceases at once to be a wilderness. Nature flees, never to be brought back again. With her go the wild game which attracted the huntsmen and made camp life,

VOL. XLIII .- 60.

with all its restfulness and strength-giving qualities, possible.

A few years ago the Adirondacks were a wilderness throughout almost their entire extent. To gain access to some of their most charming solitudes, it was necessary to ride forty or fifty miles by stages, an entire day being necessary to "get into the woods" after the railway journey had ended. In those days fish and deer and other game were plenty, and a camper could pass weeks and months without encountering more than a few casual signs of civilization. Then came the railways; two of them were allowed to penetrate the wilderness so far that a journey by rail could be made to points within an hour or two of the parts hitherto most inaccessible. What had been a wilderness became instantly a "summer resort." Cheap hotels and boarding-houses sprang up everywhere, and the woods were literally filled with visitors from all quarters. The whistle of the locomotives drove the deer into the deepest recesses of the forests, and the hordes of visitors, who had neither a genuine love of sport nor a respect for game laws, soon cleared the streams of fish. Now it is proposed to run a railway across and through the Adirondack region, opening up a large portion of it to settlement. This attack has been defeated temporarily, but it has not been abandoned. If it shall succeed ultimately, the Adirondack wilderness will soon be a thing of the past.

For a long time the Yellowstone Park was threatened with a similar destruction, but the commendable action of the President, under authority of the last Congress, seems to have removed it for all time. Repeated attempts were made so to increase the size of the park as to have it include the watershed of all the streams which flow into the Yellowstone Lake, but legislation with this end in view was for a long time prevented by a railway lobby, in the interest of a road across one portion of the park, an invasion which would be made impossible by the proposed addition. On the last day of the session, however, Congress passed an act authorizing the President to declare that the additional territory desired had been "withdrawn from entry" and should remain the property of the nation. He has so declared, and the danger of destruction by means of railways is safely and permanently passed. Congress ought next to provide the park with a superintendent, at a salary which would make it possible to obtain the best expert talent for the purpose.

The condition of affairs in the Yosemite Valley during the past year has been such as to confirm the fears of lovers of that wonderland as to its future, and to show that the temperate warnings sounded in this magazine two years ago were not without solid basis of fact. To judge from the reports of credible and disinterested observers, the actual destruction of scenery has been, to a certain extent, curbed by the force of public criticism. Miles of fence,- the existence of which was denied, - have been taken down, and injurious schemes which were mooted in official quarters have apparently been abandoned. Yet there is nothing to show that the Commission has in any way changed its attitude toward the main criticism of its policythe failure to intrust the supervision of improvements affecting the scenery to experts of proved capacity. On the contrary, moderate, respectful, and understated criticisms of the policy of these public servants have

been met officially by abusive personalities and by a sweeping denial of evident facts, while at the same time the Commission was engaged in a so-called "improvement" of Mirror Lake, which, it is said, has resulted in depriving it of much of its exquisite sylvan beauty. The issue is clearly joined - whether or not the Yosemite shall be intrusted to hands of adequate skill and taste. In the face of the Commission's announced intention to cut down all the underbrush and trees of thirty years' growth in the valley, it would be superfluous to discuss what has already been done in the way of destructiveness. Part of it was highly objectionable in itself; part of it as symptomatic of a bad state of affairs in the Board of Control. We are far from saying, and have never said, that no trees should be cut in the valley, but we do maintain that the present Commission has demonstrated its incompetence to decide upon these and other important details of this character.

Above and beyond the question of the landscape management of the valley lies another question — whether or not the Commission, which is the agent of the State as the trustee for the nation, has at any time lent its countenance to the building up in the Yosemite Valley of a financial monopoly, sustaining itself by obnoxious means. With the single desire that the valley shall be properly managed, we have reluctantly come to the conclusion that the surest, if not the only, way to preserve this reservation for the highest public uses is to bring about its recession to the General Government, and thus to merge it into the management of the greater National Park which now surrounds it.

Meantime, the thanks of all good citizens, and especially of all lovers of nature, are due to Secretary Noble for the wise, firm, and energetic manner in which he has conducted the affairs of the Yosemite National Park. While there may be honest differences of opinion as to the policy of military control, the protests against it of certain interests which have lived by preying upon the public domain are the strongest proof of the beneficent action of Congress in establishing this safeguard for the new reservation. To change somewhat the line of its boundaries by excluding some unparkable property which constitutes a fraction of it, would seem to be wise; but this is a detail which the friends of the National Park will be the first to wish properly adjusted. The first year of Secretary Noble's management of the park shows not only its value in the preservation of the sources of water-supply, which will be more evident from year to year, but the great use to the public domain of excluding predatory sheepmen and lumbermen, whose complaints are conclusive evidence of the need of this reservation. Californians owe it to themselves and to their State, as well as to the nation, in whose interest they have undertaken to administer this trust, to see that the sordid interests of a few private parties connected with the operation of the valley are no longer permitted to impair its attractiveness or to stand in the way of its adequate conduct by the best talent that can be secured. It is idle to disguise the fact that in order to do this the better sentiment of California must make itself more vigorously felt. Naturally all the influence which can be exerted by those who have "something to make" out of the valley will be put forth during the present Congress to oppose a better state of affairs and to obtain a modification of the public policy of preserving the forests

for the larger uses of the people.

We misjudge the State of California if her citizens will sit idly by and see the sources, in part, of her greatness turned over to the tender mercies of private individuals. The preservation of her scenery, the conservation of her forests, and, most of all, the security of the water-supply of her valleys, ought to move the press and the people of the Golden State to prompt and vigorous protest against the flagrant and long-continued disregard of her interests.

" Progress of Ballot Reform," I Colorado.

COLORADO should be included in the list of States which have passed new ballot laws. It enacted an excellent law in 1891, and, like Michigan, incorporated in it a corrupt-practices act which forbids the improper use of money in elections and requires sworn publication after election, by both candidates and campaign committees, of all money received and expenditures made.

1 See "Topics of the Time," in this magazine for September, 1891.

OPEN LETTERS.

M. Gounod and his Ideals.

IN a private letter to a friend last summer the composer of "Faust" announced that the end of his creative career was come; susceptibility to heart-disease would prevent him hereafter undertaking any work of magnitude. M. Gounod is now an old man and much broken in health. He spent last summer in Versailles, but, I believe, returned to Paris in time to witness a performance of "Lohengrin" at the Grand Opera, and give expression to his admiration for the genius of Richard Wagner. Of late years his life has flowed along as peacefully as a meadow brook, and its conclusion bids fair to have the tender grace of a dying day of our Indian summer. It is a well-rounded life which in its decline is modulating into the key of its early years. In his old age M. Gounod recurs to the ideals of his youth and sets an example for the things that are lovely and of good repute in morals and art.

The critical historian of the future will look for the explanation of the "Faust" score in the German models which the composer chose early in his career. They were Mozart, Von Weber, and Wagner. For Mendelssohn, too, he had much love, and, indeed, the two men were not unlike in their gentleness of character and its lyrical expression. Sympathy for Mendelssohn's ideals turned his thoughts toward the oratorio nearly half a century ago, and found expression, mild but unmistakable, in his" Redemption," with its revival of the use of the chorale. The gospel of dramatic expression Gounod read in the scores of "Don Giovanni," "Der Freischütz," and "Lohengrin." Like Verdi, he knew the score of "Don Giovanni" by heart already as a conservatory pupil; but, unlike Verdi, he never became satiated with it. Young Verdi respected but did not love Mozart's masterpiece. Young Gounod's admiration for it was a passion which remained perennial and only a short time ago bore its loveliest fruit in a glowing eulogy and analysis of the work, printed for the benefit of the young composers of France. "The score of 'Don Juan,' " writes the composer of "Faust," "has influenced my whole life like a revelation; for me it always was and has remained the embodiment of dramatic impeccability." That such an admirer of Mozart should appreciate Von Weber at his true value and have an open heart for the newer evangel of Wagner is not at all surprising; that he did not follow Wagner to the logical outcome of his theories was due to the essentially lyrical trend of his genius. Gounod is an

eclectic musician, and therefore, in the nature of the case, he could not be a revolutionary force in French art; but his "Faust" worked a greater change in the manner of operatic composition in France than all the reformatory harangues of Berlioz.

In his youth Gounod's nature had a strong religious leaning. Even after he had won the Prix de Rome and was living as a pensionnaire of the Institute in the Villa Medici, his love for music had to struggle for supremacy with an ardent desire to enter the priesthood. The painter Ingres in Rome drew a portrait of the dreamy youth in monk's dress. His first compositions were ecclesiastical. A letter from Fanny Hensel, written in 1843, says that the young Frenchman, who was much liked in the Mendelssohn household, was then engaged on an oratorio entitled "Judith." What became of that work I do not know, but the old predilection for the oratorio form returned when M. Gounod came to complete the edifice of his works. "The Redemption" and "Mors et Vita" are its expression. The same tendency may be found in his choice of operatic subjects. "Polyeucte" tells a story of Christian martyrdom, and when Dr. Hanslick, of Vienna, visited M. Gounod twelve or fourteen years ago, he found him engrossed in the sketches for an opera to be called "Abelard and Heloïse," which, the composer explained, was not to celebrate the passion of the famous lovers so much as it was to symbolize the struggle between enlightened conviction and petrified dogma. The work was put aside, but the fact of its conception remains to speak of the blending of fancifulness and earnestness, liberality and devoutness, in Gounod's religious nature.

H. E. Krehbiel.

The Camp Morton Controversy.

I .- COMMENTS ON DR. WYETH'S REJOINDER.

I DO not care to make any extended reply to the rejoinder by J. A. Wyeth to my article in the September number of The Century, concerning the charges contained in an article entitled "Cold Cheer in Camp Morton" in the April number of The Century.

This controversy has reduced itself to a question of veracity between certain ex-Confederate prisoners of war and ex-Union officers of the highest standing and respectability who have enjoyed the confidence and respect of the communities in which they have lived for a long series of years, and they are sustained in

and are turning out "better-educated men, in all that the term implies, than the average graduate of the ordinary college." Messrs. Jordan and Goodwin had contended that old ideas as to what constituted a liberal education had passed away, and new ideas, adapted to the demands of the time, had taken their place. The new ideas, briefly summarized, are: not to compel all students to take the same course of study, with Latin and Greek as the basis, but to permit each student to take the course which best suits his tastes and abilities, and to supply for each student the best facilities for pursuing the course of his choice.

It is not our purpose to follow the ramifications of this discussion, or to attempt to decide which method of education can more accurately be pronounced "higher" or "liberal." The great and encouraging facts which Mr. Comey's statistics and the discussion disclose are that the colleges of the country are attracting a steadily increasing number of students, and are making such changes in their methods of instruction as enable them to extend their influence to fields hitherto not occupied by them. Upon one point the disputants are agreed, and that is that the main object of education is to make good citizens. General Walker calls it adding to the "manhood and citizenship of the country," and President Gilman, in a passage which deserves to be put on record as a comprehensive and accurate definition, says of "liberal education":

In every "liberal" course these elements should be comliterature, science, history, and philosophy. The more one has of all these elements the better. It is obvious also that a "liberal" education is not to be limited by the period denoted to the college source or course in technol. riod devoted to the college course or a course in technology. It begins in the nursery, it goes on in the domestic circle, it continues through school, college, and university, and ends only with life. All science, all knowledge, all culture, not essential to bread-winning, is "liberal," school of science. I may go further and say that "liberal" culture may be acquired without the aid of seminaries; scholars may appear in the walks of business, in the soli-tudes of rural life, on the boards of a theater, in politics, in philanthropy, in exploration; and they cannot be produced by narrow, cramping, or servile training.

All this amounts to saying that the best college course is only a beginning, and that its main purpose, its highest achievement, is to start the student in the right direction. "Culture," says Matthew Arnold, "is reading; but reading with a urpose to guide it, and with system. He does a good work who does anything to help this; indeed, it is the one essential service now to be rendered to education." That is what the college ought to teach first of all, and if the instruction be thoroughly imparted, the foundation of a liberal education is laid. Montaigne said he read books that from them he might learn "how to live and die well." Every student who is taught to read or study with a purpose finds in his books the secret of how to live and die well; that is, learns how to become a good citizen, that most valuable influence in a community. He carries into life a deference to acquired knowledge, a respect for the teachings of experience, which are of incalculable value among a people prone to think that they can solve all problems for themselves, and have no need to profit by the results of similar experiments by the generations that have preceded them.

Especially is this true of the study of political science, to which many of our colleges, following the excellent example of Harvard and Columbia, are devoting increasing attention. In this they are doing the whole country a most useful and greatly needed service: a subject which we shall soon discuss in its bearings on public life.

OPEN LETTERS.

The Pressing Need of Forest Reservation in the Sierra.

NONE too early comes the announcement that the Interior Department has under consideration the establishment of a very extensive forest reservation in California's Sierra Nevada, to the south of the Yosemite National Park, and including the wonderful King's River Cañon described by Mr. John Muir in the November CENTURY.

It will be remembered that by a recent enactment of Congress the President was authorized to withdraw from the offerings of public lands for sale those districts where the preservation of the forests might appear, in his discretion, to be necessary for the security of the supply of water for irrigation and other purposes. Under that act an important addition has been made to the Yellowstone National Park, and, more lately, a territory largely exceeding a million acres in extent has been designated as a reservation in the State of Colorado, the area thus set apart covering much of the higher watershed of the Colorado River. The projected new reservation in California would perhaps be the most

notable of all these judicious undertakings, whether the extent of domain be considered, or attention be turned to the varied splendor of the scenery, or to the effect as insuring a permanent yield of lumber according to the efficiency of the system of forestry, or yet to the influence on agriculture in the lowlands. As contemplated, the proposed reservation would include the sources to which the upper San Joaquin Valley, comprising the great counties of Fresno, Tulare, and Kern, must forever look for a supply of water for that irrigation which is necessary to successful agriculture in this land of inadequate rainfall. It would also include those steep declivities on which, if denuded of their restraining vegetation, the melting snows and falling rains would unite to form torrents that would, a little later, take the form of such devastating floods as have but recently taught the Spaniards how Nature revenges herself on those who trifle with her forces.

At present the population of the whole valley region overlooked by the proposed reservation is probably not more than 70,000 in number. Under comprehensive irrigation the land would easily be able to support several millions of inhabitants, and all in a high average of rural or urban comfort. Even a cursory inspection of the wealth of those irrigated oases which have been created at intervals along the line of the railway, during the last dozen of years, is enough to carry conviction that the head-gate of the irrigation ditch is the door to a future whose magnificence cannot easily be overdrawn by the liveliest fancy. In the county of Fresno alone there are now about 150,000 acres actually watered by means of canals, and thus brought into an admirable condition of prolific and highly remunerative husbandry. The canals existing would suffice for the irrigation of several times the acreage named, and the counties of Tulare and Kern are ambitious rivals of their neighbor in the matter of profitable agriculture through the vivifying influence of the ditch. Yet all that has been accomplished and the vastly greater results that may be accomplished in the proximate future are imperiled to satisfy the desire of a few men for gain, and by the supineness of the many in the face of dangers that promise disaster to the well-being of their children, if not of themselves.

That the hazards which have accumulated under the policy of indifference are not imaginary is perfectly well known to such persons as have considerable knowledge of the mountains. Not long ago one of the bestinformed landed proprietors in the San Joaquin Valley related that he had traveled over about 700 square miles of the King's River watershed, and had rarely seen a tree under thirty years of age. The age of the youngest trees at all commonly noticeable would therefore nearly coincide with the invasion of the mountains by numerous bands of sheep, and with the attendant fires due to negligence or deliberate incendiarism. With no younger growth coming on and with the mature or maturing trees rapidly vanishing in flame, or by natural causes, it is easy to foresee what will soon be the fate of those forests (which are occasionally described as "inexhaustible") under the policy of public inaction. Add to the destructive agencies already at work the uncontrolled operations of lumbermen, who are only now beginning to push their industry on a formidable scale in the part of the Sierra in question, and the disappearance of the forests that stand guard over the welfare of the San Joaquin Valley becomes a supposition whose realization may well be witnessed by men now long past youth. "If the policy heretofore followed," says an unusually well-informed correspondent of the writer, "be much longer continued, we shall have so denuded the rock of our mountain ridges that within half a century all our streams will be torrents for a few brief weeks in spring and dry beds of sand all the rest of the year. Massive reservoirs of masonry will have to be built at vast expense to take the place of the beautiful reservoirs of pine and redwood which nature created."

