with poetry and music. In the vast majority of even good teachers, it is impossible to resist the conclusion that they become accommodated in their own minds to the minds of their pupils. Sympathy being the essential requisite, they unconsciously fall into the habit and scope of thought of their students,—"subdued to what it works in, like the dyer's hand." It is the fatal tendency in teaching to shrink towards the capacity of those taught—a tendency that able teachers resist by constant watchfulness and severe studies.

When a great man gives himself to teaching young men, and successfully resists this tendency, and when also he has the gift or genius for teaching, we have that rarest of men-a great teacher. This century has furnished two eminent examples: Dr. Arnold, of Rugby, and Dr. Hopkins, of Williams College. There have been other great teachers, but these two men preeminently wear these marks,- greatness and genius in their work. Dr. Arnold taught boys, but he kept even with his own powers, and was as great as if he had spent his days at Oxford or in Parliament. Dr. Hopkins taught young men, but it is difficult to conceive of him as greater in any other possible sphere. The success of each is due to the fact that they preserved the full measure of their mental powers, and at the same time had the faculty of laying powerful hold of the young mind. A great mind, enlisting young men, and drawing them by the secret charm and power of his divine gift up to himself without descending in his own mental habit to them, - such was Dr. Hopkins.

It would not be quite correct to say that Dr. Hopkins had a theory of teaching. Great men do not work by theories. He taught spontaneously, out of his own nature; and here lay the value of his work. He carried into the class-room the free action of his own mind and also its total action. Many men are able to do this who fail as teachers, but Dr. Hopkins possessed the knack of bridging the space between his own lofty thought and the mind of the pupil, and so getting him up to his own level. This is true teaching—inducing in the pupil the thought and feeling of the teacher.

But Dr. Hopkins did far more to get his pupils to share in his thought and ideas: he taught them to think in the same fashion. It was not a prime or even a subordinate purpose with him to induce his pupils to agree with his opinions. He rather aimed to get them to thinking in a certain way. His idea was that if he could arouse the nature of the man to the full, and start him into vigorous natural action, he would think safely. Hence he taught principles, and, above all, the nature of man. Scholasticism, formal logic, dogma these were remote from his methods, as they were remote from himself. "Know thyself" is the heathen phrase which he put to a use that carried his pupils to the heights of Christian morality. It is for this reason that his teaching and his pupils wear the plain marks of freedom and catholicity.

It was also a distinguishing mark of Dr. Hopkins's instruction that it had a peculiarly germinant quality. Teaching by principles and by the nature of man, and avoiding a too close deduction, his pupils were left free to develop in their own way. Dr. Hopkins taught the catechism for many years, but the students carried away more of their teacher's breadth and rationality than of the dogmas of the Confession.

It was a characteristic of his teaching that it had a directing rather than a binding influence. Room was left in it for growth, for variation, and adaptation to new conditions. He founded no school of philosophy, but did the better work of grounding young men in the fundamental principles of thought and feeling and conduct. If his teaching had a specialty, it consisted in unifying truth; the truth of one realm was the truth of all realms. Thus a well-taught pupil stood with the whole earth under his feet and all heaven above his head.

Dr. Hopkins's long life was spent in one of the most rural parts of New England, and one of the most remote from the centers of culture. Shut in between the Hoosac range on the east, and the Taconic on the west, miles of untouched forest on every side, in a little village that clustered about the college as cottages nestled at the foot of a friendly castle, he drew to himself, like a medieval teacher, pupils from all parts of the country, kept them about him for four years, and sent them out, stamped with his impress, to the towns and cities to repeat in themselves what he had taught them, and to convey far and wide something of the keenness of thought, of moral earnestness, and religious wisdom which they had learned and felt in him. Such a life is at once great in its humility and in the breadth and power of its influence.

Shall we Plant Native or Foreign Trees?

THE relative value for planting in America of native and foreign trees is a question of wide and deep and of rapidly increasing interest; yet it is one to which the public has scarcely begun to give the attention it deserves. As the destruction of our native forests progresses, planting for the sake of timber must be ever more largely engaged in; and this destruction cannot but progress with considerable rapidity, even though the legislation which is so greatly to be desired as a check upon it should soon be brought to bear. Year by year, too, it becomes more desirable that the worn-out fields of our Eastern States should be put to arboricultural service, and that the settlers on the prairies of the West should be accurately informed as to what trees they may best set out. And as our love for art increases we shall wish to do even more than we are doing now in the way of private and public planting for ornamental purposes. In short, there is no American who is not interested, directly or indirectly, in the question as to the kinds of trees which are best adapted to American uses.

