

tion plan put into force. Centers of insect and fungus damage will be located and timber will be marked so that during the coming winter the park employees will be busy removing the dead, diseased and undesirable specimens. A forest nursery will be developed and active reforestation begun in 1914.

THAT balsam fir, a tree which a few years ago was considered of little value, is now in demand for pulp wood, is the statement made by the Department of Agriculture in a bulletin just issued on the subject. This demand has been brought about, says the department, by the enormous expansion of the pulp industry during the past two decades, with its present consumption of three and a quarter million cords of coniferous wood and the consequent rise in the price of spruce, the wood most in demand for paper-making. In addition, the department goes on to say, balsam has begun to take the place of spruce for rough lumber, laths and the like, as the price of the latter wood has risen. The chief objection to the use of large amounts of balsam fir in the ground-pulp process of paper-making is said to be due to the so-called pitch in the wood, which injures the felts and cylinder faces upon which the pulp is rolled out. Balsam fir does not have a resinous wood, and the material which gums up the cylinder probably comes from grinding balsam under conditions adapted to spruce wood. Yet from ten to twenty-five per cent., and possibly more of balsam can be used in ground pulp without lowering the grade of the paper produced. It is known that with balsam logs left lying in water over a season this drawback practically disappears. In chemical pulp, produced through the action of acids, these acids are known to dissolve the pitch, and any amount of balsam can be used, though some claim that too much balsam in the pulp gives a paper that lacks strength, snap and character. At the present time, balsam fir furnishes about six or seven per cent. of the domestic coniferous wood used by the country's pulp industry. The tree itself constitutes, numerically, about twenty per cent. of the coniferous forest in northern New York

and Maine, and is abundant in many parts of New Hampshire, Vermont, and in the swamps of northern Michigan, northern Wisconsin and Minnesota. It readily reforests cut-over areas, and attains a size suitable for pulp wood in a short time. Under present methods of cutting, balsam fir is said to be increasing in our second-growth forests at the expense of red spruce, and with the gradual decline in the supply of the latter wood the fir will become more and more important commercially.

UNIVERSITY AND EDUCATIONAL NEWS

THE faculty of the graduate school of Cornell University has voted to recommend to the board of trustees that Dr. J. E. Creighton, professor of logic and metaphysics, be elected dean to succeed Dr. Ernest Merritt whose resignation takes effect in June. The recommendation by the faculty is virtually equivalent to election. Two years ago President Schurman, in a report to the trustees, proposed that the faculties of the graduate school and the college of arts and sciences be permitted to choose their own deans and the trustees approved the suggestion. Last year the faculty of the college of arts and sciences did select a dean, in the person of Dr. E. L. Nichols, professor of physics.

DR. GEORGE L. STREETER, professor of anatomy in the medical department of the University of Michigan, has been appointed professor of embryology in the Carnegie Institute of Embryology, of the Johns Hopkins Medical school.

PROFESSOR CHARLES MCMILLAN, professor of civil engineering at Princeton University since 1875, has retired and been appointed professor emeritus.

DAVID CAMP ROGERS, Ph.D., associate professor of psychology at the University of Kansas, has been appointed professor of psychology at Smith College.

MR. WILFRED JEVONS has been appointed junior lecturer and demonstrator in physics, and Mr. A. E. Barnes lecturer in materia medica, pharmacology and therapeutics at Sheffield University.