With reference to the advisability of the projected reservation, the present writer was led of late to make some extended inquiry concerning the opinions held by men of acknowledged enlightenment, of large views, and whose interests in the San Joaquin Valley are of undoubted extent. The result of this inquiry was to disclose a uniform agreement in the idea that there should be an immediate abandonment of the old policy of laisser-faire. As fairly representative I quote, by permission, the substance of the reply made by Hon. C. C. Wright, a gentleman known to all Californians

as the author of the Wright Irrigation Act, whereby the system of irrigation districts sustained by public taxation has been introduced as one of the most noteworthy parts of the order of the State. Mr. Wright's letter says:

I think it would be universally admitted that the existing supply of water in the streams, if all conserved, is sufficient to meet present and, very likely, prospective uses, so far as the demands of irrigation go. The paramount importance of comprehensive irrigation is almost, if not quite, unanimously admitted. The interests to be served by the removal of the forests, as compared with those to be secured by comprehensive irrigation in the great valleys of California, are insignificant. So far as additional reservations will secure the use and deter the abuse of forest areas, they ought to be established. I consider Federal control and action as the only practicable means of affording the protection needed.

To the San Joaquin Valley the subject of transportation by water is second in importance only to that of irrigation. Such transportation will, however, soon be listed among the dim recollections of things that were, or that might have been, unless prompt measures shall be taken to restrain the flood-borne detritus from the hills, now laid bare by the hoof of the sheep and by fire. As a sufficient warning of the most practical description, one need only point to the ruined navigation of the Sacramento River, and to the buried farms lining the course of that stream, which were, not so many years ago, the pride of northern California. The whole of that melancholy and calamitous work is the result of causes strictly analogous to the denudation which has made such progress on the sierras that slope toward the valley of the San Joaquin, and which has already had the most injurious effects on the navigation of the river of that name. There is one stretch of thirteen miles where the detritus from the mountains has during the last few years formed bars that divert the water into sloughs leading off from the main channel. On this stretch boats drawing six feet of water had formerly no difficulty in navigating. I am informed by a letter of Mr. H. J. Corcoran, of Stockton (who represents the giver navigation interests), that the channel has now a maximum depth of thirteen inches. It is perhaps needless to add that Mr. Corcoran "is in every case in favor of the preservation of the forests."

In the case of the Sacramento River the National Government has interfered to prevent further destruction; but before the interference the damage had reached such an extent that if a practicable remedy be at all applicable it will be attained only by the means of heavy pecuniary expenditure. It is not too late to save the San Joaquin. Little money will be needed for the undoing of the mischief already wrought. And for the future there need be no fear if the plain, common-sense method of precaution be adopted,—the method of maintaining at every point the only means—to wit, forest vegetation—by which the mountains can be prevented from becoming the worst foe, instead of the best friend, of the inhabitants of the valley.

After nearly six continuous years spent in the Sierra, the writer entertains not a shadow of doubt of the truth of what is said by Mr. Emil Newman, of Porterville, Tulare County:

I, for one, believe that the reservation of forest lands in the mountains, and intelligent legislation in regard to the preservation of the forests, are absolutely necessary in order to prevent this valley from reverting to desert conditions.

George G. Mackenzie.

TOPICS OF THE TIME.

Words are Deeds, and May be Crimes.

THE CENTURY has never undertaken any duty with more serious consideration, and under a greater sense of responsibility, than the publication, in the present number, of Judge Gary's account of the trial and condemnation of the Chicago Anarchists. We believe that a better knowledge of that momentous event will be beneficial to civilization and conducive to good order throughout the world. The solemn statement of Judge Gary is prepared not only for the profession of the law: it is submitted not merely to the judgment of experts, but to the opinion of mankind—and, as Lowell says, "All free governments, whatever their name, are in reality governments by public opinion, and it is on the quality of this public opinion that their prosperity depends."

A study of the testimony and finding shows that not only philosophically, but legally, words are deeds, and that for words leading to crime a man must suffer the extreme penalty of the law. We are willing to give up pages of the magazine to the partly fanatical and partly purely vicious ravings of the anarchists, not merely with a view to showing the nature of the evidence on which they were convicted, but also in order that the minds of men may be familiarized with these phrases; so that wherever they are heard it may be understood that this sort of language is likely to be but the spluttering of the end of a fuse, or the signal for the throwing of a yet more deadly bomb of dynamite.

But perhaps the most important part of the paper is the appeal of the writer (himself trained in manual labor) to working-men everywhere to avoid being led by professional lawbreakers and anarchists into a position of antagonism to the community. In a free country, where the people make their own laws, and where public sympathy is on the side of justice in every labor contest, so long as that side remains untainted by crime—in such a country the quickest way to reform is not the way of violence and cowardly cruelty, and destruction of government, but the path of honor, patriotism, and common sense.

There is nothing so radical as justice. It is the one safe cure for all social and political evils.

A Memorable Advance in Forest-Preservation.

THE people of the United States in general, and of the State of California in particular, owe Secretary John W. Noble, of the Harrison administration, an eternal debt of gratitude for his intelligent, zealous, and invaluable services to the cause of forest-preservation. We have had occasion more than once to express our hearty appreciation of his efforts in this direction, and we rejoice at a fresh opportunity to do so which comes in the establishment of a memorable series of forest reservations, performed on the eve of his departure from office.

By this policy, accomplished by President Harrison's proclamation in accordance with the powers conferred upon him by Congress in 1891, there has been made, first of all, a new reservation south of and adjoining the Yosemite National Park by the addition of over four million acres, comprising that portion of the Sierra Nevada which is at once the most mountainous and most grandly beautiful in the United States. It contains over six thousand square miles, with an altitude ranging from 3000 to 15,000 feet, composed almost entirely of lofty mountains and great cañons, and reaching the highest elevation in the Union, outside of Alaska. It includes the wonderful King's River Cañon, called by Mr. John Muir "a rival of the Yosemite," in his article with that title in THE CENTURY for November, 1891, and by him there suggested as a national reservation. This is, however, but a fraction of Secretary Noble's far-reaching reserve, which includes nearly if not quite all the big-tree (Sequoia gigantea) forests not before reserved, and has in addition the finest forests of sugar-pine, cedar, and other valuable trees known to the world. In addition to all these attractions and treasures, it is the source of the water-supply of the San Joaquin Valley, and as such the reservoir of the new wealth which irrigation has developed in the arid lands of that now beautiful region. Mr. Cleveland's administration will probably continue this policy by making another reserve of the northern sierra, from the Yosemite National Park to Mount Shasta.

But this is not all. Three other extensive mountain reserves on the Pacific slope have been created by the same wise policy,—one extending from Los Angeles to San Bernardino, one thence eastward to the San Gargonia Pass, and the third, in the State of Washington, embracing Mount Rainier,—the three aggregating about 2,500,000 acres. Hardly less important is the reservation of the territory contiguous to the Grand Cañon of the Colorado, which has also been effected by Secretary Noble's forethought. The record thus made by the late administration, like the accomplishment of International Copyright, will reflect credit upon it when other seemingly more important features are dimmed by time.

The chief gain is, primarily, to California. By this series of official acts President Harrison and Secretary Noble have completed the reservation of a chain of forest uplands that now includes all the elevated region which furnishes the water-supply for the productive regions of California south of San Francisco. The value of this great preserve, extending almost continuously for nearly the entire length of the State, and comprising in all between six and seven millions of acres, cannot be estimated. Californians who have seen what they had supposed to be barren and utterly worthless lands transformed into bounteous acres under the magic touch of irrigation, know that the value to the State of having its water-supply secured for all time against destruction or impairment is incomputable.

The establishment of these reservations will add strength to the movement now in progress at Sacramento to recede the Yosemite Valley and the Mariposa Big Tree Grove to the United States. The necessity of more securely guarding these two great treasures ought now to be more apparent than ever to the people of California. They ought to see the wisdom of allowing control of the entire tract to be consolidated in the hands of the General Government. In this way alone can it be secured for all time against the ravages of ignorance, the greed of "rings," and the onslaughts of vandalism. If the effort to procure voluntary recession shall fail, it will be the duty of Congress to repeal the grant of 1864. For this course it is certain that a congressional inquiry will reveal only too substantial grounds. Once the valley is in the hands of the Government, the services of Mr. Frederick Law Olmsted should be secured to lay down the principles on which it should be treated. Meantime he should be selected to act as adviser to the bureau in charge of which the scenic portions of the new parks shall be placed.

That the vandals are always on the watch was shown anew by the attack which was made upon the Yellowstone National Park in the late Congress. Cooke City, a small mining-camp situated on the northeast corner of this park, had two bills before Congress which ought to have been embodied in a single measure, and entitled "An act to mutilate the Yellowstone National Park, rob it of its most beautiful natural scenery, and ruin it as a game-preserve." One of the bills gave Cooke City the right to build a railway across the Park, and the other, in order to evade the technical objection to a railway within the Park, proposed to cut off all that portion of the Park including and lying outside the line of railway, restoring it to the public by making the railway line the new boundary. In exchange for the tract thus cut from the park it was proposed to add another tract, somewhat larger, but which is an inaccessible mountain region, which tourists could never visit, and which heavy winter snows render incapable of supporting game. It was proposed by the Cooke City vandals to substitute this practically valueless region for what is undoubtedly the most beautiful portion of the Park, to run a railway along the route which is destined by nature as the great scenic route of the Park, and to drive all game away from the best pasturage by putting a railway through the center of it. The only defense of this outrageous proposal was that the Cooke City mines are in need of a railway outlet. Granting the paramount importance of this need, the proposal to ruin the Park in its behalf is disposed of by the fact that a railway outlet can be secured in several other directions, outside the Park. There is, in fact, no possible excuse for this vandalism, and no Congress ought to listen to its advocates for a moment.

The policy set on foot by the Harrison administration should also be of use in the establishment or management of State reserves. In regard to the preservation of the Adirondack forest in New York State, a very great advance was made in 1892, when the legislature passed an act creating the Adirondack Park. This was the final result of a long and discouraging struggle. Originally the Adirondack wilderness comprised 12,000 square miles, but this area has been reduced by clearings, till it now contains only about 5600 square miles, or about 3,700,000

acres. Of these 3,700,000 acres, about 900,000 are owned by the State, but not in an unbroken tract. In fact fully one half of the State's lands were, at the time the Park was authorized, situated in detached places around the borders of the wilderness. Under the Park Act the commissioners have power to sell some portions, and with the money thus obtained buy new ones, and thus create a solid tract which shall be owned by the State, and, in the language of the act, "be forever reserved, maintained, and cared for as ground open for the free use of all the people for their health or pleasure, and as forest lands necessary to the preservation of the head waters of the chief rivers of the State, and a future timber supply." By this act the State, it is believed by the commissioners, will be able to increase its acreage, and, by consolidating its holdings, will be able to adopt and carry out a rational system of forestry, which will preserve and protect the forests, and make them a blessing to all its people. About 8000 acres have already been purchased under the act.

What the National Government has done for the Pacific Slope, and what New York has done for the Adirondacks, New Hampshire is called upon to do for the White Mountains. A loud cry of alarm in their behalf has been sent forth during the past few months, and, unless it be heeded before the present year rolls away, the chief natural glory of New England may have been ruined forever. The danger lies in the fact that the White Mountains are owned by private persons, Mount Washington itself being to-day private property. Experience everywhere has shown that private ownership cannot be depended on to preserve natural beauty in scenery which has a high market value. Year by year the lumbermen have been cutting their way into the White Mountain region till now they threaten to destroy those tracts which are its greatest glory, and which constitute the chief charm for the thousands of visitors who resort thither year after year from all quarters of the land. Contracts were made several months ago under which the Pemigewasset wilderness, that magnificent stretch of pathless forest, was to be invaded by the destroyer with his gangs of cutters and his steam sawmill. Another assault was also planned upon the region about the Flume, and still another upon Albany Intervale. These attacks, if carried out, would completely strip the mountains of their magnificent and imposing vesture, depriving the region of its glory and beauty, and taking from the rivers of the State their supply of water. Small wonder that the threat of such appalling devastation - nay more, such desecration - aroused the whole country, and that appeals were sent from all quarters of the land to have the hand of the destroyer stayed.

The alarm was first sounded by Mr. J. B. Harrison of Franklin Falls, N. H., the leader in the successful movement by which Niagara Falls was made a State reservation. He has done a great deal to arouse the people of the country to the danger, and to induce them to bring pressure upon the people of New Hampshire to act at once, and save from annihilation their greatest treasure, not merely in its natural beauty, but in its power to attract visitors and money to the State. He started a fund which received contributions from public-spirited persons everywhere, and expressions of warm sympathy which have done a great deal to arouse the astonishingly lethargic public opinion of New

Hampshire to the need of action. Professor Charles Eliot Norton, of Harvard University, was one of the first to respond with a contribution to the fund, saying of its object:

The saving of the forests of New Hampshire is not a mere local interest. It is of national concern, - nay, it is more than this,—it is a patriotic duty. Each generation is a trustee of the natural wealth and beauty of its native land for the generations to come. We are not owners in fee, and we have no right to squander the inheritance which belongs to others equally with ourselves.

That might well be applied to every movement for forest-preservation, and it ought to be made the text for missionary work in all parts of the land, for there appears to be no quarter in which the destroyer is not at work. Simultaneously with the plea for the White Mountains one was heard for aid to save the beautiful forests in Southern Kentucky and Tennessee, in the vicinity of Cumberland Gap. A tanning company is working for the ruin of this region by removing the bark from thousands of trees, leaving their trunks to rot upon the ground, and making great rents in the forests thousands of acres in extent.

This wide-spread raid upon American forests ought to have the effect of greatly arousing public sentiment throughout the country to the need of national concentration of effort for forest-preservation. It ought to result in the creation of active interest in the work which the American Forestry Association is seeking to accomplish - that is, the "advancement of educational, legislative, or other 'measures" tending to the promotion of an interest in the preservation, renewal, and management of our forests. A great deal has been accomplished by this association, but a great deal more will be accomplished if all persons interested in its useful and most genuinely patriotic work will become members of it, and give it all the aid in their power. Public sentiment is visibly aroused, but it is only by unity and systematic direction of effort that results can be achieved.

Parks in and near Large Cities.

An act was passed by the Massachusetts legislature of 1892 which ought to be imitated by the legislature of every other State which contains one or more large cities. It provides for the appointment by the governor of three men, to constitute a board of metropolitan park commissioners, whose duty it shall be to "consider the advisability of laying out ample open spaces, for the use of the public, in the towns and cities in the vicinity of Boston," and to make a report, accompanied by maps and plans, to the next session of the legislature. Governor Russell appointed Charles Francis Adams of Quincy, Philip A. Chase of Lynn, and William de las Casas of Malden as members of the commission, and they proceeded immediately to a vigorous prosecution of the work assigned them.

It is the intention of the commission to ascertain first what is the present public holding of every community within twelve miles of the State House. The next step will be to inquire what more is needed. All public beaches near Boston will be examined with a view to seeing what rights the public already has in them, and what additional rights and improvements are desirable. River borders, like those of the Charles River, will be examined with a view to ascertaining if the river

can be made a pleasure waterway with public rights upon its banks. Finally, the question of making a State reservation of about four thousand acres of Blue Hills, the highest tract of land near Boston, will be considered, and a recommendation made.

It is easy to see at a glance what a public-spirited movement this is, and what important and far-reaching results may be the outcome. It is a very necessary movement for Massachusetts to make, for the most desirable portions of the waterways and beaches about Boston are being so rapidly absorbed for private dwellings and summer residences, that the public is in a fair way to be shut out entirely from enjoyment of them. It is the purpose of the commission to evolve a comprehensive plan for saving open places here and there in all directions about the city, to be set apart for public uses and pleasure-grounds for all time, and to

urge its adoption by the legislature.

At the same time, the interior needs of Boston itself ought not to be neglected. In this direction a good example has been set by New York, which all other cities would do well to follow. Not only have large tracts in the upper and newer sections of New York been acquired and set apart for park usage, but liberal provision has been made for constructing in the most densely populated districts of the older city an indefinite number of small parks, which will bring the benefits of light and air to the inhabitants of the crowded tenement-houses. Under an act of the legislature passed in 1887, one million dollars a year is available for this purpose, the city being authorized to issue bonds to that amount annually for an indefinite period. In accordance with the terms of this act, work is at present in progress on two small parks, and proceedings have been instituted for the acquisition by the city of the land necessary for the construction of four others, all situated in portions of the city in which their advent will be an inestimable blessing to thousands of poor people, old and young, to whom the large and remote parks of the city are virtually inaccessible because of the time and money required in reaching them. No more worthy or humane use of public money could be devised than such expenditure of it as this. It beautifies the city, and at the same time adds immeasurably to the happiness and health of the most helpless portion of its inhabitants.

What the commission is doing for Boston and its suburbs another organization, called the Trustees of Public Reservations, is seeking to do for the whole State of Massachusetts. It has issued a public appeal in which the scope of its work is defined as follows:

TO WHOM IT MAY CONCERN:

In your part of Massachusetts are there any beautiful beaches, bluffs, hilltops, ravines, groves, river-banks, or

Would it not be well to secure for the public the most interesting of these places before their beauty is de-stroyed, or they become fenced in for private gain or

pleasure?

Owners of such places, by giving them into the keeping of the Trustees of Public Reservations, will enhance the value of adjacent real estate. Neighbors of such places, by giving them into the charge of the trustees, may profitably increase the attractiveness of their district. Men and women of Massachusetts who have gained wealth within or without her borders, can find no more acceptable way of benefiting their native land than by dedicating one or more of her places of beauty to the enjoyment of all, forever.