The extent to which we have hitherto planted foreign trees is probably ignored by a great majority of our readers. Not indeed in very earliest years, but ever since the first advent among us of the nursery-gardener we have given them the preference, in our more thickly settled districts, over trees of native origin. The first nurserymen were Europeans, and brought both their stock of knowledge and their stock of plants from the Old World; and even when their knowledge had extended itself their stock remained largely the same; for, from some inexplicable reason, a great many species of European trees may be far more easily raised, and therefore more cheaply and profitably sold, than our own. Thus the private planter, getting his materials from nursery gardens, has generally been led to

choose foreign trees. Again, those who first began to plant on a large scale with an eye to economic results—to the production of timber—were inspired by English examples, and naturally selected those species whose utility had been proved by centuries of experience. So when ornamental planting over large areas was undertaken, what more natural than that the landscape-gardener should most often try to reproduce European successes and guide himself by the recommendations of those European books which were his only printed helpers?

The result has been that the foreign representatives of many important genera are as familiar to American eyes in populous districts as their native cousins, and in certain cases—in the case, for instance, of the willow, of the spruce, and of the horse-chestnut—are much more familiar. Signs of a change in practice may now be perceived. A few years ago it was impossible to buy American trees in any quantity in any nursery, but now they may more easily be had and are more often chosen. Still, the comparatively recent introduction of novel species from Asia has added to the exotic temptations of the purchaser, and even now, we are told, "where one native tree is planted in Massachusetts, five foreign trees are planted here."*

It will easily be guessed that this is not a desirable state of things. But how deplorable a state of things it really is, few understand as yet, save those who have specially studied the behavior of foreign trees upon American soil. Such studyhas been carefully carried on by more than one scientific observer during a number of years, and of late an effort has been made to test the value here, as sources of timber supply, of many of the species which had made the best records in their native habitat. Of course all observers do not agree upon all points, and of course it is too soon yet to decide dogmatically with regard to many imported species. But with regard to many others the evidence is practically conclusive and of a most unfavorable sort.

Take, for instance, the Norway spruce (Abies excelsa), which all through the Northern and Eastern States has been planted in such numbers for so many years that it can surely be said to have been fairly tested. It is a most remunerative tree to nurserymen, and a most tempting one to planters - easily raised and transplanted, and growing with remarkable rapidity and great beauty of form while young. But in the pamphlet just quoted, Professor Sargent says that its general introduction into our plantations "must, nevertheless, be regarded as a public misfortune. . . . In spite of its early promise, it must be acknowledged to be a complete failure in eastern America. It has passed its prime here, and is almost decrepit before it is half a century old; it will never produce timber here, and it becomes unsightly just at that period of life when trees should be really handsome in full and free development." The most cursory glance at the condition of this tree in the neighborhood of New York will prove that it is not unsuited to the climate of Massachusetts only. The Central Park is disfigured by hundreds of half-dead specimens which are not yet

half grown; and even where the soil is better, ragged, blackened forms almost invariably prove a want of health and vigor. Again, Mr. Robert Douglas, of Waukegan, Ill., one of the oldest and most widely known nurserymen in the country, writes that he has never seen a Norway spruce in the East fifty years old that was not failing in its upward development, or one in the West forty years old; and that when he went purposely to Canada to examine a large number which he had seen planted forty-nine years before (believing that they might have done especially well in a northern climate), he found that not one was living, and that many which had been planted in later years were already failing. And he adds, that he speaks with a sense of responsibility, as he has "grown more Norway spruces than any man in America and than all other men in America."

As it is with this favorite conifer, so it seems to be with many others almost as often planted. The Scotch pine (Pinus sylvestris), for example, will bear more exposure than any other tree, and will sooner make an effective "wind-break." It is therefore invaluable in certain positions to planters on the prairies; but as regards long life and the production of timber, Mr. Douglas pronounces it "an abject failure" in any part of the country where he has ever seen it, and his words are fully confirmed by the Massachusetts report.

With deciduous trees the case is similar. Neither the foreign lindens nor the foreign ashes are long-lived in this country. The sycamore maple (Acer pseudoplatanus)—so widely cultivated abroad for its valuable timber—grows rapidly at first, as is the way with many other European trees, but seems likely to prove quite worthless at least for economic purposes. Of the European oak (Quercus robur) Professor Sargent writes: "Tens of thousands of these trees have been planted in this State during the last century, but it is now almost impossible to find anywhere a healthy specimen more than thirty years old, while all the older trees have now almost entirely disappeared from the neighborhood."

These few instances are examples of a number more which might be given of the proved unfitness of European trees to withstand our climate. With other species, as has been said, the question still remains an open one; and with others, again, the evidence seems distinctly favorable. The white willow of Europe (Salix alba) not only flourishes, but has become thoroughly naturalized, in New England, and is of greater economic value than any native species. Though as much as this cannot be said of any other European tree, the English elm (Ulmus campestris) does thoroughly well and affords by its very different habit a desirable contrast to our native elms, while the Norway maple (Acer platanoides) and the European larch (Larix europæa) also promise to thrive. In such cases the needs of the landscape-gardener justify their continued cultivation, even though related native species may be still better fitted to supply us with timber.

