carbohydrates—pentosanes and sanes-particularly products of their respective hydrolysis-pentoses and hexoses. The bark of the coniferae, and to some extent that of the deciduous woods. contains tannin associated with a large percentage of substances called "nontans" including carbohydrates, such as glucose, etc. Tannic acid is a member of the aromatic (cyclic) series, and the tannin obtained from barks is generally classed as belonging to one or both of the following groups-pyrogallol and cate-Derivatives of these compounds are found among the degradation products formed by the distillation of wood, and in a measure the presence of these substances explain the hypothetical contention that lignin is built up from coniferyl alcohol and besides the analogy between the bark and lignified wood.

The chemist, in considering the products of the distillation of wood, has his attention almost entirely directed to the substances formed by the pyrogenic degradation of cellulose, lignin and carbohydrates which constitute his raw material and the conditions most favorable for the highest yields of the economic products which he desires to obtain from his wood. Some of the methods and results will be the subject of future communica-

tion

New York to Alberta by Wing.

From New York State wild ducks drift north-westward to Alberta, according to the inscription found on a band on the leg of a pintail shot on the outskirts of Camrose, Alberta, recently. The inscription bore the wording: "Released by the American Museum at New York. Will the finder of No. 35793 please notify us." Carl Jensen, who shot the bird, is communicating with the museum authorities and is having it mounted.

Roughly speaking, it would be about 2,500 miles from New York to Camrose. The discovery of the New York bird so far north-west will open up a new field of speculation as to the wild ducks' migratory habits.

Daylight Encouragements

Books are night birds. Most printing reaches the ultimate consumer by lamplight. Only school books, directors, telephone books, maps and telegrams are

read by daylight.

So says Dr. Frank Crane. The doc slights the newspaper writers, however, in overlooking the fact that some of the most impressive literature we get reaches us in the morning mail to brighten up the day and encourage us in our work. It generally concludes with a jovial threat to take the usual legal proceedings if not attended to within a specified date.—Ottawa Citizen.

The Rats-and-Matches Theory

In the lengthy category of reasons and excuses for fires, that of friction due to the gnawing of match heads by rats and mice has had to bear its full share. When all else could prove an alibi the rats were blamed. The increasing number of fires attributed to this cause emphasized the necessity of establishing the possibility of it being bona fide.

The Underwriters' Laboratories, Inc., of Chicago, after careful and prolonged experiments by its fire prevention engineers, has reached the definite conclusion that rats would rather starve to death than eat the modern match heads.

Match Concern Reforests

Bryant & May, a big British match firm, have purchased a large estate in Scotland and are reforesting land to supply their own wood for the making of matches. The land secured is at present quite bare, the tree chosen is the aspen, and it will be thirty years before the firm manufacture the first matches from the new supply.

A Subscriber's Opinion.

I am delighted with your Forestry Magazine, and am pleased to be a member of the Forestry Association. Being a wood ranger myself, you can imagine how these articles appeal to me.

Wishing the association every suc-

cess,

H. J. D. HAMMOND, Dryden, Ont.