Hampshire to the need of action. Professor Charles Eliot Norton, of Harvard University, was one of the first to respond with a contribution to the fund, saying of its object:

The saving of the forests of New Hampshire is not a mere local interest. It is of national concern, - nay, it is more than this,—it is a patriotic duty. Each generation is a trustee of the natural wealth and beauty of its native land for the generations to come. We are not owners in fee, and we have no right to squander the inheritance which belongs to others equally with ourselves.

That might well be applied to every movement for forest-preservation, and it ought to be made the text for missionary work in all parts of the land, for there appears to be no quarter in which the destroyer is not at work. Simultaneously with the plea for the White Mountains one was heard for aid to save the beautiful forests in Southern Kentucky and Tennessee, in the vicinity of Cumberland Gap. A tanning company is working for the ruin of this region by removing the bark from thousands of trees, leaving their trunks to rot upon the ground, and making great rents in the

forests thousands of acres in extent.

This wide-spread raid upon American forests ought to have the effect of greatly arousing public sentiment throughout the country to the need of national concentration of effort for forest-preservation. It ought to result in the creation of active interest in the work which the American Forestry Association is seeking to accomplish - that is, the "advancement of educational, legislative, or other 'measures" tending to the promotion of an interest in the preservation, renewal, and management of our forests. A great deal has been accomplished by this association, but a great deal more will be accomplished if all persons interested in its useful and most genuinely patriotic work will become members of it, and give it all the aid in their power. Public sentiment is visibly aroused, but it is only by unity and systematic direction of effort that results can be achieved.

Parks in and near Large Cities.

An act was passed by the Massachusetts legislature of 1892 which ought to be imitated by the legislature of every other State which contains one or more large cities. It provides for the appointment by the governor of three men, to constitute a board of metropolitan park commissioners, whose duty it shall be to "consider the advisability of laying out ample open spaces, for the use of the public, in the towns and cities in the vicinity of Boston," and to make a report, accompanied by maps and plans, to the next session of the legislature. Governor Russell appointed Charles Francis Adams of Quincy, Philip A. Chase of Lynn, and William de las Casas of Malden as members of the commission, and they proceeded immediately to a vigorous prosecution of the work assigned them.

It is the intention of the commission to ascertain first what is the present public holding of every community within twelve miles of the State House. The next step will be to inquire what more is needed. All public beaches near Boston will be examined with a view to seeing what rights the public already has in them, and what additional rights and improvements are desirable. River borders, like those of the Charles River, will be examined with a view to ascertaining if the river

can be made a pleasure waterway with public rights upon its banks. Finally, the question of making a State reservation of about four thousand acres of Blue Hills, the highest tract of land near Boston, will be considered, and a recommendation made.

It is easy to see at a glance what a public-spirited movement this is, and what important and far-reaching results may be the outcome. It is a very necessary movement for Massachusetts to make, for the most desirable portions of the waterways and beaches about Boston are being so rapidly absorbed for private dwellings and summer residences, that the public is in a fair way to be shut out entirely from enjoyment of them. It is the purpose of the commission to evolve a comprehensive plan for saving open places here and there in all directions about the city, to be set apart for public uses and pleasure-grounds for all time, and to

urge its adoption by the legislature.

At the same time, the interior needs of Boston itself ought not to be neglected. In this direction a good example has been set by New York, which all other cities would do well to follow. Not only have large tracts in the upper and newer sections of New York been acquired and set apart for park usage, but liberal provision has been made for constructing in the most densely populated districts of the older city an indefinite number of small parks, which will bring the benefits of light and air to the inhabitants of the crowded tenement-houses. Under an act of the legislature passed in 1887, one million dollars a year is available for this purpose, the city being authorized to issue bonds to that amount annually for an indefinite period. In accordance with the terms of this act, work is at present in progress on two small parks, and proceedings have been instituted for the acquisition by the city of the land necessary for the construction of four others, all situated in portions of the city in which their advent will be an inestimable blessing to thousands of poor people, old and young, to whom the large and remote parks of the city are virtually inaccessible because of the time and money required in reaching them. No more worthy or humane use of public money could be devised than such expenditure of it as this. It beautifies the city, and at the same time adds immeasurably to the happiness and health of the most helpless portion of its inhabitants.

What the commission is doing for Boston and its suburbs another organization, called the Trustees of Public Reservations, is seeking to do for the whole State of Massachusetts. It has issued a public appeal in which the scope of its work is defined as follows:

TO WHOM IT MAY CONCERN:

In your part of Massachusetts are there any beautiful beaches, bluffs, hilltops, ravines, groves, river-banks, or

Would it not be well to secure for the public the most interesting of these places before their beauty is de-stroyed, or they become fenced in for private gain or

pleasure?

Owners of such places, by giving them into the keeping of the Trustees of Public Reservations, will enhance the value of adjacent real estate. Neighbors of such places, by giving them into the charge of the trustees, may profitably increase the attractiveness of their district. Men and women of Massachusetts who have gained wealth within or without her borders, can find no more acceptable way of benefiting their native land than by dedicating one or more of her places of beauty to the enjoyment of all, forever.

It would be difficult to conceive of projects more deserving approval than these we have mentioned. We have urged many times, in this and other departments of THE CENTURY, the great public value of park-creation and -preservation. Every city in the country ought to have a commission like that of Boston appointed to secure park-preserves in its suburbs. The time to secure such preserves is before the suburbs are closely built up and before the land becomes too valuable to be spared for such use. There are suburbs within the vicinity of New York and other large cities which have been allowed to be built up solidly without leaving a single large open space for public uses. This is a blunder which will be seen to be more and more grievous as time goes on. Other cities ought to see to it that so far as they are concerned the blunder shall not be committed.

In regard to the preservation of spots of great natural beauty in the States at large, - that is, in parts remote from large cities,- the matter of public ownership and public preservation is comparatively a simple one. The actual value of such places is usually not great, and the cost of acquiring them for public use would not be high. The value of their acquisition and preservation as a means for cultivating the esthetic sense of the people cannot be overestimated. Every picturesque hillside, rocky bluff, tumbling waterfall, shady ravine, cool grove, or sandy beach set aside for public enjoyment would be a constant object-lesson in natural beauty to all beholders - an object-lesson which local pride would be constantly enforcing. Aside from its esthetic usefulness, by enhancing the attractiveness of a community possessing it, it would add greatly to the marketable value of all adjoining property. There is scarcely a village in the land which has not within its borders at least one spot of this kind whose natural beauty well entitles it to preservation. What an immeasurable gain it would be to us as a people, if all these spots could be spared destruction, and set apart forever for public use and enjoyment! Why should not the example of Massachusetts be followed by that of every other State in the Union? The obvious advantages of the proposal are so great that if a few zealous persons take up the work of advocacy, there can be no doubt of speedy and hearty public approval.

The World's Fair and Landscape-Gardening.

The most remarkable point about the Chicago Fair is its beauty as a whole. Its great artistic success has been achieved because, at the very outset, before any of its buildings was planned, Mr. Frederick Law Olmsted was commissioned to lay out the site, and determine their positions and the character of the means of access to them.

This fact, we think, is now fully understood, not only by artists, but by a large part of the public. It cannot fail to be recognized by every intelligent person who visits Chicago this summer; and it will undoubtedly do more than anything else has ever done, or than any achievement of another kind possibly could do, to make Americans understand that the art which, for want of a more broadly inclusive term, we call the art of gardening (or landscape-gardening, although this word is quite as inadequate) deserves to rank with architecture, painting, and sculpture as a genuine fine art — as

an art of design in a very noble sense. The Fair will do this; it will show how important the assistance of the artist in gardening may be to the architect, and also that his help should be secured before the architect goes to work, and not, as is our common practice when we employ him at all, to "touch up" architectural results after they are finished.

Thus the Fair will be of great advantage to American art; or would be, but for a most unfortunate state of things. The Fair will stimulate our desire to employ landscape-architects; but unfortunately landscape-architects at all deserving of the name are very difficult to find. One can count on the fingers of a single hand the trained and tasteful workers in this department whom the United States possess. This was recently proved by the way in which the untimely death of Mr. Codman, Mr. Olmsted's young partner, was lamented as a public calamity. In any branch of art the death of so capable and energetic a man would have been a serious loss; but in his branch it has left a blank as great as though a score of our prominent painters or architects had died.

Probably more young Americans do not enter this profession because we have no regular schools of landscape-design, and it is consequently hard to determine how one may secure the best training. Therefore, in pointing out the probability that, for once, our demand for good artistic work may exceed the available supply, we hope to attract the serious attention not only of young men about to engage in their life's work, but also of the directors of our educational institutions, and of liberal citizens anxious to work for the public good. The establishment of a department of gardening art in connection with one of our universities or great technical schools would be both a novel and an extremely useful way of investing money for the benefit of the American people. It might best be established, perhaps, in Boston or Cambridge, owing to the neighborhood of the Arnold Arboretum, and to the fact that a more intelligent popular interest in such matters can be noted here than elsewhere in America - doubtless because of the influence of Mr. Olmsted and Professor Sargent, and of the late H. H. Richardson, who was the first among our architects practically to recognize the inestimable advantage of a brotherly accord between his profession and that of the landscape-architect. But in any place where facilities for acquiring at least the rudiments of architectural, engineering, and botanical knowledge already exist, a school of landscape-design would be of very great public benefit.

Arbor Day.

THE CENTURY needs to make no apology for devoting a considerable space in the present number to a day which, to the credit of our people, is coming to be celebrated more and more throughout the country. Mr. Bunner's poem and Mrs. Robbins's account of that unique institution the Arnold Arboretum, though bearing more directly, do not bear more importantly upon Arbor Day than the editorials in this department dealing with other phases of the subject, such as forest-reservation, landscape-gardening, and the establishment of city and suburban parks; for it would be but saving at the spigot and wasting at the bung to direct the energies of our people through laborious national organizations to the observation of Arbor Day, even with its

OPEN LETTERS.

The Use and Abuse of Executive Clemency.

HE recent pardon of the three anarchists confined in Joliet Prison for their share in the frightful Haymarket massacre of 1886 has brought into renewed prominence the dangerous manner in which the exercise of executive clemency may be abused. By his action in this case Governor Altgeld has perverted the fundamental theory of the pardoning power. He has invaded the jurisdiction of the courts by re-trying the case and examining the law and the facts-a duty which, under our system of government, is left to the judge and jury. In brief, he, who, as chief executive of the State, is bound to exert his utmost power to defend the law, has in this instance seemingly done his best to bring its administration into contempt. The exercise of the pardoning power should be so regulated as to subserve the best interests of the State. Governor Altgeld, however, has used the power of his high office, not to strengthen the hands of those whose duty it is to uphold law and order, but to rebuke and humiliate them.

The necessity for the existence of some power to pardon persons convicted of crime is recognized by everybody. Kent declares that such a power is indispensable, "since, otherwise, men would sometimes fall a prey to the vindictiveness of accusers, the inaccuracy of testimony, and the fallibility of jurors and courts." The exercise of executive clemency is not in itself obnoxious to the general sense of the nation, which is always willing to see justice tempered with mercy. Public opinion, therefore, may be divided as to the propriety of remitting the unexpired portions of the sentences imposed upon the Chicago anarchists, but it is unanimous in resenting the manner in which this particular act of executive mercy was performed. What peculiar facilities has the governor of Illinois for reversing of his own motion, and without any possibility of adequate examination, a case which was subjected to a full and exhaustive review by the Appellate Court of Illinois, and by the Supreme Court of the United States, both of which sustained the verdict of the lower court? Governor Altgeld had an undoubted right to pardon these prisoners if he so desired, but he had no right to assume the functions of an appellate court. He did not stop with the exercise of his prerogative. He was not content with simply pardoning the prisoners, but assumed to review the case and decide upon the legal points,-an unheard-of proceeding,-and then went out of his way to attack at great length the court before which the offenders were tried, the methods used at the trial, the rulings of the judge, and the verdict of the jury.

As everybody knows, there are three great divisions of authority in the government of every State—the executive, the legislative, and the judiciary. For a governor so to encroach upon the functions of the judiciary is a very dangerous thing. Indeed, the pardoning power could not be used more unwisely than by presuming to retry a case, and reverse and overturn all

the collected and corroborative decisions of the courts which have considered it. Nothing can be more dangerous to good government than for an executive to interfere with the other two departments of the government, assuming to do their work for them, and differently.

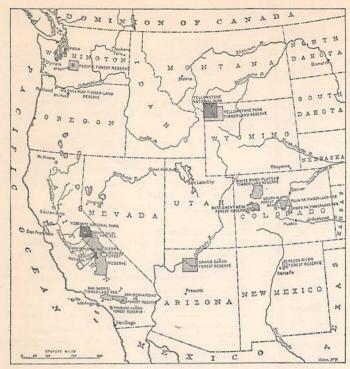
A bill was introduced in the New York legislature last winter which sought to take from the executive the power of pardon, allowing pardons to be granted by the courts alone, upon the presentation of new evidence of an extenuating nature. It is urged that the pardoning power is a judicial function, and that its lodgment in the executive is an anomaly in our institutions. It is also argued that the power is too important to be intrusted to a single official, especially a governor, who is usually overburdened with administrative duties, and who must find it impossible to devote the time necessary to a proper consideration of the numerous cases which are constantly before him. There is much to be said on that side of the question, but it should be remembered that there have been flagrant abuses of the pardoning power in States where the governor does not exercise the power. New Jersey, for instance, has a Court of Pardons; yet in New Jersey not long since the Jersey City ballot-box stuffers were set free through the action of this court. In at least twenty-eight States the pardoning power is vested in the governor alone. He may pardon a criminal without assigning any reasons for so doing, though as a rule the grounds upon which his decision is based are made public. If, however, he sees fit to review the decision of the trial court, and by his own pardon to annul its action, a governor should at least refrain from commenting unfavorably upon the action of the judiciary, which is an independent branch of the government. Such criticism on his part is calculated to work national mischief. since it naturally inspires the criminal classes with contempt for our courts and judicial methods.

Charles Robinson.

Our New National Forest Reserves.

Some misapprehension exists as to the real meaning and further consequences of the forest-reservation policy recently inaugurated by the General government. The fifteen great timber-land tracts reserved by the proclamations of President Harrison, upon the recommendations of Secretary Noble, are not national parks, although it is hoped that several will become such. The policy of creating such pleasure-grounds as the Yellowstone, Sequoia, General Grant, and Yosemite National Parks does not want for approval or defenders against the few settlers, miners, and herders who resent the withdrawal of such tracts from the public domain. Sentiment applauds the preservation of the natural scenery and the many objects of wonder and interest in those Rocky Mountain and Sierra parks, which under the care of the General government are to be enjoyed by the people for all time.

The practical and far-seeing policy of creating gov-



NATIONAL PARKS AND FOREST RESERVATIONS. DRAWN BY G. W. COLTON.

ernment forests and timber-land reserves must be popularized by campaigns of education, argument, and proof in the immediate region of the reserves. These forest tracts are reserved as climatic agents in equalizing temperatures; as protective measures to guard, preserve, and regulate the water-supply of neighboring agricultural regions; and as economic measures to preserve and cultivate supplies of timber for a time when the present reckless and wasteful lumbering system will have exhausted all forests not owned and reserved by the Government. Such reservations have been opposed in many sections by the very classes to be benefited and protected by the reserves. The average American, living only for the present day and the dollars of the moment, in this extravagant age of wood does not consider the lumberless condition of the next century, when wood will rank with metal as in Europe, when wood will be little used as a building material, when rails will be laid on metal ties, and stone piers and docks replace our wooden wharves resting on acres of piles. The guarding of the water-supply is the only argument that appeals to Western settlers, and several Colorado valleys with empty flumes and irrigation ditches already offer object-lessons as to the effect of wholesale forest destruction on any watershed.

Germany and France learned a century ago that forest destruction dried up the rivers, turned fertile plains to deserts, and increased climatic extremes. In those countries, forestry is an established profession, and wood-crops are cultivated as much as root or cereal crops. Russia has lately been taught the severe lesson of forest destruction, and in French and German schools has trained foresters to preserve and manage its timber lands and redeem its wastes. India, Australia, and Canada have systems of forest preservation and management. The government forests in India return an average net revenue of \$300,000 a year. Great forest fires are a thing of a past dark age in Canada, and its lumbermen coöperate with the Dominion authorities in protecting the forests.

The United States alone lags behind the age. It did not learn from others' experience to reserve in the beginning all timber lands for the General government, to derive a perpetual revenue from them, besides guarding the best interests of the people thereby. The Timber Culture Laws were a failure, as only ten per cent. of nearly 31,000,000 acres taken up were planted with trees as required. More government timber is destroyed by fire each year than is used by the people. In addition to \$8,000,000 annually lost in burned timber, the Government recovers an average of but one thirtieth of the value of timber stolen.