As the climate of eastern Asia is much more like our own than that of Europe, one is not surprised to find the trees which have been brought thence giving, as a whole, a better account of themselves. Their chief value is for ornament and shade, but from these points

^{*&}quot;Some Additional Notes upon Trees and Tree-planting in Massachusetts." By C. S. Sargent, director of the Arnold Arboretum of Harvard College. (Reprinted from the Annual Report of the Massachusetts State Board of Agriculture.) Boston: Wright and Potter. 1886.

[†]In one of a number of letters recently published in the "Philadelphia Press."

of view some of them are very precious acquisitions. The curious gingko-tree, which has a beauty all its own, is now largely planted in the streets of Washington and is perfectly hardy as far north as Massachusetts. The paulownia, so interesting in form, so valuable for shade, and so splendid in its spring bloom, thrives in all the cities of the Middle States; and its masses of purple flowers appearing every now and then in the wild woods of Maryland show that there at least it has made itself perfectly at home. Of the ailantus it is hardly necessary to speak. Despite the disagreeable odor of its blossoms, it is one of the most valuable of all trees for city planting - growing very rapidly, affording a wide expanse of shade, being free from insects, and keeping the freshness of its foliage uninjured through the heats and dusts of summer.

But it is not our present aim to weigh the evidence for and against this tree or that. What we desire is simply to show that such evidence has already been collected in a considerable body; that it is the duty of every experienced planter still further to inform the public; and that it is for the interest of every intending planter that he should consider carefully before he buys his stock. Yet we feel justified in adding to these general statements a word of strong recommendation in favor of native as against foreign, or at least as against European, trees. At the best the latter are uncertain in almost every case, while the former have an inborn and a well-proved title to be trusted. The most successful ornamental planting that has ever been done in America shows its results in the streets of such towns as Stockbridge, Great Barrington, Salem, and New Haven, and was the work of men who went to the forest and not to the nursery for their infant elms and maples. Certainly our more recently planted parks offer small promise of a like maturity of beauty, with their European oaks and ashes, their Scotch and Austrian pines, in almost as deplorable a state as their Norway spruces. When not ornamental but economic plantations are in question, past experience tells very strongly against European trees, while the evidence of recent experiment with native trees - as in the plantations of indigenous conifers in eastern Massachusetts - is of the most encouraging kind.

OPEN LETTERS.

Centennial Considerations.

Two Views of the Relation between the State and the
General Government.

I. GOVERNMENT BY THE PEOPLE.

If a small community can govern itself, and do it better than others can govern it, a larger community composed of like individuals can do the same, and so any still larger community of like individuals, even to the largest.

There is no reason why a government by the people, through their representatives, should not wisely and well govern the inhabitants of a whole continent, provided the people are sufficiently civilized to enable those occupying the various parts of it to govern themselves.

This will appear more clearly the more accurately we distinguish what are the proper functions of government, and all that is necessary for it to do.

The only warrant for the existence of government of any kind is, that it makes possible for the people a greater degree of happiness than would be possible without it. In the earlier stages of civilization, war is the chief business of the government, and success in war is the chief good, and to it all else is made subservient. When civilization has advanced somewhat, it is found that in some degree each individual should be protected from aggression by other individuals, and then the power of government is, to some extent, exerted for that purpose; and as civilization progresses, this purpose increases in importance as compared with the other, and could we imagine wars entirely to cease, it would be the only necessary function of government.

From our position in relation to other nations, and from our strength as compared with those on this continent, the danger from aggressions by other nations is exceedingly small, and the probability of any resort to arms, unless we are the aggressors, is very remote, so that the preventing of aggressions by other nations

has come to be with us of comparatively small importance. Our government should every year become less military and more industrial; that is, less occupied with the duty of preventing foreign aggressions, and more occupied with preventing the aggressions of individuals on each other, and promptly and sufficiently repressing the wrongs done by such aggressions.

This, the paramount duty of government, has been very imperfectly performed in the past, and there is little reason to hope that it will be better done in the near future. Much of this imperfection is due to the low standard of the average morality of the people. But is not more of this imperfection the result of our governmental machinery not being adapted to the performance of this duty? Can it be performed efficiently so long as the national and State governments coëxist, and each is expected to perform undefined and undefinable parts of this duty?

When our national government was formed, slavery existed in most of the States, and presented an insuperable objection to any arrangement by which the people of the whole country could be intrusted with unlimited power over any part of it. The part of the people among whom slavery existed, and who intended to retain it, would not, and could not, consent that the part among whom it did not exist should regulate the relations between master and slave. Where these relations existed, laws were required which would not have been tolerated elsewhere, and it was only by the agency of the State governments that slavery could be continued.

For the repression of crime and for dealing with the criminal class, the single agency of the nation would be more efficient than the one compounded of the nation and the several States, each acting separately. There are as many criminal codes defining crimes and the mode of dealing with them, and with the criminal class, as there are States, and to them is added the code of the nation.

Whatever is properly a criminal act in one locality