AN AERIAL PHOTO OF THE LAURENTIDE COMPANY'S PLANT AT GRAND'MERE, QUE.

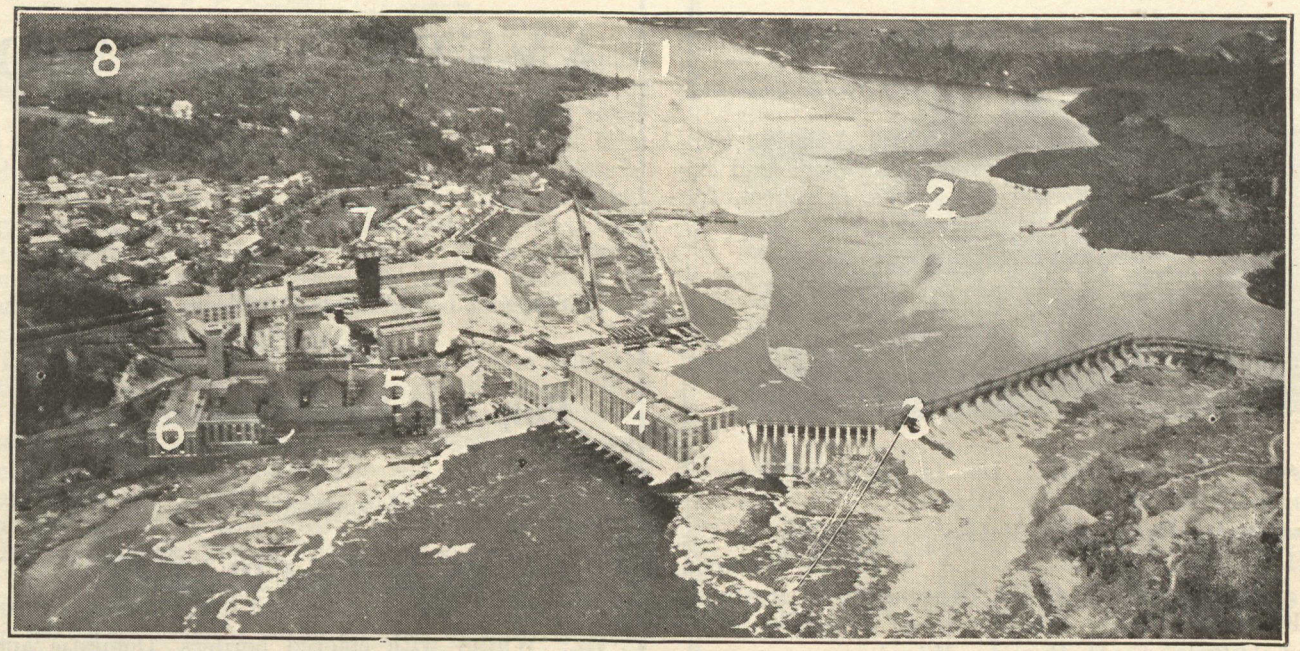

Plate reproduced by courtesy of the The Financial Post. Photo by Fairchild Aerial Surveys Co. (of Canada) Limited.

Key to Photo.—No. 1. The St. Maurice River stretching 170 miles to the north; 2. Pulpwood floating down; 3. Dam and falls providing power with 82 foot head; 4. Power house (162,000 h. p.); 5. Pulp mill adjoining; 6. Paper mill; 7. Townsite, built in the wilds; 8. Golf course, one of many means of entertainment provided.

The Possibilities of Aerial Photography

THE MAKING of photographs from aircraft is rapidly assuming importance in all sorts of engineering work, and to a less extent in advertising. Photographs of industrial plants, like the above, give a far better idea of the layout and appearance of a mill than any formal perspective drawing can possibly do. Vertical photographs have all the advantages of line maps and blueprints and give infinitely more information, and are much more intelligible to persons unaccustomed to reading maps and drawings. Nothing escapes the eye of the camera, and a photograph can be studied in the office at leisure, and all the information it contains extracted. Insurance companies have found that they can see forbidden piles of rubbish, old boxes, etc., in backyards, which have escaped their inspectors, when the premises are photographed from the air. Recently a power company wanted to locate a right-of-way for a transmission line. They had the proposed routes photographed from the air, the engineers picked out the one they wanted, the property lines showed on the photos, and the owners were looked up in the county records. Then before any engineering parties had been on the ground, the owners were looked up and the properties purchased, before anyone knew that any power line was contemplated.

Aerial photos of the forest are equally valuable. With the old method of timber cruising, strips are run through the forest at intervals of one-half mile to a mile, and all the trees estimated on a strip 66 feet wide. The width of this strip is estimated by eye, and wherever its centre line crosses a lake, swamp or burn, a note is made at the beginning and end of such feature, and also at the beginning and end of each timber type. The boundaries of types and lakes, swamps, burns, etc., are sketched in from these notes giving the areas. From the strips the average amount of timber per acre is calculated, and applied to the various types. In this way, the usual percentage of the total area estimated is two-and-one-half. Sources of error are the eye estimate of the width of the strip and the areas of the various types, burns, lakes, swamps, etc., which are sketched in. Then, too, the small amount of country actually covered. With aerial photos the actual area of each type is measured with a reasonable degree of accuracy, the boundaries of types are more accurately determined than is possible on the ground, areas burnt, windthrown, killed by insects, swamps, etc., can be accurately measured. The amount of timber per acre can be estimated from the pictures by comparing them with areas already studied in detail, and if more accurate estimates are required, a small amount of ground work can be done to check up. ONE HUNDRED per cent of the area is covered, and the time is only a small fraction of that required to do ground work. The methods are out of the experimental stage, and have been successful in important actual work.

A Canadian Company, the Fairchild Aerial Surveys Company (of Canada) Limited, has been formed to carry on this work, the flying being done by the Laurentide Air Service, Limited, which has made such a good record during the last season. The directors of the Company are Mr. Thomas Hall of the Laurentide Air Service, Ltd., and Montreal Boat Builders, Ltd., Montreal, Mr. F. E. Mutton of the International Business Machines Co. Ltd., Toronto, Mr. S. M. Fairchild of the Fairchild Aerial Camera Corporation, New York, and Ellwood Wilson. The offices of the Company are at Grand'Mere, Que.