The United States sells its forest lands at \$2.50 an acre,

lumber companies indirectly acquiring a square mile of land for little over \$1600, while the timber on it is often worth \$20,000. The French government forests return an average profit of \$2.50 an acre annually from timber sales, or two and a half per cent. interest on the value of the land. The United States now owns only enough forest land to provide a continual timber-supply to its present population, if forests are managed and lumber used as in Germany. The United States is exactly in the position of a man making large drafts on and using up an immense idle capital, which, if properly invested, would return an interest sufficient for his expenditures. In 1885 the government of Bavaria sent an expert forester to study the timbers of the United States, who stated: "In fifty years you will have to import your timber, and as you will probably have a preference for American kinds, we shall now begin to grow them, in order to be ready to send them to you at the proper time."1

The European is amazed at the reckless destruction by lumbering in our Eastern States; Eastern lumbermen comment upon the wasteful methods of Northwest and California lumbermen; while John Muir of California has remarked that in Washington trees are evidently "a larger sort of pernicious weed," to be got

rid of in every way possible.

The forest lands in the Eastern and Middle States are all under private control, and will have to be purchased back by the States or associations, if protective forests for guarding the watersheds are to be established. New York State, while holding 715,000 acres of forest land in the Adirondack region, contemplates a protec-

1 See Report of the Division of Forestry, United States Department of Agriculture, 1890. B. E. Fernow, Chief of Division.

Vol. XLVI.-103.

tive reserve of 3,000,000 or 4,000,000 acres, by the purchase of adjoining tracts. The forests of the Adirondack League, covering 93,000 acres, were the first timber tract in the United States to undergo systematic forest management. Mr. George Vanderbilt's 10,000 acres in North Carolina form the first private estate where forestry is practised-i. e., a treatment of forest areas based upon scientific and rational principles, upon a knowledge of physical, physiological, and economic facts. The citizens of New Hampshire have voluntarily contributed to a fund for saving the remaining forest tracts in the White Mountain region, and the legislature of that State will doubtless take steps to acquire and manage permanent State forests. The Chickamauga Military Park Association is enlarging its area, and will save the acres of hemlock forests which the Tennessee tanning companies are destroying for the bark alone. The General government has lately ceded 40,000 acres of forest lands to the State of Minnesota for a public park. Professor Fernow, chief of the Forestry Division of the Department of Agriculture, in his annual pleas for the reservation and rational management of the government forest lands, has often urged that abandoned military reservations should be planted to forests for the benefit of the adjoining agricultural lands. The methods and benefits of systematic planting and care might be profitably exhibited on all military reservations in the United States, and model arboretums thus created throughout the Western States particularly.

The first steps of inquiry into the extent of forest areas of the United States were taken in August, 1876, when Congress, after repeated appeals, called upon the Commissioner of Agriculture for a report upon the timber lands and forest products of the United States. Professor Sargent's report on the woods and forests of the United States, in the report of the Tenth Census (1880), again called attention to the situation and its needs. A forestry division was established in the Bureau of Agriculture in 1881, but its only work for twelve years has been collecting data, furnishing statistics, and persistently urging and proving the necessity for the Government's reserving and systematically managing the fraction of forest lands remaining in its possession. Since 1882, the Forestry Division has had encouragement and practical aid from the American Forestry Association, which has regularly memorialized Congress, and through its attorneys argued the Government into reserving a part of its forest lands. The association has membership in thirty-four States, and has been instrumental in the organization of State forestry commissions. Its publications 1 supplement the able reports of Professor B. E. Fernow, and continue a campaign of education and enlightenment.

The Timber Culture Laws were repealed by act of Congress, March 3, 1891, and a final clause, which the American Forestry Association has the credit of originating and attaching, provided.

Sec. 24. That the President of the United States may, from time to time, set apart and reserve, in any State or Territory having public land bearing forests, any part of the public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as

¹ See also "Publications of the American Economic Association of Baltimore, Maryland," Vol. VI., No. 3, containing three papers on forest administration read at a joint session of the Amerpublic reservations, and the President shall, by public proclamation, declare the establishment of such reservation and the limits thereof.

In accordance with this act, Secretary Noble, after investigation by the General Land Office, made recommendations, and President Harrison issued proclamations, withdrawing from entry or sale these fifteen tracts of forest lands, their combined area, exclusive of the Afognak Reserve in Alaska, amounting to about twenty thousand square miles, or about thirteen million acres.

Reserves.	President's Proclamation.	Area.	
		Square Miles.	Acres.
ALASKA— Afognak Island, Kadiak Group. Fish-Culture and Timber Reserve	Dec. 24, 1892.		
ARIZONA — Grand Cañon Forest Re- serve. In Coconino Co	Feb. 20, 1893.	2,893	1,851,520
CALIFORNIA — San Gabriel Timber Land Reserve. In Los Angeles and San Bernardino Cos	Dec. 20, 1892.	868	555,520
Sierra Forest Reserve. In Mono, Mariposa, Fresno, Tulare, Inyo, and Kern Cos	Feb. 14, 1893.	6,400	4,096,000
San Bernardino Forest Reserve. In San Bernar- dino Co.	Feb. 25, 1893.	1,152	737,280
Trabuco Cañon Forest Reserve. In Orange Co.	Feb. 25, 1893.	78	49,920
COLORADO — White River Plateau Timber Land Reserve. In Routt, Rio Blanco, Gar- field, and Eagle Cos	Oct. 16, 1891.	1,872	1,198,080
Pike's Peak Timber Land Reserve. In El Paso Co.	Feb. 11, 1892, and supplemented March 18, 1892.	288	184,320
Plum Creek Timber Land Reserve. In Douglass Co.	June 23, 1892.	280	172,200
South Platte Forest Re- serve. In Park, Jeffer- son, Summit, and Chaffee Cos.	D 0		60
Battlement Mesa Forest Reserve. In Garfield, Mesa, Pitkin, Delta, and	Dec. 9, 1892.	1,068	683,520
Gunnison Cos	Dec. 24, 1892.	1,341	858,240
Taos Cos	Jan. 11, 1892.	486	311,040
Washington — Pacific Forest Reserve. In Pierce, Kittitas, Lewis,	June 17, 1892.	222	142,080
and Yakima Cos Wyoming — Yellowstone National Park	Feb. 20, 1893.	1,512	967,680
Timber Land Reserve. On the South and East of the Yellowstone Na- tional Park	March 30, 1891, supplemented Sept. 10, 1891.	1,936	1,239,040

Actual settlers and miners within the boundaries are not interfered with, but as such reservation prevents any additions to the little communities, these pioneers will naturally be inclined to seek more populous neigh-

ican Economic and American Forestry Associations, December, 1890, by Messrs. Gifford Pinchot, Edward A. Bowers, and B. E. Fernow, which furnish an epitome of the whole subject.

borhoods. While the natural scenery and the wild game are preserved as in a national park, the proper administration and preservation of these protective and economic forests will benefit the adjoining regions, and their treatment upon the best economic principles furnish object-lessons to private owners of forest lands. They must be protected from fire and depredations if nothing else can be done. The preservation of the underbrush and the "forest cover," - the thick mat of leaves and twigs covering the soil, - upon which tree growth and even water flow so greatly depend, are next considerations, and broad fire lanes must be cut to enable even the temporary patrols to save the forests until they are in charge of foresters. The extension of the Yellowstone National Park was the first reserve made under the new act, and the first proclamation followed as quickly as the necessary plats and papers could be made out. It saved to the people the forest lands bordering the park, and it prevented the vandal plan of lopping off a great corner of the park, which the Cooke City miners proposed as an alternative to running a railway line through the park itself. This forest belt further insured the preservation of the park scenery, and it added to that demesne the picturesque Absaroka range, sheltering the head waters of several streams and breeding-grounds of elk and other large game.

Afognak, the second island in size of the Kadiak group in southern Alaska, was reserved at the instance of the United States Fish Commissioners as a fishculture and timber reserve. The great forest belt of the northwest coast, the rainiest and most densely wooded region in the world, ends at the Kadiak line. All this wooded coast region of Alaska is virtually a timber reserve. The general land laws have never been extended to that territory. Only mineral claims and town sites may be entered. The great salmon fisheries are not leased or supervised in any way by the Government. Cannery owners may settle upon and purchase any lands needed in one-hundred-and-sixtyacre tracts, at \$1.25 an acre. They may exhaust the streams, drive away the fish, use any nets or methods they wish, disregard even a weekly close season, and deprive the Indians of their chief food supply by thus usurping their hereditary fishing-grounds. They pay no taxes on buildings, boats, nets, catch, or shipments, and do not require any license. They may not cut timber save on their own tracts, nor ship any lumber out of the territory.

Some of the most important reserves were made in . the last fortnight of Secretary Noble's term of office, among them that bordering the Grand Cañon of the Colorado in Arizona. This great tract of nearly two million acres is almost square. Its lines begin five miles east of the Hualpai Indian Reservation, which tourists cross in driving from Peach Springs station, on the line of the Atlantic and Pacific Railroad to the cañon. The reserve holds nearly one hundred miles of the finest cañons, including the western end of Marble Cañon, and among other lookouts Spanish Point, from which Coronado viewed the wonderful gorge in 1542. It preserves the extensive Coconino forests lying south of the cañon's edge, and many plateaus covered with dense growths of Pinus ponderosa. The first thought of those who favored this reservation was the protection of the marvelous scenery of the region, while the Forestry Division regards it as one of the most important reserves for

the benefits it secures to future residents of the adjoining regions.

Secretary Noble merely withdrew from entry the two tracts of land in eastern Arizona covered with the fragments of the petrified forests, admitting that the Supreme Court might decide that petrified forests were not legitimate timber reserves under the provisions of the act. The withdrawal of these lands prevents the petrified forests from falling into the hands of speculators and toll-collectors when increased travel and railroad extension shall have made Arizona's wonders more accessible. Future legislation may empower the President to proclaim them as national parks or protected reserves.

California has gained much by the new forest policy, and the most important of all the reserves made, as regards its immediate benefit to the greatest number of people, is the vast Sierra Forest Reserve, of 6400 square miles, or 4,096,000 acres, in southern California. The proclamation of February 14, 1893, set aside this great tract, which, beginning at the southern boundaries of the Yosemite National Park, forms with that tract, the Sequoia, and the General Grant National Parks a continuous public reservation running for 220 miles along the crest of the Sierras, and averaging about fifty miles in width. It protects the watersheds of eight rivers and hundreds of tributary streams draining into the San Joaquin River, and preserves the water-supply of half that great agricultural valley. In these forests are many scattered groups and groves of giant sequoias, belts of magnificent sugar-pines, and other growths peculiar to the Sierras. Mount Whitney (14,898 feet) and the highest peaks of the range are within the reserve, and the cañons of the King and Kern rivers, which with the Tuolumne and American River cañons in the Yosemite National Park provide as many more rival Yosemites for the enjoyment of the people. The value of this reserve as a protective and economic measure cannot fail to be appreciated by agriculturists dependent upon irrigating systems in other parts of the State, and to hasten the policy suggested by so practical a man and miner as the late Senator George Hearst of California, who believed that all Sierra and other mountain lands above a certain elevation should be reserved by the General government. Nothing could better conduce to the future prosperity of the Pacific States than to have such a mountain-summit reserve extending from the Mojave desert to British Columbia on the Sierra and Cascade lines, and another stretching from the redwood regions of Humboldt and Mendocino counties along the Coast and Olympic ranges to the Straits of Fuca.

The San Gabriel Timber Land Reserve, lying along the Sierra Madre range north of Los Angeles from Salidad Cañon to Cajon Pass, protects the watershed of the San Gabriel and Los Angeles rivers, and insures the continued fertility of the beautiful valley at the base of the mountains. The San Bernardino Forest Reserve adjoins it, extending from Cajon Pass to San Gorgonio, and protecting the watershed of the Santa Ana river, whose tributaries supply the Colton and Riverside citrus regions. The little Trabuco Cañon Forest Reserve preserves the forests along the Santa Ana slopes near the coast, and insures the water-supply of the Santa Ana and Capistrano regions.

The Colorado forest reserves have been urged and

applauded by the State Forestry Association, but the Colorado senators, representing miners, settlers, and other objectors, have succeeded in restricting the area of the reserves, and delaying action upon reserves already determined. The Pike's Peak Timber Reserve, some thirty miles long and ten miles wide, surrounds the great landmark of the plains with a protective inclosure. The Plum Creek Reserve joins it on the north, and the South Platte Reserve joins the latter on the west, the three reserves forming a large irregular tract in the very center of the State, covering the wildest of the mountain region between Denver and Leadville. This preserves the remaining forests, protects the head waters of the South Platte and many feeders of the Arkansas, and, insuring the water-supply of Denver and other towns at the edge of the plains, has a considerable influence upon the fertility of the adjoining prairie.

The White River Plateau Reserve to the northwest of these central forest tracts is the largest in the State. It was reduced to its present size from an originally larger reserve, and settlers and miners are making every effort now to have it further reduced in their interests. The tract shelters the head waters of the White, Green, and Grand rivers, and preserves much natural scenery. The Battlement Mesa Reserve lies along the range between the Grand and the Gunnison rivers, holding the sources of many of their tributaries, and surrounds the Grand and Battlement Mesas with their strange formations and picturesque groupings.

The Pecos River Reserve in New Mexico preserves the thin forests along the crest of the mountains north of Santa Fé and Las Vegas, protecting the water-supplies of those places and the adjoining plains, occupied by agriculturists and stock-raisers.

Secretary Noble was able to make but one reserve in the State of Oregon. The Bull Run Reserve, which might have enjoyed several other equally descriptive and more attractive names, slopes from the northwest side of Mount Hood almost to the banks of the Columbia. It protects the head waters of Bull Run, Hood River, and the Multnomah, whose beautiful fall on the banks of the Columbia near the Cascades is the chief object of beauty seen by travelers between The Dalles and Portland. It is greatly to be regretted that the snowy peak of Mount Hood (11,225 feet) was not at that time made the center of a reserve four or six times the size of this trifling Bull Run tract.

The Pacific Forest Reserve, immediately surroundmeasuring forty-two miles from north to south and thirtysix miles from east to west. The reserve is seen from the cities of Tacoma and Seattle, and its boundaries are almost touched by the Northern Pacific Railway at Stampede Pass, at Wilkeson, and at Carbonado. The natural scenery in the reserve is not surpassed by anything in the Sierras, and the densest of the Cascade forests clothe its slopes. The proclamation declaring the reserve was delayed several weeks by a contest between the citizens of Seattle and Tacoma as to the name the tract should bear-whether the Mount Rainier or the Mount Tacoma Reserve should be established. The same controversy, once settled by the decision of the United States Board of Geographic Names that Vancouver's name, Mount Rainier, must remain unchanged on all government maps, charts, and publications, again raged in the two communities last winter. "Cascade Reserve" should have been

the name by all rights, Rainier being the highest (14,444 feet) peak of that range, but that title having been chosen for an Oregon reserve then under consideration. "Pacific "was chosen because the Pacific Ocean may be seen from Rainier's summit, the highest point within the reserve. Only thirty-eight people in all have reached the summit of Mount Rainier, and not all of them saw the ocean, 120 miles distant, at the base of the Olympic range. The Pacific Reserve holds so much natural scenery, so much of interest and wonder, that it is certain to become a national park, with hotels, roads, and trails. Its great attractions, besides the twin craters and steaming ice caves at the summit, are the dozen splendid glaciers descending by magnificent ice-falls to the level of a thousand feet; the many curious evidences of volcanic action; the circle of beautiful parks near the timber line, with lakes and trout-streams, lesser cones and craters; a wonderful flora, and forests which are fancifully said to be those of the Carboniferous age. The great peak has been ascended as late as October, and experienced Sierra climbers pronounce the view from Eagle Cliff, near the west border of the reserve, the finest mountain view on the Pacific coast, far surpassing the outlook from Inspiration Point on the Yosemite's edge. When this reserve is declared a park, some more appropriate name, as Tahoma, Puyallup, Nisqually, Conifer, Cascade, or, best of all, Glacier Park may be adopted.

Fearful destruction has been wrought in this reserve by forest fires already, and its further protection should be a matter of pride with citizens of Washington until the General government has authority to patrol and protect it. With all the rank, luxuriant growth of the Cascade region, the tracts burned by a retreating band of Nisqually Indians in 1853 have not recovered their forest growths naturally, even after forty years. Bleached trunks and stumps alone show above the acres of bush and scrub undergrowth. Destructive floods and an unequal water-supply have already followed the ruin caused by fire and ax around the great mountain. Herders, campers, hunters, and mountainclimbers are responsible for many recent forest fires. A great tract was but lately desolated in order to open a trail up Nisqually bluff to the camping-grounds in Paradise Valley. Campers have fired many trees in the high parks for the pleasure of seeing the moss-hung spruces swept by sheets of flame, or burn at night like huge signal-torches. Sheep-herders have destroyed ing the peak of Mount Rainier, is in form nearly square, forests of larches and miles of underbrush on the eastern slopes by firing the grassy parks in the fall.

