will be the case in the future state forests of Wisconsin, it will undoubtedly be found that there are some parts of the entire system which cannot be made to yield a profit, on account of poor natural conditions or bad marketing facilities. In such cases it is sufficient if the entire system is made to show a profit. The unprofitable tracts must be carried along with as little outlay as possible, and may at least be made to yield some revenue. It would be good policy for the state to maintain a system of forests even if it had to run every part of it at a loss. For it needs forests in order to keep its climate from deteriorating and to maintain the prosperity of its people. But there is no reason to doubt that forest management in Wisconsin will yield a reasonable profit.

After the making of the working plan for each district will come the actual work of improving the forest. The natural growth of the trees which it is decided to raise is fostered by all the means of the forester's art, while the undesirable species are gradually got rid of and their new growth prevented. Wherever advisable, the natural re-forestation is aided by planting or seeding; as time progresses, improvement cuttings are made, and a partial revenue obtained. In the meantime roads are built, and gradually everything is brought into readiness for the final harvest. This takes place at different times in different portions of the district, so that after a while the district will contain lots stocked with trees of all stages of growth and a portion become ripe for marketing every year.

These stages in the development of a forestry system cannot be reached in Wisconsin for many years, and it is not necessary to provide the needed administrative machinery at the present time. For the tasks which will be the first to be performed and which have been enumerated above, the bill submitted by the commission contains the following plan:

THE FORESTRY DEPARTMENT.

There is no reason why the number of administrative boards should be increased. The attorney general, state treasurer and secretary of state, who now perform the same functions for the land office, may just as well constitute the supervising and auditing authorities of the forestry department. This will save the expense connected with the work even of unpaid commissions. The bill, therefore, provides for the appointment of a Superintendent of Forests by the officials named, who shall be the responsible head of the department, subject, however, to the finan-
cial control of the board composed of those officers. The success and efficiency of the department will depend principally on the qualifications of the superintendent, who should be a man of executive ability, and sufficiently interested in the work to familiarize himself with all its details as they gradually develop. In order to obtain such a man it is necessary to offer a fair salary, and to make the incumbent feel secure enough in his position to make it worth his while to put in his best efforts. For this reason the bill makes the term of the superintendent a long one, and one that overlaps with the terms of the elective state officers. A change in the office of superintendent every two years, according to the exigencies of party politics, would be fatal to the whole enterprise. Such a system may do well enough in offices the routine of which is established and has only to be followed by the new incumbent. But in the proposed forestry department everything must first be created. Methods, routine, precedents, and this formative period will extend over a long series of years.

The subordinate officials ought to be appointed by the head of the department. There need be but few of these at the start. A deputy and a clerk or two is all that will be required at first, in addition to the local fire wardens and such temporary help in the field as may be from time to time required. The increase of the permanent department staff ought, of course, not to be left to the arbitrary judgment of the superintendent. The bill lodges this duty with the supervising board. With this board is also left the authority to decide on the selection of lands for the permanent forest reserve, the making of contracts for the cutting, etc., of timber on state lands, the duty of auditing the accounts of the department, etc.

The duties of the superintendent and his assistants cannot be defined in detail, as much regarding the methods to be pursued must necessarily depend on circumstances as they arise from time to time. The amount and kind of work done by the department will depend in no small degree upon the size of the appropriation which each succeeding legislature will make for the purpose. The larger the appropriations, the more speedily can the forest system be brought into such shape that it will first pay for its own support and after a while become a source of profit. But under any circumstances will a certain period elapse before this can be done.

The first task to be done is, of course, the selection of the land, which must be made, evidently, in conjunction with the present land office. Even if no more state lands are to be sold, the work of the latter department will continue for a long while, to wind
up the transactions now pending with purchasers of land. But its work will contract considerably, and some of the expense incurred for the forest department will be saved on the score of the land office. After the new department has obtained the lands which it is to manage, it must find out what they are like. For the purpose of forest management this must of course be done much more thoroughly than has been done as to a part of the state domain by the land office. This part of the work will take, therefore, years to accomplish, and this survey of the land, together with the supervision of the local fire wardens, will take a large portion of the time of the superintendent and his assistant.

The supervision of the local fire police should be of such a character that not only should the department receive regular reports from the local wardens, but the latter should be liable, at any unforeseen moment, to receive a visit from the superintendent; who should have authority to call upon them for explanation in cases of neglect of duty, to remove them when found guilty, and in flagrant cases of negligence to enforce a penalty by prosecution in court.

A number of experiment stations, which should at the same time serve as model forests, should be established by the department at the earliest possible moment. The experiments to be conducted should be of a twofold nature: Partly sylvicultural, partly of a more strictly biological sort, and for this purpose the department ought to have a right to count on the assistance of other scientific agents of the state, notably members of the Geological Survey and the State University. Experiments, of course, are a source of expense, and the value of these stations as model forests will necessarily be impaired by the outlay for experimentation. But means will probably be found to keep the two objects of these stations as much apart as possible. Regarding the expense of this part of the work, it should again be remembered that much or little can be accomplished with them according to the amount of money available. Even a small appropriation, however, should be fruitful of some good. It would be superfluous to enter upon the detail of the work to be done at these stations. It will be of a more or less technical character; and will be useful in proportion to the skill of the persons in charge of it.

Much importance ought to be attached, especially during the infancy of the system, to the educational work of the department. The superintendent and his assistant should be men competent to deliver popular lectures on forestry subjects, and should do so whenever opportunity arises in schools, colleges, farmers' institutes, etc. They should also, from time to time, publish bulle-
tins containing information regarding forestry affairs, and use all other available means to instruct the people in their specialty. The forest system of the state cannot be successful unless it has that energetic and sympathetic support of the people which its importance for the public welfare so richly deserves.

The provisions of the bill submitted herewith, which have not been touched upon above, easily explain themselves. They are of an administrative nature, designed to bring the proposed new department into harmony with the general scheme of the state administration.

RECAPITULATION.

In conclusion, this commission wishes to emphasize once more the following points:

1. The establishment of a system of state forests is a necessity, not only for the protection of the climate and waterflow of the state, but for the purpose of providing a sufficient supply of raw material to the various lumber and wood industries of the state. The necessary steps toward this end cannot be delayed any longer with safety to the public welfare.

2. The establishment of such a system is entirely feasible. There are no obstacles of a physical, economic or financial nature which cannot with moderate effort be overcome.

3. It will take a series of years and some initiatory outlay to fairly establish such a system. However, the money so expended at first will after a reasonable time return into the state treasury, and the system, once fairly established, will yield a large annual income that will to a proportionate extent do away with the necessity of taxation.

4. The idea of managing forests by the state so as to obtain an annual revenue and yet not destroy the forests themselves is not the project of a dreaming idealist, nor an experiment which may or may not succeed, but has long been an accomplished fact in nearly every highly civilized community outside of the United States, including countries of such widely different conditions as Germany, France, Russia and British India.

Respectfully submitted,

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