> Additional forest reserves were contemplated in Minnesota, North Dakota, Montana, Colorado, California, and Washington, and Secretary Noble's recommendations waited only upon President Harrison's attaching his signature to the necessary proclamations. While heartily in accord with his Secretary of the Interior, President Harrison preferred leaving these reservations to be considered and acted upon by the new administration. Since there is no protection or management provided for the reserves already proclaimed, they are saved from settlers' and lumbermen's axes, only to be left to the mercy of any careless or malicious persons who may fire them. Two bills were introduced in the last Congress looking to the protection and management of these government forests, but neither became a law.

The Paddock bill, introduced in the Senate, June, 1892, provided for a thorough system of forest management by the Department of Agriculture, with a competent commissioner and inspector, resident foresters and rangers, "to protect and improve the forest cover within the reservations, for the purpose of securing favorable conditions of water flow and continuous supplies of timber to the people of the districts within which the reservations are situated." Military aid in protecting the reservations from fire and trespassers, and enforcing rules and regulations, was provided, also cooperation with State forest management. Land best adapted to agriculture was to be restored to the public domain; mining to be prosecuted within the reserves under special regulations, and wood to be cut under a system of licenses by lumbermen and others; cutting or removing timber, burning, injuring, tapping, or girdling timber, to be punished by fine and imprisonment upon judgment of any United States court or commissioner; ship-owners and railroad companies transporting any lumber or timber product unlawfully obtained to be liable to the same penalties; and all revenue derived from the reserves in any way to constitute a separate fund to be expended by the Secretary of Agriculture for the care and preservation of the reservations. This bill was drawn up at the instance of the American Forestry Association, and received the active support of its members, and the zealous attention of its attorney. It found a place on the calendar, but did not become a law. The McRae substitute bill in the House was introduced in January and reported in February, but failed of consideration by the Fifty-second Congress. The McRae bill provided only for the immediate protection of the reserves by troops; for selling timber of commercial value to the highest bidder; for restoring agricultural lands to the public domain; and for creating a fund for reservation use from timber sales.

The fact that the Hon. J. Sterling Morton, the originator of Arbor Day and President of the American Forestry Association, has since become the Secretary of Agriculture, to whom the management of the government forests will be intrusted, is promise enough of the attitude of the present administration toward the new national forest policy. The appointment of Mr. Edward A. Bowers, the secretary and formerly the attorney of the American Forestry Association, as Assistant Commissioner of the General Land Office, is another assurance that the best interests of the Government and the people will be guarded in these initial years of the great undertaking.

Eliza Ruhamah Scidmore.

Money and a Day's Work.

I HAVE read with interest and profit your editorial in the June CENTURY, "Has Gold Appreciated in Value?" It occurs to me that there is a primary measure of value, which you do not mention, but tried by which the value of gold will be found to have deviated but little in thirty years past. I refer to labor,—not the price of labor, but "days' works." I have not at hand exact data, but practical miners tell me that the average result from a day's work in gold-mining is not perceptibly different from thirty years ago, while the average day's work in the silver-mines will produce three times as much as in 1865. On the theory that the natural relative price of commodities is determined by the

brazon expended in the production, while demand is but a modifier of the rule, it would seem that much of the mystery relating to the deviation in values may be explained.

WATERTOWN, SOUTH DAKOTA. Doane Robinson.

Christianity Outside the Churches.

In the "Forum" of October, 1890, Bishop Huntington emphasized anew the fact to which Professor Ely had already called attention—viz., that a wide-spread alienation, and indeed distrust, of the church existed even among those working-men who would yet applaud the name of Christ and listen respectfully to his teachings. This is a fact to the very serious significance of which the ecclesiastical authorities and leaders of our churches have given, as yet, far too little weight.

But there is another fact, due primarily to much the same causes, of perhaps even more serious import, but to which even less attention has been given. This is the extent to which some of the most sincere Christian believers of our day, especially among men of intellect, of education, and of moral culture, have come to hold aloof from the institutional fellowship of Christ's professed disciples. The Rev. Dr. Newman Smyth, in his precious little volume, "Personal Creeds," says (p. 75):

"There is now a good deal of unformulated and even unbaptized Christianity in the thought and life of men outside of the church. Christ is becoming more real in many ways to this generation. His doctrine, although perhaps not so fully apprehended as it might be, is entering effectively into much of the best striving and working of men who are standing aloof from the churches." And again (p.102): "With a high sense of moral honor, they prefer to go without any belief in a divine plan of salvation, rather than to profess belief in some conceptions which take no active hold on their experience of life."

In even stronger language writes Professor Bruce ("Kingdom of God," p. 144): "I am even disposed to think that a great and steadily increasing portion of the moral worth of society lies outside of the church separated from it, not by godlessness, but rather by exceptionally intense moral earnestness. Many, in fact, have left the church in order to be Christians." And again (p. 272): "Instead of claiming for the church that within it alone is salvation to be found, earnest men are more inclined to ask whether salvation is to be found in it at all, and does not rather consist in escaping from its influence. A good many are asking such revolutionary questions even now; and it is foolish for churchmen simply to be shocked and to characterize them as profane. The church is only a means to an end. It is good only in so far as it is Christian. There is no merit or profit in mere ecclesiasticism. Whatever reveals the true Christ is of value and will live. Whatever hides Christ-be it pope, priest or presbyter, sacraments or ecclesiastical misrule - is pernicious and must pass away."

Few things are more difficult than to form a calm and an unprejudiced judgment of our own times, and especially of any course of events in which we are ourselves taking, however slight, yet an interested part. We read the published story of the past with the feeling that personal equations have been largely allowed for already by the judicious historian. But in the attempt to judge of that history which is still "in the

cial world. Neither are we disposed to continue the discussion, fully treated by us on former occasions, as to the alleged appreciation in value of gold, and as to the supply of gold in the world being sufficient for the transaction of business. The repeal of the silver purchase law has taken these questions out of the field of speculative inquiry, and put them into the field of actual experience. The whole world will know before long whether or not gold has so appreciated in value as to be undesirable as a standard and as a medium of exchange, and it will soon find out also whether the supply is adequate or not. It is sufficient to say now, at the outset of the experiment of conducting the business of the world on the gold standard, that the leading nations of the world have entered upon it, one after another, by a great law of evolution, each reaching the conclusion by itself that no other standard so well meets the demands of trade and commerce. If in coming to this conclusion the leading nations of the world have been individually and collectively wrong in the deductions which they have drawn from their own experience, while the few opponents of those deductions in this and other countries alone are right, then a wonderful thing has happened in the history of the human race. If there has been arranged and carried out a "conspiracy" of the whole world to "degrade silver," and to adopt a monetary system which is foredoomed to failure because adopted either through ignorance or malice, the event is more wonderful still. Never before did the whole world unite in a conspiracy against its own welfare.

The Army and the Forest Reserves.

So much has been written of recent years to warn the country of the rapid inroads made upon the public forests by the natural demands of commerce, aggravated by greed and ignorance, that it would seem needless iteration to call attention to the fact that, in the opinion of our own best authorities, and of foreign experts who have recently revisited us, there is more than a danger-there is almost a certainty-of a national timber famine, unless it be avoided by prompt and vigorous measures. In February last a first step toward a wise policy was taken by President Harrison and Secretary Noble, in reserving from private entry large tracts of non-agricultural forest lands of high altitude in the West - in all some ten millions of acres - with the triple object of preserving great scenery, of defending important forests against private encroachment and destruction, and of conserving the sources of water supply. The hearty and general approval which this policy has met from Californians is sufficient proof of its wisdom and timeliness, and indicates that whatever objections may be urged by those who profit by present opportunities for private gain at public expense, the people may be relied upon to support the most vigorous measures that may be adopted to meet the requirements of the situation.

Meantime the immediate duty devolves upon Congress to devise some permanent system of timber-preservation and of timber-culture. The bill of Mr. McRae of Arkansas, chairman of the Public Lands Committee of the House of Representatives, is a step in this direction. Its object is to establish a more efficient control of the forest reservations, and to provide funds for

their defense from the sale, to the highest bidder, of timber-cutting permits, now to be obtained without cost by the favor of the Secretary of the Interior. One clause of the bill authorizes the Secretary of War to make such detail of troops for the purpose of protecting these reservations as the Secretary of the Interior may require. The whole measure is understood to have the support of the Interior Department.

But this measure, however useful it may be in itself. and in awakening the torpid sentiment of Congress and the public, is very far from a complete solution of the problem. What is needed at the earliest possible moment is a settled, intelligent, far-reaching, scientific system looking to the management of all the public forests in the public interest. First of all, instead of waiting for the proposal of separate forest reserves, the Administration should lose no time in considering what lands are left that may properly and profitably be so included. The great scenery should all be reserved for the people, and not left to fall into the hands of individuals. Any one who has observed how the Ohio and Mississippi valleys have suffered from forest denudation will not think this proposition premature. The next consideration should be how to guard and cultivate what shall thus be reserved. In a recent conversation of halfa dozen persons who have given much attention to the subject, it was unanimously taken for granted that, in some way or other, effective control would be likely to be reached only through military supervision. This conviction is confirmed by the admirable management of the Yellowstone and Vosemite National Parks, which are in charge of officers of the army and patrolled by United States soldiers - in contrast to the conduct of the smaller Yosemite reservation by Boards of State Commissioners, which has not only been for years and is now a local scandal, but has awakened the official protest of no fewer than three special agents of the Land Office, as shown by Secretary Noble's report of December 29, 1892, to the Senate.

Professor Charles S. Sargent, the well-known authority on American forests, has made an interesting suggestion, in "Garden and Forest," of a permanent system which may well employ the attention of legislators. It comprises substantially the following features:

I. Forestry instruction at West Point: The establishment of a chair of forestry at the United States Military Academy, to be supplemented by practical study in the woods and by personal inspection of foreign systems of forestry.

2. An experimental forest reservation: the purchase on the Highlands near West Point (or elsewhere) of a small territory for the use of the proposed new branch of instruction.

3. Control by educated officers: the assignment of the best-educated of these officers to the supervision of the forest reservations.

4. The enlistment of a forest guard: a body of local foresters, to be specially enlisted for the purpose of carrying out the principles of forestry thus taught.

In our opinion there is much to commend in this plan. The permanence, fidelity, and independence of the army; the need of more avenues of activity for graduates of West Point; the honorable and useful character of the work; the demonstrated failure of local control of national reservations, and the pressing need of scientific instruction as a sine quá non of success—these

considerations all argue strongly for this plan. It rests upon those who would reject the suggestion to show wherein it would be bettered, either by the transference of the territory to the Agricultural Department, as has been proposed, or by its retention in the present dual control of the Interior and War departments—a plan which, though temporarily advantageous, is likely to break down before the first considerable demand for military forces for other service.

Bible Exploration, Past and to Come.

The significant feature of modern Bible study and biblical research is the independence of the several divisions of which it consists. Professor Moulton has recently shown how distinct the literary study of the Bible is from biblical exegesis in the common acceptation of the term. Equally distinct are the historical and archæological phases; though it is to be noted that the study of the political and social conditions prevailing at the various periods of ancient Palestinian history follows closely in the wake of the advance that has been achieved through the researches of modern scholars in our knowledge of the manner in which the books comprising the Old and New Testaments assumed their present shape.

Travels in the East, and explorations conducted during the past decades, have imparted a fresh stimulus to what may comprehensively be termed biblical archæology. Through the activity of the Palestine exploration societies of England and of Germany many a site prominent in biblical times has been definitely identified, and a much clearer grasp has been obtained of the physical geography-that indispensable factor in the solution of the many problems that confound the historian. The position of Palestine, wedged in the great area of ancient culture, accounts for the abundance of light that has also been shed upon the customs, traditions, and events of her past by the recovery of ancient records and monuments exhumed from the soil of Mesopotamia, Egypt, and Syria. Palestine paid the penalty for her position by being constantly menaced in her political independence. Hebrew supremacy in Palestine is comprised within a period of five hundred years, at either end of which lies a rivalry for control between Egypt, Babylonia, Assyria, and the principalities of Syria. On the other hand, the close contact into which the inhabitants of Palestine were brought with surrounding states proved fertile, and it is especially in the case of the Hebrew people that the traces of foreign influence extending into the domain of religious ideas and rites have been clearly brought out through the extension of our knowledge of the an-

There are several reasons why the bearings of the Assyrian and Babylonian monuments on the Old Testament occupy the first place in respect to prominence and importance. The article published in this number of THE CENTURY sets forth the more significant phases of these bearings. Egypt, too, has contributed many an interesting chapter to biblical archæology. True, of the sojourn of Hebrew clans in Egypt only the faintest traces have as yet been met with—so faint as to remain for the present outside of the pale of popular exposition; but for an earlier period a recent find made in Egypt has furnished material of a most re-

markable character. By the merest accident, some peasants, while rummaging the ruins at El-Amarna, about 100 miles to the south of Cairo, struck upon several hundred clay tablets inscribed in the cuneiform characters of Babylonia. El-Amarna stands on the site of a city founded by Amenophis IV. in the fifteenth century before this era, and the tablets comprise, among other things, the reports and communications of this monarch's officials stationed along the coast of Phenicia and in the interior, or Palestine proper. The whole district was at that time tributary to Egypt, having been wrested after a long struggle out of the hands of Babylonian rulers, who had exercised a certain measure of control over it for several centuries previous. Through these archives a remarkable picture is obtained of the political and social conditions prevailing in Palestine before the Exodus. Many of the places that afterward were closely bound up with the fortunes of the Hebrew people are already in existence. Sidon is there, and also Tyre and Gaza, Lachish in the interior, and, strangest of all, Jerusalem appears, 500 years before King David, as a center of political activity with its garrison and its governor.

Following El-Amarna comes the account of excavations at a mound in northern Syria, which, besides affording a view of one of the numerous principalities that divided the region in the eighth century B. C., contribute largely to our knowledge of biblical days, though chiefly in illustration of the language and script of the Hebrews. In Palestine itself, beginnings have been made toward securing the treasures of the past that the soil unquestionably holds. Besides some sporadic efforts, systematic excavations have been conducted during the past two years at Tel-el-Hesy, the site of the ancient Lachish, and the finding of a tablet there dating, like those of El-Amarna, from the fifteenth century B. C., may be regarded as an index of what may be expected when once the lowest stratum of the towns of Palestine shall be thoroughly explored. Lachish is only a few miles distant from Jerusalem. Will it ever be possible for the explorer to attack the most interesting of all ancient sites? The amicable relations existing between this country and Turkey place us in a favorable position for the successful issue of negotiations conducted with this end in view. In such a case the discoveries of the past bid fair to be eclipsed by those of the future.

Now for Free Art!

THIS is the moment when every art institution and association in the country, every enlightened journal, and every person who appreciates and loves art, should urge Congress, through the nearest congressman, to strike from our tariff laws the barbarity of a tax upon the introduction of art into America. That the newest of the great nations, the one least equipped artistically, the one most needing the example and culture of art in its homes, schools, and manufactures, should be the one to stand at the ports of entry with a club in its hand to beat back the very thing we most require, is a reproach to American intelligence and a disgrace to our legislators. The lesson of the World's Fair will have been in great part lost unless it teaches our lawmakers the necessity of removing a tax which is an ignorant and brutal clog upon national progress.

is eliminated. The use of colors makes unnecessary the granting of aid to illiterates within the compartments.

The objections to the machine are, first, that it affords no means of rectifying mistakes on the part of the voter, for if he presses the wrong knob inadvertently, the vote is recorded beyond recall; second, that it is in the interest of straight party voting of the blindest and most unreasoning kind; and third, that it makes no provision for the voter who wishes to cast a ballot for some name not upon the regular ballots. The first objection is the most serious, though there is this to be said of it, that in all trials thus far made of the machine no mistake of the kind mentioned has been made. The second objection is one that applies to all those adaptations of the Australian ballot-system which arrange the names of candidates in party columns, with a party name, and sometimes an emblem also, at the top. There are nineteen States which have laws providing such arrangements. The third objection is met by an improvement in the machine which its inventor has designed. It consists of a blank column arranged with

knobs like the others. When one of its knobs is pressed in, a slot opens in the column in which appears a roll of paper of sufficient width to allow a name to be written or pasted upon it. The slot is closed by the opening of the exit door, and the roll of paper is turned in such a way as to present a blank space to the next voter wishing to use it.

A machine similar to the Myers was invented by J. W. Rhines of St. Paul in 1889. He applied the principle which Myers uses to a desk with a keyboard. When the voter opened the desk, which was placed in a stall in the voting-room in full view of the election officers, a screen was drawn up before the stall, shutting him from observation. The vote was recorded in the same manner as in the Myers machine. The Rhines machine arranged the keys in the alphabetical order of candidates' names under each office, requiring the voter to read and select the name of each candidate for whom he wished to vote; but its inventor also had in mind the adaptation to it of the party-column principle in colors which is employed in the Myers device.

OPEN LETTERS.

Forestry Legislation in Europe.

GERMANY.

I SHOULD like to know who first started the nursery-story, which has been propagated in the United States beyond extirpation, that paternalism in forestry is so rampant in Germany that the owner of forest property who cuts down one tree is obliged to plant two. Curiously enough, in Germany, where forestry is found in the highest state of development,—or perhaps just because of that condition,—laws regarding the use of private forest property are less stringent than among the other nations who have paid attention to the matter.

The various governments own and manage in a conservative spirit about one third of the forest area, and they also control the management of another sixth, which belongs to villages, cities, and public institutions, in so far as these communities are obliged to employ expert foresters, and must submit their working-plans to the government for approval, thus preventing improvident and wasteful methods. The principle upon which this control is based is the one we recognize when we limit by law the indebtedness that any community or town may incur. The other half of the forest property in the hands of private owners is managed mostly without interference, although upon methods similar to those employed by the government, and by trained foresters who receive their education in one of the eight higher and several lower schools of forestry which the various governments have established.

The several states differ in their laws regarding forest property. Of the private forests seventy per cent. are without any control whatever, while thirty per cent. are subject to supervision, so far as clearing and devastation are concerned.

In Saxony no state control whatever exists. In Bavaria, Baden, Wurtemberg, and other principalities, clearing without the consent of the authorities and de-

vastation of private forests are forbidden, and there are also some regulations regarding the maintenance of "protective forests"; but altogether the laws are not stringent.

In Prussia, which represents nearly two thirds of Germany, private forests are absolutely free from governmental interference. When, however, a neighbor fears that by the clearing of an adjoining forest his land may be injured, he can call for a viewing jury, and obtain an injunction against clearing, if such anticipated damage is proved. Since he has to bear not only the cost of such proceedings, but also any damage resulting from the interference, the law is rarely if ever called into play.

The government, either communal or state, can also make application for such a process in cases where damage to the public can be proved from a wilful treatment of a private forest.

From the fact that hardly 10,000 acres have in this way become "protective" forests, it may be gathered that the law has been largely inoperative.

The tendency on the part of the government has been rather toward persuasive measures. Thus, in addition to buying up or acquiring by exchange, and reforesting waste lands,—some 300,000 acres have been so reforested during the last twenty-five years,—the government gives assistance to private owners in reforesting their waste land. During the last ten years \$300,000 was granted in this way.

However, voices have called loudly for a closer supervision, and for extension of the control of the state over the use of private forest property.

AUSTRIA.

THE status of forest legislation is very different in Austria, where, with a larger proportion of mountainous territory, the results of the unrestricted free will of private owners are more severely felt. The country on the Karst, along the Mediterranean, which was well wooded, well watered, rich, and fruitful, famous for its mild climate, has been changed into an arid, sterile plain, interspersed with stony and parched hillsides, the replanting of which was made well nigh impossible by opening the country to the hot, dry winds.

This and other experiences led, in 1852, to the adoption of a forest law by which is prescribed not only a strict supervision over the forests owned by communities, but also over those owned by private individuals.

Not only are the state forests (comprising less than thirty per cent. of the total forest area) rationally managed, and the management of the communal forests (nearly forty per cent.) officially supervised, but private owners (holding about thirty-two per cent.) are prevented from devastating their forest property to the detriment of adjoiners. No clearing for agricultural use can be made without the consent of the district authorities, from which, however, an appeal to a civil judge is possible, who adjusts the conflict of interests.

When dangers from land-slides, avalanches, or torrents, are feared, and private owners cannot bear the expense of precautionary measures, the state may ex-

propriate.

Any cleared or cut forest must be replanted or reseeded within five years; on sandy soils and mountainsides clearing is forbidden, and only culling of the ripe timber is allowed. Where damage from the removal of a forest belt which acted as a wind-break is feared, the owner may not remove it until the neighbor has had time to secure his own protection. That neglect in taking care of forest fires subjects the offender not only to fine, but to paying damages to the injured, goes without saying. In addition, freedom from taxation for twenty-five years is granted for all new plantations, and premiums are paid under certain circumstances. The authorities aid in the extinguishing of fires as well as in the fighting of insects.

Finally, to insure a rational management of forests, the owners of large areas must employ competent foresters whose qualifications satisfy the authorities, opportunity for the education of such being given in one higher, three middle, and four lower class forestry

schools.

HUNGARY.

IN Hungary also, where liberty of private property rights, and strong objection to government interference, had been jealously upheld, a complete reaction set in some fifteen years ago, which led to the law of 1880, giving the state control of private forest property as in Austria.

ITALY.

ITALY furnishes, perhaps, the best object-lesson of the relation of forest-cover and waterflow.

Though provincial governments had for a long time tried here and there to regulate forest use, the first comprehensive measure that recognized the urgent necessity of state interference was the law of 1877. An improved law was placed on the statute-books in 1888.

Under this law, the Department of Agriculture, in cooperation with the Department of Public Works and in consultation with the forestal committee of the province and the respective owners, is to designate the territory which for public reasons must be reforested under governmental control.

The owners may associate themselves for the purpose of reforestation, and for the purpose may then borrow money at low interest from the State Soil-Credit Institution, the Forest Department contributing three fifths of the cost of reforestation upon condition that the work is done according to its plans, and within the time specified by the government. Where the owners do not consent or fail to do the work, the department has the right to expropriate and reforest alone, the owners having, however, the right to redeem within five years, paying price paid together with cost of reforestation and interest. The department has also the right to restrict and regulate pasturage, paying, however, compensation for such restriction, and any other damage arising to the owner in the non-use of his property. It is estimated that over 500,000 acres will have to be reforested at a cost of \$12,000,000.

RUSSIA.

In Russia, until lately, liberty to cut, burn, destroy, and devastate was unrestricted; but in 1888 a comprehensive and well-considered law cut off, so far as this can be done on paper, this liberty of vandalism. For autocratic Russia this law is rather timid, and is in the nature of a compromise between communal and private interests, in which much if not all depends on the good will of the private owner. In this it reminds us of much of our own legislation, beautiful in theory, but a dead letter in practice, because its execution is left to those inimical to the laws. If we may trust reports, the law has so far had the very opposite effect of what it intended, owners, from fear of further control, slaughtering and devastating their properties recklessly.

A sharp distinction is made between "protective" and other forests. For the former the government at its own expense prepares plans of management, and relieves of taxation all such forests and new plantations. If expenses of reforestation become necessary, and the owner refuses to act, the government can expropriate, the owner having the right of redemption within ten years. The demarcation of protective forests and their control are placed under a forestry council, consisting of law-officers, officers of the general administration, and of the local forest administration. The owners, however, have much to say in the matter, the tendency being everywhere visible to obviate restriction of private rights on one hand and expenditure of the government funds on the other.

For private forests not classed as protective, the right to clear is to be dependent on the consent of the council, while too severe culling, or the cutting of proportionately too large quantities without regard to reproduction, is also forbidden, but the means for ascertaining infractions are not provided. If any devastation has taken place, replanting becomes obligatory, and the government forester may execute the planting at the expense of the delinquent owner. The foresters must also give to the owners advice concerning management free of charge; but since they are overburdened with the duties in the administration of the government forests, it is not likely that they will be able to superintend all that is demanded of them.

It should be added that the Imperial Bank loans for long time on forests well administered as a matter of encouragement to rational forest management, and the thirteen lower forestry schools.

SWITZERLAND.

ALTHOUGH sporadic enactments of the cantons tending to check forest devastation are found as early as the thirteenth or fourteenth centuries, only with the beginning of the present century was the matter seriously taken in hand by the different cantons, when restrictive laws were passed. Owing to defects in these and to the lack of combined action, a federal law was adopted in 1876, which gives the federation control over the forests of the mountain region embracing eight entire cantons and parts of seven others, or over 1,000,000 acres of forest. The federation itself does not own any forest land, and the cantons hardly 100,000 acres, somewhat over four per cent. of the forest area, two thirds of which is held in communal ownership, and the rest by private owners.

The law is quite remarkable as illustrating the rational principles upon which this little republic works, maintaining close relation between the general and cantonal governments, very different from our ridiculous jealousies between State and Federal governments.

The federal authorities have supervision over all cantonal, communal, and private forests, so far as they are "protective forests"; but the execution of the law rests with the cantonal authorities, under the inspection of federal officers. "Protective forests" are those which by reason of elevation and situation on steep mountainsides or on marshy soils, on the banks of brooks or rivers, or where a deficiency of woodland exists, serve as a protection against injurious climatic influences, damage from winds, avalanches, land-slides, falls of rocks, washouts, inundation, etc. The cutting in these forests is regulated so as to insure a conservative use, and to prevent devastation. Where needful reforestation is mandatory, the federal and cantonal government share in the expense, or may expropriate with payment of full indemnification to the owners. No diminution of the forest area within the established area of supervised forests is permissible, and replanting is prescribed where necessary; nor can township or corporation forests be sold without consent of the cantonal authorities.

The national government contributes from thirty to seventy per cent. of the cost for the establishment of new forests, and from twenty to fifty per cent. for planting in protective forests; where special difficulties in reforestation are encountered, or where the planting is deemed of general utility, the cantonal government assumes the obligation of caring for and providing improvements in the plantings.

The employment of educated foresters is obligatory, and to render this possible, courses of lectures to the active foresters are maintained in the cantons. There is also an excellent forestry school at Zurich.

FRANCE.

BEFORE the Revolution in France, the forest code of 1669 enjoined private owners to manage their forests upon the principles on which the government forests were managed, which was by no means a very rational management, according to modern ideas, yet was meant to be conservative and systematic. During the Revolu-

government sustains four higher, seven middle, and tion a law forbidding clearing for twenty-five years was enacted, and later laws, the most important of which are those of 1860, 1862, and 1882, establish the control of the state over all "protective forests," and make mandatory the reforestation of denuded mountains.

Not only does the state manage its own forest property (one ninth of the forest area) in approved manner, and supervise the management of forests belonging to communities and other public institutions (double the area of state forests) in a manner similar to the regulation of forests in Germany, but it extends its control over the large area of private forests by forbidding any clearing except with the consent of the forest administration.

The permit to do so may be withheld where public interest demands. Heavy fines follow any attempt at clearing such forests without permission, and the owner may be forced to replant. In addition to this, the reforestation of denuded mountain-slopes is encouraged, enforced, or directly undertaken by the government.

The encouragement consists in the granting of financial aid or of plant material in proportion to the general good resulting from the work, or according to the financial condition of the communities undertaking it. Wherever reforestation is made obligatory by decree on account of the condition of the soil and watercourses, and the danger of threatening the lands below, the general council and a special commission have a voice; the territory to be reforested, the plans of work, the time limit fixed for the same, and the amount of aid offered by the forest administration, are published. If the land belongs to communities unwilling or unable to reforest, the government may either expropriate or do the work alone, holding the land until it is reimbursed; this can be done by the cession of one half the land within a given time. If the land belongs to private owners who refuse or fail to perform the work, the state may also expropriate, allowing redemption within five years.

The government, if desired, or where success depends on it, superintends the planting, and also regulates the use of these protective forests afterward.

In order to gain the confidence and cooperation of the communities and proprietors, annual meetings were held in which the government agents explained the advantages and methods of reboisement, and discussed the local conditions and difficulties. These meetings proved of great usefulness in the cause of rational forestry. The education resulting from them, and the success of the reforestation work, had covered, in 1888, an area of about 365,000 acres, of which 90,000 were private and 125,000 communal property, the rest belonging to the state. The expenditure by the state has been \$10,000,000, of which about \$2,500,000 were for expropriations, and \$1,200,000 for subventions. The cost per acre for reforesting was somewhat less than \$10.00. It is estimated that 800,000 acres more are to be reforested, and an additional expenditure of \$38,-000,000 is necessary before the damage done to the agricultural lands of eighteen French departments by reckless forest destruction will be repaired.

Shall the United States learn from these experiences? Shall we take advantage of these examples? How far may we utilize the methods indicated by them?

TOPICS OF THE TIME.

Good Government in New York.

A FAILURE on the part of the citizens of New York to drive Tammany Hall from power, after the revelations of corruption made in connection with the last election, and through the Legislative Committee and the police trials, and after a full understanding of the character of some of the appointments made by the present mayor, would renew the disgrace that this ignoble domination has brought not only upon the city and upon the nation, but upon republican institutions.

All that can save Tammany from such a combination as would make its overthrow certain is a blind, unintelligent, and in this case well nigh criminal allegiance to

the supposed interests of national parties.

No good Democrat should be ignorant of the fact that Tammany Hall is a curse to the national party it pretends to serve, and sometimes does serve when it is clearly to its interest to do so, but to which it is a continual reproach, and upon which it is a crushing burden,— almost as hard to bear as was the burden of slavery before the war.

No good Republican should be so eager for local "spoils" or partizan advantage as to refuse to strike hands with good men of the opposite party in undoing its old enemy,—or should refuse the opportunity of "driving into the open" that curse of local Republi-

canism, the Tammany Republican.

The campaign in the city of New York is not only against Tammany Hall, it is in favor of permanent reform in the separation of national from city politics. The banners of the Good Government Clubs have inscribed upon them the true motto of the campaign: "For the City." It is a fight for a clean, intelligent, progressive government, not for the benefit of any machine, but for the benefit of the whole people.

But the campaign, successful or unsuccessful, must not end with the election. Aside from the corruption in high places and low, the city is behind other great cities of the world in many details and devices of government. This is the era of improved municipal administration, and while New York can make a good showing in some matters, in others it is at least twenty years behind the age. Even when "Tammany methods" have been rooted out, there will be need of endless energy in the prosecution of greatly needed reforms.

Congress and the Forestry Question.

"IT is an ill wind that blows nobody good," and the recent tempests of flame which have raged in four or five States on the Canadian border, and which have excited the sympathy of the civilized world, may have at least the good result of awakening Congress to the necessity of better methods of guarding the national forests against the same danger. The indifference of the average legislator is to blame for the prolongation of many a public peril; but he is by no means obtuse or sordid, and we look forward with confidence to the ultimate outcome of the present wide-spread interest in forest preservation. The national government, we be-

lieve, has little or no relation of ownership to the forests which have recently been destroyed; but in this country the interplay of State and national legislation is so intimate that to enact measures of security for the public forests would be to influence favorably the policy of the States themselves. The fate of Minnesota, Wisconsin, and Michigan might, with slight change of conditions, have been the fate of other States-of even so humid a State as Washington, where by singular good fortune the town of Whatcom barely escaped destruction by forest fires; and one has only to consult the records of the newspapers to note that the national forests also are continually being depleted by this terrible agency. Callous indeed would be the conscience of that senator or representative who, with the object-lesson of these disasters before him, could refuse favorable consideration to a bill for forest preservation bearing the stamp of expert scientific knowledge. The consideration and passage of such a measure at the December session are well nigh imperative.

During the past year several events have given encouragement to those who are solicitous as to the future of American forests. The placing of lumber on the free list, whatever its commercial effect may be, will be of extraordinary conservative value by reducing at once the timber-dealers' temptation to indiscriminate cutting, and by insuring more careful management of the forests. Together with the recent calamity, it will for a time guarantee a more watchful activity in the prevention of fire. It is to be hoped that the great companies will now see the advantage of a systematic employment of belt lines for the localization of the danger.

In the second place, we seem to have reached the end of our temporizing and shifty policy with reference to the Adirondack Reserve. Last spring the ruinous plan of cutting the twelve-inch timber, to which the Forest Commission had committed itself, met with successful opposition from a public-spirited official, State Engineer Campbell W. Adams, and hundreds of permits were thus nullified. More recently has Comptroller Roberts announced the discovery of a wide-spread conspiracy to defraud the State and despoil the Reserve by illegal cutting, cancellation of tax sales, etc. These perils have aroused the State and caused the passage, by a unanimous vote, of the amendment to the State constitution which, at the instance of the New York Board of Trade, was submitted to the Albany Convention, prohibiting the sale or exchange of lands now acquired or to be acquired by the State within the lines of the Reserve, and prohibiting the cutting or sale of timber on such lands. Were the region involved the heart of a virgin forest in the Alleghanies, it would be unnecessary, and perhaps unwise, to resort to a constitutional amendment to protect it; but in a region like the Adirondacks, where the soil is thin and poor, and the timber is already greatly depleted, and the greed of private gain is so reckless, it is the part of prudence and foresight to put beyond legal peradventure what is left of this great conservator of health and source of commercial prosperity to the whole State. It is not necessary that we should wait until the Hudson and other rivers have lost, from the same cause, as many inches of depth as some of the German rivers, before we take the necessary steps for their preservation. Twenty years from now, when Nature shall have renewed herself in the Adirondacks, the amendment may safely be repealed; by that time, let us hope, we shall have a large body of educated foresters. It should be followed by a legislative appropriation for the purchase or control of all lands necessary to the objects of the Reserve.

Another point that has been gained is the defeat—for who knows how many a time—of the assault upon the integrity of the Yellowstone Park, and the failure of a similar attempt to reduce the area of the Yosemite National Park before careful investigation of the reasons alleged. Congress will do well to search closely into all such measures for objects of private or corporate gain.

A fourth source of encouragement is the general interest awakened among societies such as the Sierra Club, the National Geographical Society, and others, for the preservation of the Pacific, or Mount Rainier, Forest Reserve as a national park. The opening of this remarkable region - the home of some of the greatest glaciers south of the Canadian line - would add another to the points of interest in the far West accessible to the traveler. The chief reason for wishing success to this movement is the danger that unless the government undertake the management of this reserve on the same basis as the Yellowstone Park, there will be an overwhelming pressure from the State of Washington for its cession as a State park, with the probable fate of neglect which has visited the Yosemite valley under the unfortunate management of the State of California. It has come to be an axiom that State management of national property is inevitably loose and bad.

Against these hopeful signs we have to face two regrettable considerations: one, that the bill of Mr. Mc-Rae, Chairman of the House Committee on Public Lands, providing for a measure of better government for the forest reservations, has been the object of a successful filibustering opposition on the part of certain Western representatives, which is very much as if an infant should filibuster against its mother's milk. The second and more important relates to the inaction of the United States government in the defense of the reserves already made - which is partly, we fear, supineness, and partly inability. The result has been that the incursions of sheep into the Sierra reserves have been unchecked, trustworthy accounts stating that during the past summer half a million sheep have been pastured on the Sierra Reserve in defiance of the "paper bullets of the brain" which have been fulminated against them by the Secretary of the Interior. In this matter the secretary is almost helpless, since he has not, and cannot have, initial command of the army for the purpose of policing these reserves; and there are, moreover, we believe, but two troops of cavalry assigned to California. It has been argued that this lack of ability to patrol should be a bar to further reservations until Congress shall have adopted some better measure of protection. With this view we do not agree. By the act of Congress of March 3, 1891, by which the President is empowered to make reservations of non-agricultural lands of high altitude, the President has it within his power to do his country a lasting and memorable service by making extensive reservations, where

practicable, at the head waters of Western streams. These are not only a commercial necessity for the low-lands, under the present conditions, but are likely to become such more extensively as irrigation becomes an important industry in the arid West. Already there are signs of interstate contests as to the ownership of water flowing through adjacent States, and it is the part of patriotic wisdom to provide a national policy on this subject—a policy which it may not be too much to hope will reduce to a great extent the injury from spring floods in the Mississippi and other streams, and at the same time insure the conservation of the water higher up where it is needed.

We have previously stated with some particularity the plan of Professor Charles S. Sargent, of Harvard, for the management of the forest reserves already made and to be made. It contemplates the transfer of these reserves to the care of the War Department, and their supervision and management by army officers, to be educated in the principles of scientific forestry at West Point or elsewhere, the force of laborers to be employed to consist of a forest guard locally enlisted. The present Secretary of the Interior has expressed the opinion that this plan would be preferable to the present dual control, and the only alternative of which we have heard is that the reservations should be placed in charge of the Agricultural Department. Against this there are two objections: first, that the government would have to create an entirely new educational system instead of availing itself of the Military Academy; and, secondly, that it would necessitate a large force of civil servants, which, until the complete adoption of the merit system, it would be the part of good citizenship to avoid. It is very much to be hoped that Mr. Sargent's plan will receive the favorable consideration of Congress at its coming session. It has already been indorsed by the American Association for the Advancement of Science and by the Irrigation Congress.

What is the Referendum?

DISSATISFACTION with the working of our State legislatures is leading to a demand in many parts of the country for the adoption into general practice of the Swiss referendum. It is urged by the advocates of this change that if the opinion of the people can be obtained in approval or disapproval of the acts of the legislature, we shall be certain of defeating many pernicious measures, and of aiding in the enactment of many desirable ones. In order to enable our readers to judge for themselves as to the probabilities of these results being obtained through this instrumentality, we will sketch briefly the history of the referendum and its results in practice.

There are in Switzerland two varieties of referendum, one called the obligatory, and the other the facultative or optional. The first applies to all amendments to the federal constitution, requiring that these must all be submitted to the popular vote for ratification. The second requires that all laws and acts of a general nature shall be submitted for popular approval whenever 30,000 voters or eight cantons petition to have it done. Though the cantons never petition, the people avail themselves of the privilege so freely that during the twenty years in which the law has been in force they have had the referendum applied to an average of one eighth of all the laws passed. Only a third of those thus submitted have secured popular approval.

Celtic cross which marks the position of a body of Irish troops. There are a few unobtrusive pieces of natural rock which fittingly express willing sacrifice or unyielding valor; but for the most part that beautiful field - the chosen valley for the nation's salvation has become for lack of coördination in plan and good taste in execution an unsightly collection of tombstones. In this respect it is only less so than the ordinary cemetery: the objection to it is that it is a cemetery; and a mere cemetery, we maintain, a great battle-field should not be allowed to be made.

As the fields of Antietam and Shiloh are now passing into Government control it may not be too late to urge upon those in charge a few practical considerations which may lead to a larger measure of beauty, without any loss - indeed, with a marked enhancement - of the practical value of such an enterprise.

1. Every Commission should avail itself of the advice of the best landscape architects, so that park-like effects may be retained as far as may be consonant with the more practical objects of the reservation.

2. Lines of battle should be marked clearly but unpretentiously with a low uniform stone, and the whole plan should be worked out artistically before large monuments are erected.

3. The Commission should have the advice of a competent board of sculptors, and should be guided by them in the acceptance of plans for monuments.

4. The monuments, to be of artistic excellence, must be few; and to this end the unit of celebration, so to speak, should be the corps. The sense of historical perspective is lost by allowing each regiment to determine the proportions and character of the memorial. Alas! the appropriation of the States for separate monuments for each of their regiments is perhaps already beyond diversion to a more artistic plan. But some oversight may yet be possible, and legislatures making new appropriations may well keep in view the necessity of a severe artistic supervision, such as made the Court of Honor of the Columbian Exposition the admiration of the world. Surely at Gettysburg such a board could have made every provision for satisfying the pride and claims of individual regiments, without in any way impairing the charming natural features of the field. It will be little short of a criminal blunder if the error there made shall be repeated on other fields. The heroes of the civil war are worthy of the best that History and Art can give them.

Hope for the Forests.

FROM time to time during the last six years, both by editorial articles and by solicited contributions, we have endeavored to impress upon our readers the conviction of intelligent observers that no time should be lost in providing against the imminent and manifold perils of forest destruction in the United States, and especially on the public lands. The mind that would compass the evils brought upon other countries through indifference to this matter may see them startlingly set forth in George P. Marsh's engaging volume "Nature as Modified by Man," in which that patriotic student of science and history gave his countrymen an anxious warning against similar neglect. This was fifty years ago, and in the main our national forest policy has not yet taken shape, while the destruction of our largest crop by fire, sheep, and the hungry ax goes bravely on.

This is not because the intelligence of the people is not convinced of the situation. A correct public sentiment on the subject has been rapidly forming. Bodies as widely diverse as the American Society for the Advancement of Science, the National Irrigation Association, and the New England Lumbermen's Association have officially joined in the demand for legislative action: only Congress lags behind. As usual, it is in the Capitol at Washington that ignorance and greed make their last stand, relying on the indifference or preoccupation of the law-makers. For the rest, it is natural that honest legislators who have given no attention to the subject should hesitate to take the initiative, but that they should not be willing to give weight to the united voices of experts is most provincial and most deplorable. But a more potent voice is now about to speak. Those who will not listen to Science will hardly turn a deaf ear to Commerce.

During the present year the advocates of a modern forest policy have received the important support of the two leading mercantile organizations of New York City. On January 3, 1895, the New York Chamber of Commerce, after special consideration of the subject, adopted unanimously the following resolutions:

Whereas, A thorough inquiry into the question of the preservation of our forest lands is of paramount importance to agricultural and other interests; therefore, be it Resolved. That this Chamber recommend to the United

States Senate and House of Representatives in Congress assembled to pass a bill which authorizes the President of the United States to appoint a Commission of three experts, and make the necessary appropriation for the purpose of a thorough study of our public timber lands, so as to determine what portions ought to be preserved in the interest of the people, to prepare a plan for their management, and report the same within a year of their appointment. The Commission to have access to all public documents bearing on the question.

On June 12, 1895, a similar meeting was held by the New York Board of Trade and Transportation, and, after discussion of the larger aspects of the subject, the following resolutions were unanimously adopted:

Whereas, The welfare and the commercial interests of the entire country are closely related to the preservation and proper management of the public forests:

Resolved, That, as a first step to a permanent and scientific forest policy, we heartily favor the creation by Congress of a National Forest Commission with the following objects:

1. To study the public timber lands, reserves, and parks on the ground.
2. To ascertain their condition and extent.

To ascertain their relation to the public welfare, and to existing local needs of the people as regards agri-culture and the supply of wood for mining, transportation and other purposes.

To ascertain what portions of the public timber lands should remain as such in view of the agricultural,

mining, lumbering, and other interests of the people.
5. To prepare a plan for the general management of the public timber lands in accordance with the principles of forestry.

6. To recommend the necessary legislation, and Resolved, That the special committee on forestry be directed to communicate with other commercial bodies and with Congress in furtherance of concerted action on this important question at the next session.

It was understood to be the purpose of the Board to devote itself to the organization of the sentiment of the country in favor of a National Commission. The value of this action may be inferred from the fact that it is to the energetic leadership of the Board of Trade and Transportation, that we owe the adoption

of the recent amendment to the New York State constitution, virtually prohibiting for twenty years the sale or cutting of timber on the Adirondack reservation, where the reckless violation of previous statutes by a ring of lumbermen made a drastic measure indispensable.

In thus taking an active part on a wider field of forest reform, it is to be hoped that the Board of Trade and Transportation will be promptly, heartily, and continuously supported by the merchants of the country, not only by similar resolutions, but by independent

study of the subject and by personal appeal to senators and representatives before the reassembling of Congress. The short session preceding a presidential campaign, when there is a disposition to avoid political legislation, ought to be favorable to a general project of this kind, of common and vital interest to the whole country now and hereafter. Legislators may differ upon the details of a governmental administration of the forests, but there can hardly be an honest objection to the thorough scientific study of a subject of so vast importance.

OPEN LETTERS.

New Light in the Black Belt.

EVER since the negroes were enfranchised, what is known as the Black Belt of Alabama has been noted for what many regarded as a dangerous preponderance of colored people. It was in the heart of this section—at Tuskegee, in Alabama—that fourteen years ago was founded, very modestly, by a colored man, freshly graduated from Hampton College in Virginia, a normal and industrial school for his race, which, so far as negro education was concerned, was an experiment.

The founder of this school, Mr. Booker T. Washington, had become persuaded that most of the efforts at training his people in purely academic directions were almost entirely thrown away. He held that the time was not ripe, and his people were not prepared, for the higher scholastic training of which the Greek and Latin classics are the basis, but that they needed to be taught how to work to advantage in the trades and handicrafts, how to be better farmers, how to be more thrifty in their lives, and, most of all, how to resist the moneylenders' inducements to mortgage their crops before they were made. It was with these great ideas that he began his work at Tuskegee, the results of which are well worth reporting.

When the attention of philanthropists was first directed to the ignorant condition of the freedmen in the South, in nine cases out of ten the practical effort to do something for their improvement was controlled by clergymen and was largely influenced by sentimental considerations. The chief object seemed to be to grow a great crop of negro preachers, lawyers, and doctors. The result was so disheartening that fifteen years after the war was over there were grave doubts whether the colored race in the South was not lapsing into a barbarism worse than that of slavery. Fortunately among these educators and philanthropists there was at least one sane man, the late General S. C. Armstrong, of Hampton. His main idea was to train workmen and teachers. Mr. Washington was one of these teachers. Of him and his work General Armstrong, shortly before his death, said: "It is, I think, the noblest and grandest work by any colored man in the land. What compares with it in general value and power for good? It is on the Hampton plan, combining labor and study, commands high respect from both races, flies no denominational flag, but is earnestly and thoroughly Christian, is out of debt, well managed, and organized."

Mr. Washington began in 1881 with nothing but ideas and ambition and a few friends, none of whom could do much in the way of contributions. But he has pressed on to such purpose that the fourteenth year showed an enrolment of 1025 pupils and teachers: 809 pupils in the Normal School, 150 in the Model School, and 66 teachers and superintendents. The school owns about 2000 acres of land, and has over 40 buildings either completed or in course of erection. It rents 15 cottages not on the school grounds, and some ten of the teachers live in homes of their own. It has no endowment worth mentioning, and it must support itself from earnings, and from the donations of those who have become interested in it. For the year that ended in June the expenses were \$73,347.58 - surely a small amount when it is considered that it represents the support of more than one thousand persons for a year. The pupils are rarely able to pay for their board, only \$9,696.80 being secured from this source during the year; yet all had to be lodged and fed. The State of Alabama gave toward the expenses \$3000, the Slater Fund \$5400, the Peabody Fund \$500, the Women's Home Missionary Society \$576, and the balance, \$54,-174.78, was received from earnings and from the donations of societies and individuals. The tuition is entirely free. The cost of educating a student is \$50 a year (the student paying his board partly in cash and partly in work); \$200 enables him to complete the four years' course; \$1000 creates a permanent scholarship.

Twenty-five industries are carried on at the school, and while learning trades the pupils are given an opportunity to earn something toward their support, being allowed five cents an hour while at work. But they not only work at trades and in the fields; they are required to spend a part of the day or evening in the class-room; so that the carpenter or the blacksmith or the bricklayer learning a trade at Tuskegee is also instructed in the rudiments of lettered knowledge.

At the commencement held at the end of May the exercises included not only music and speaking, but an exhibition of the handiwork of the pupils, who were called on to show how each kind of work was done. One showed the method of putting tires on a buggy, another the construction of a house, another the pinning of the same, and still another the painting of the structure; the girls showed the process of ironing a shirt, of cleaning and lighting a lamp, of making bread, cake, and pie, of cutting and fitting a dress, and

level, their opponents work only spasmodically, usually a few weeks before election, and during the remainder of the year dismiss the subject from their minds.

It requires great fervor of patriotism to carry on this work, but he must be a very poor American who is willing to admit that there is not enough of saving grace in our people to produce a sufficient body of men to accomplish it. The kind of patriotism required is of the highest order. It must be willing to give time and labor and money, to sacrifice the best that a man has on the altar of his country. It is undoubtedly more prosaic than dying for one's country on the field of battle, but the man who devotes his life to preserving the honor of his country and perpetuating free government is as much a hero as the one who falls upon the field of battle. Happily there is no demand for him to prove his patriotism in war, while there is a great and pressing demand for him to prove it in the peaceful duties of citizenship. He is not the truest or most useful patriot who boasts of his willingness to fight for his country in a war which may never come or ought never to come, but he who gives her his service in a struggle that is already in progress. What our country is in need of to-day is an army of patriots who will enlist for the extermination of an army of political pirates and freebooters who are slowly but surely filching from us all "that made it the best to live in and the easiest to die for." We need recruits in every town and village and great city, men who will not give up the fight till the victory is won. This is a patriotism which tries men's souls, for it calls for quiet, self-sacrificing, unremitting labor; but it is the only patriotism which will save American institutions from destruction, and make the American name, as the symbol of human progress, honored throughout the world.

Plain Words to Californians.

It is announced that during the month of May of the present year there will be held in the city of New York a unique and significant exposition consisting entirely of the products of the State of California. But for the short-sighted and unpatriotic policy which has controlled its railway system, California would to-day be as well known in New York as any State of the middle West; and it is in keeping with the commercial enterprise of its people that in spite of such discouragements they boldly undertake to send across a continent a comprehensive exhibit of its imperial resources. It is a scheme in which Americans may well take pride, and to which they will wish the widest publicity and the highest success. From the days of the gold-hunters an air of romance and adventure has been associated with this region as with no other part of the country; and those especially who have visited this wonderful and beautiful State, and whose imagination has been touched by its possibilities of good to the race, can never divest themselves of a personal interest in anything that touches its honor or its prosperity.

Among the exhibits a prominent place will doubtless be given to photographs of the unrivaled scenery of the Yosemite Valley and its environs, as well as of the scarcely less wonderful cañons of the lower Sierra. But it is certain that one of the exhibits will not be a comparative series of views of the floor of the valley, showing it as it was, and in its various stages of deterioration through

the disastrous course of "improvements" which have impaired its former beauty—a state of affairs which has come about in part innocently through a lack of knowledge of the proper method of procedure, and in part through a strongly intrenched system of tyranny and greed known as the "Yosemite Ring."

No traveler will consider this a matter of merely local interest. Mr. John Muir, the Alaska and Sierra explorer, has well called the great gorge «the World's Yosemite Valley," and its degradation in any respect is as much a matter of general concern as would be the defacement of the Pyramids. In January, 1890, THE CENTURY called general attention to the destructive tendencies at work-a condition of affairs long notorious in the State. At intervals since we have noted the continuance of the amateur system of management. That the wide-spread criticisms in and out of the State have had no deterrent effect is evident from the observations made by Mr. Muir during last summer. In reading his remarks which follow, it must be remembered that the valley itself, which technically is held by California in trust «for public use, resort, and recreation inalienable for all time," has since 1890 been surrounded by a national park thirty-five times as large. which has been under military control; and that adjoining this park on the south, extending along the range, lies the Sierra Forest Reserve of over four million acres, which, for lack of similar supervision, is being desolated by sheep, by fire, and by the ax, as were the environs of the Yosemite before the establishment of the National Park. Mr. Muir says:

The care of the national reservation by the military has been a complete success. I was delighted to find that since the cavalry have successfully kept out the sheep and prevented destructive fires, the forests are taking on their old beauty and grandeur. Before the cavalry gave protection the floor of the forest was as naked as a corral and utterly desolate.

On the contrary, the forest reservations are still being overrun with sheep, and are as dusty, bare, and desolate as ever they were, notwithstanding the Government notices posted along the trails forbidding the pasturing of sheep, cattle, etc., under severe penalties, simply because there is no one on the ground to enforce the rules. One soldier armed with a gun and the authority of the Government is more effective than

any number of paper warnings.

The only downtrodden, dusty, frowsy-looking part of the Sierra within the boundaries of the National Park, with the exception of a few cattle-ranches, is the Yosemite, which ought to be the gem of the whole, the garden of all the gardens of the park. When I first saw the valley its whole floor, seven miles long by about a half to three quarters of a mile wide, was one charming park, delicately beautiful, divided into groves, meadows, and flower-gardens. The vegetation was exceedingly luxuriant, and had a charmingly delicate quality of bloom that was contrasted with the grandeur of the granite walls.

This beauty, so easily injured, has in great part

This beauty, so easily injured, has in great part vanished through lack of appreciative care, through making the finest meadows into hay-fields, and giving up all the rest of the floor of the valley to pastures for the saddle-animals kept for the use of tourists, and also for the animals belonging to campers.

The solution of the whole question, it seems to me, is to re-cede the valley to the Federal Government, and let it form a part of the Yosemite National Park, which naturally it is. It is the heart and gem of it, and should at least receive as much care and protection as the park surrounding. If the valley were returned to the control of the United States Government, it would be under the care of the military department, which would rigidly carry out all rules and regulations, regardless of ever-shifting politics and the small plans of interested parties for private gain. One management is enough.

and management on the Government basis would be better than one ever fluctuating with the political pulse. If that were done, the State would not be called upon for a dollar. Nearly all the members of the Sierra Club with whom I have talked favor putting an end to this political management. Only those people pecuniarily interested in roads, franchises, and other little jobs are opposed to it, as far as I have found out, though even those would be benefited by the change through increase of travel.

Mr. Muir's suggestion of recession is one that should enlist the support of every public-spirited Californian. It is idle to waste time in considering the causes of the valley's deterioration. The scandal of the present situation is well known. The State accepted the trust from the nation in 1864, but its servants have not observed the fundamental condition of the cession. If the suggestion of recession is thought humiliating, it is not half so humiliating as the continuation of the scandal. And why should the suggestion be humiliating? Continually in every State systems of administration which do not work well are being changed. The commission system has not worked well: whereas, side by side, the system of national control has redeemed the National Park-the very sources of the Yosemite waterfalls. Why should not this treasure of nature have the same admirable protection?

One word in conclusion: if recession is to be accomplished at the next meeting of the California legislature, its advocates must organize and bestir themselves now. If Mr. Muir is not cordially supported in this effort to redeem the valley and remove a blot upon the State, let not Californians any longer boast of public spirit or resent the charge of absorption in material progress.

The New Olympic Games.

It is not alone in the United States that a reaction has set in against the excesses of athletics. Other countries recognize that the enthusiasm has gone too far, that too much energy has been thrown into play, that brutality has been fostered, and that honor has often been put at a discount in the worship of mere success. Realizing the true value of sport in its widest extension, and hoping to develop and strengthen an international sentiment in support of fairness and moderation, a number of prominent men of various nationalities have set on foot a series of standard and periodic contests to which all the world may contribute. These have already received the name of the New Olympic Games. The first of the series is to be held at Athens during the Greek Eastertide, from the fifth to the fifteenth of April; and if it shall awaken sufficient interest, others will be held at intervals of four years in Paris, London, and New York successively.

The movement began in France, and was largely due to the initiative of Baron Pierre de Coubertin, general secretary of the French Athletic Union. By his exertions a congress of delegates from the leading nationalities, most of them representing amateur associations of importance, met in the Sorbonne during May, 1894. Germany alone of the great peoples sent no representative, but that was due, we believe, to accident and not to intention. The meeting was held under the presidency of Baron de Courcel, now French ambassador in London, and was approved by men famous in public life from all countries, including Germany. The result

of its proceedings was in brief the enactment of stringent regulations for the conduct of those who claim to be amateurs, and the appointment of a committee to inaugurate a series of international contests for such persons in all sports. President Cleveland has expressed his interest by accepting the honorary chairmanship of the American committee.

The leaders of this movement have done well to adopt the name Olympic Games. When Western civilization was confined to Greece the participating nationalities were Greek, but the event was international and made for international harmony; the name is invaluable by its reminiscences, and the great territorial expanse of Western civilization pays a just tribute to the international and democratic sport of ancient times in adopting its nomenclature for the modern counterpart. Here, indeed, lies the real importance of the enterprise. It has been generally remarked that the drift of our democratic age is either international or anti-national. The frequent international contests in sport reflect and typify the tendency. Those who believe that the nation, next to the church and the family, is the most beneficent of social organisms must struggle to substitute international for anti-national in the democratic feeling of our time; and any enterprise, however tentative, which looks in that direction deserves sympathy and support. The members of the international committee are not ashamed to be idealists; and they hope, as M. de Coubertin has said, that a well-regulated, honorable athleticism will be a factor not only in a wholesome muscular development of humanity, but in cultivating the finer sentiments of universal brotherhood and social peace. Ignorance is the mother of suspicion and hate; the better our acquaintance the larger our forbearance.

It is to be regretted that there is no prospect of participation in the coming sports by large numbers of Americans. This is due to the distance, the unwonted season, and our consequent inability to send our best athletes. We are informed, however, that the United States will have a few worthy representatives. Apparently our amateurs have not realized just what they owe to their country, and some have not yet learned that dishonor lies not in being beaten, but in refusing to struggle. The prospects are that there will be a considerable concourse of American spectators. It will awaken strange and important sensations in citizens of almost the newest Western nation to sit where the ancient Athenians sat. The contests in horsemanship will take place in the cavalry school, those in targetshooting at the government range, those in fencing and wrestling in the fine rotunda of the Zappeion, those of a nautical character on the Bay of Phalerum; but the most important, the historical representatives of the old Olympic sports, those which we designate as gymnastic and athletic, will take place in the stadium, hoary with age, and suggestive of all that has been most enduring along the whole central course of secular human history.

The readers of The Century will be interested to learn that these contests will be the subject of a paper in this magazine by M. de Coubertin, with drawings by Mr. Castaigne, which will derive additional attractiveness by comparison with the scenes graphically reconstructed by his pencil in the present number.

To what extent will it be able to dictate the Presidential nominations? Will its adhesion to either party prove a gain or a loss? Will the party managers court it or shun it? Will its influence be offset by the open, unpartizan, and patriotic political activity of the Christian Endeavor movement? The exigencies of the next election always press upon the mind of the partizan leader, and the hope of securing the solid support of such a formidable contingent will powerfully affect his imagination. But it should not require any exceptional far-sightedness to discern the ruin which must overtake any party, in a free government, that identifies its fortunes with these «patriotic» orders. Such principles and purposes as their oaths reveal cannot be harbored by any political organization without forfeiting the confidence of the people.

A Model Forestry Commission.

THE readers of THE CENTURY are familiar with the various efforts that from time to time have been made during the last seven years to arouse members of Congress and the public to the peril of neglecting the National forests.1 The indifference of our lawmakers to the preservation of our largest and most valuable agricultural crop has been phenomenal—the only bright spot in the dark record being the system of forest reservation advocated in these pages, and authorized by act of Congress, March 3, 1891. Under this law 17,000,000 acres of forest land of high altitude have been set aside by Presidents Harrison and Cleveland as reservoirs of timber and of water; but the enemies of the reservation policy have succeeded in defeating all measures looking to the proper defense and use of these lands, while the sheep-herders of the West go on in their depredations, unawed by the «paper bullets of the brain» fulminated against them by the Secretary of the Interior, who is powerless to call to his support a single soldier of the United States army. Even as we write a vigorous organization of the sheep-herders of Oregon is besieging the Secretary to consent to give up three fourths of the great Cascade Forest Reserve in that State. To yield to them would not only be against the immediate interests of Oregon, but would be a reversal of the beneficent policy of two administrations for which there would be no adequate reason, and would be a positive enactment of the principle, «After us the deluge,» heretofore negatively shown in our legislative inaction.

But at last the whole policy of the Government has been turned in the right direction. By the official initiative of the Secretary of the Interior, the Honorable Hoke Smith, a National investigation has just been set on foot, which, by the sheer force of its authoritativeness, must compel legislative attention. By the constitution of the National Academy of Science it becomes the duty of this body to undertake the investigation of any scientific problem upon the request of the head of a department of the Government.

¹ Among the articles on this subject printed in The Century during the last seven years, are these: "How to Preserve the Forests," June, 1889; "The Treasures of the Yosemite," August, 1890; "Features of the Proposed Yosemite National Park," September, 1890; "Amateur Management of the Yosemite Scenery," October, 1890; "Grees in America," November, 1890; "Trees in America," December, 1890; "The Pressing Need of Forest Reservation in the Sierra," June, 1892; "A Memorable Advance in Forest Preservation," April, 1893; "Our New National Forest Reserves," September, 1893; "The Forest Reserves and the

ernment, and such a request for the study of the subject of forestry Secretary Smith has made of the president of the academy, Professor Wolcott Gibbs, who has responded in a spirit commensurate with the importance of the Secretary's wise and patriotic action. In his acceptance of the task President Gibbs says:

It is needless to remind you that the matter you refer to the Academy is important and difficult. No subject upon which the Academy has been asked before by the Government for advice compares with it in scope, and it is the opinion of thoughtful men that no other economic problem confronting the Government of the United States equals in importance that offered by the present condition and future fate of the forests of

western North America.

The forests in the Public Domain extend through 18 degrees of longitude and 20 degrees of latitude; they vary in density, composition, and sylvicultural condition from the most prolific in the world, outside the tropics, to the most meager. In some parts of the country they are valuable as sources of timber-supply which can be made permanent; in others, while producing no timber of importance, they are not less valuable for their influence upon the supply of water available for the inhabitants of regions dependent on irrigation for their means of subsistence. The character of the topography, and the climate of most of the region now embraced in the Public Domain, increase the difficulty of the problem. Scanty and unequally distributed rainfall checks the growth of forests, while high mountain-ranges make them essential to regulate the flow of mountain streams.

You have done the Academy the honor of asking it to recommend a plan for the general treatment of the forest-covered portions of the Public Domain. That its report may be valuable as a basis for future legis-

lation, it must consider:

 The question of the ultimate ownership of the forests now belonging to the Government; that is, what portions of the forest on the Public Domain shall be allowed to pass, either in part or entirely, from Government control into private hands.

2. How shall the Government forests be administered so that the inhabitants of adjacent regions may draw their necessary forest supplies from them without af-

fecting their permanency.

3. What provision is possible and necessary to secure for the Government a continuous, intelligent, and honest management of the forests of the Public Domain, including those in the reservations already made, or which may be made in the future.

This admirable statement of the scope of the work is accompanied by the appointment of a commission of experts to undertake the investigation which, in character and in range of scientific knowledge of the sort that qualifies for a given task, has seldom, if ever, been equaled in the record of governmental work. The members are: Professor Charles S. Sargent of Harvard, chairman; Professor Wolcott Gibbs, ex-officio; Alexander Agassiz; Professor W. H. Brewer of Yale; General Henry L. Abbott, U. S. A. (retired); Arnold Hague of the Geological Survey; and Gifford Pinchot, practical forester.

These gentlemen, serving without pay, will proceed to make a scientific and practical study of the public forests from every point of view, and on the ground, and

Army, January, 1894; "Forestry Legislation in Europe," April, 1894; "The Depletion of American Forests," May, 1894; "Congress and the Forestry Question," November, 1894; "A Plan to Save the Forests," February, 1895; "The Need of a National Forest Commission," February, 1895; "The West and her Vanishing Forests," May, 1895; "Roresting Mehigan Lands," July, 1895; "Hope for the Forests," September, 1895; "The Plight of the Arid West," February, 1896; "Plain Words to Californians," April, 1896.

their report and their recommendations, whatever they may be in detail, cannot fail to carry such weight with the press and the public that it will be as impossible to go back to the old policy of neglect as to reënact literary piracy, or the toleration of lotteries, or any other outworn system of robbing the many for the benefit of the few.

We regard the establishment of this commission as a landmark of national progress. While of extraordinary value to the whole country, it will prove, particularly, the salvation of the West from those who would sacrifice its entire future to the greed of the immediate moment.



Recent American Sculpture:

DANIEL CHESTER FRENCH'S O'REILLY GROUP. (SEE PAGE 89.)

ISTORY does not become ancient so fast but that many people will remember the coming and the going of John Boyle O'Reilly. He has been dead only half a dozen years, and it was so late as 1869 that he first landed in America. He came as an escaped Fenian after three years of confinement in English prisons and a final transportation to Australia. On his arrival here he took out naturalization papers, began lecturing, and soon became a reporter for the «Pilot.» In 1876 he became the editor and manager of the «Pilot.» and remained so until the time of his death. In addition to his political writings he addressed himself to the Muse. The Irish Americans of New England accepted him as a leader, and when he died a memorial committee was appointed for the purpose of erecting « a statue or other monument to John Boyle O'Reilly." The sculptor chosen for the work was Daniel Chester French, and the group for the base of the monument shown in the illustration is the first result of Mr. French's labor.

The monument (to be erected in a small triangular park in the Back Bay district of Boston) is to take the form of a granite monolith of Celtic design. There will be a bronze bust of O'Reilly on the front of the shaft and this group of three figures in bronze at the back. It was fitting that the monument should show the features of the man in the bust, and symbolize the dominant qualities of the man's life in the group. As was abundantly shown in his verse, O'Reilly had his tender and sympathetic side. He had a love for the shepherd's pipe and the arts of peace; and this Mr. French has effectively represented by the figure of the genius of Poetry. He had also his sterner side, a nature quick to passion and resentful of wrong; and this Mr. French has represented by the strong figure of the soldier-the genius of Patriotism. Between the two sits the figure of Erin, the mother for whom he fought and sang. The two natures seem to support and console her: each has offered something to the leaves that lie in her lap; and as she sits sadly tranquil, forming the wreath of glory from shamrock, laurel, and oak, she seems to be thinking with pride of the deeds he has done in her name, and of the love that he in common with other sons has borne her.

The figures are types, not portraits, and they lean toward an expression of the Irish type in the Erin and in the Patriotism; but in other respects they are classic, yet with something too much of individualism and modern

spirit about them to be called either Greek or Italian. The Poetry, modestly offering a laurel leaf for the wreath, has a face of tender sadness which the light and shade seem to emphasize, and in pose is restfully relaxed, slightly leaning against the mother as though in sympathy. The lines of the figure, and the sweep of the wing which repeats the outer curve of the body and leg, are exceedingly graceful, and the lyre of Apollo, held in the left hand, relieves while it accents the rhythm of the lines. The figure of Patriotism is something of a contrast. The costume is that of a Roman or a Celtic warrior, the left hand clutches the flag, and slung at the back by a strap is the shield. The whole figure is heroic, strongly muscled, iron-like of frame, and stern of visage, as befits the soldier. The lines are shorter, rougher, more angular than in the Poetry, and instead of the soft relaxation of the gentler genius we have the half-strung rigidity of the guardsman ready to spring into action at a moment's notice. It is not a restless, but an alert figure-one that holds the oak leaf in the right hand easily enough but has something suggestive of nervous strength in the grasp of the left hand upon the flag. The Patriotism seems expressive of restraint; the Poetry indicates repose.

The entire group forms a pyramidal, balanced composition, and while the figures at the sides relieve each other, they also form the diagonal lines, and help support the pyramid of which the Erin is the center and the apex. She is seated erect upon a raised platform, and has a footstool or bench under her feet. The figure is massive, and is clad in a robe of heavy woven stuff that emphasizes the strength of the body by its breadth of treatment. The arms, bust, shoulders, and head are of corresponding proportions, and in their modeling give the feeling of structure and substance. The very largeness of the figure is impressive, and helps the dignity and majesty of the pose. The head is covered and the face is partly shadowed by a gracefully turned headcloth, which not only lends to the evenness of the composition by sustaining the large proportions of the body, but produces an admirable effect of light and shade upon the face. Little of the Greek is to be seen in the features: the cheek-bones are too high, the jaw is too square, the mouth too large, the nose too heavy, for the ideal classic proportions; but the ruggedness and boldness of the features create the heroic type. It is a face of great nobility, tinged by sadness, it is true, and yet with something of pride in the sorrow. Sorrow is shown, but