

wheel brakes.

Colonel McCoy discussed other important points in propeller design requirements which have been studied in the Army propeller laboratory where he is stationed and in other aircraft laboratories. Keeping ice off propellers is one of the most important, he said.

The standard alcohol slinger ring method, he feels, "has about reached the limit of usefulness as propeller diameters grow larger and propeller rotation speeds become slower." Electric heating has several handicaps. He described a new blade-coating method.

"Experiments and service trials

with anti-icing pastes and lacquers readily applied and removed from the blades show considerable promise of eventually providing protection as good as any yet obtained by any other means," Colonel McCoy stated. "The life and effectiveness have not yet been fully determined."

One paste or compound used contains certain ingredients to lower the freezing point. Other types of finish attempt to lower the adhesion shear values of the ice, permitting centrifugal force to clear the blades of ice periodically as soon as a sufficient thickness collects to be affected by centrifugal force.—S.S., Jan. 21, 1944.

### ✧ Reviews ✧

**Meteorology Workbook with Problems**, by Peter E. Kraght. 141 Illustrations, Sample Weather Map. Photos of Cloud Forms. 148 Pages. 8½ x 11 Inch Format. \$2.25. Publication Date: December 5, 1943.

The author covers the subject of basic meteorology in a most realistic manner. His many illustrations are not merely supplementary to the text, but make a pictorial foundation for an understanding of weather as related to flying, sailing, and other activities. Too much praise cannot be given him for his problems which demonstrate to the student the relationship between pure and applied meteorology more clearly than many more advanced textbooks. The readability of his book in no way diminishes the accuracy of the meteorological theory, which by necessity is complex. The use of lapse rate diagrams along with pictures of atmospheric conditions familiarize the student with the vertical dimension of the atmosphere, which is of great value to the aviator and any one who

plans to learn how to forecast.

The workbook consists of fifteen chapters with a set of practical problems at the end of each chapter. The book can be roughly divided into two parts, the first dealing with the physical background and the last dealing with weather phenomena as such. In the first part, the author discusses temperature, pressure, atmospheric composition, condensation, and stability. These chapters include a set of graphs showing fundamental relationships between different elements. In the last part, he covers clouds, visibility, fog, local and gradient winds, fronts, frictional effects, and weather observations. This completes the range of possible weather conditions which concern the practical student.—*E. M. Brooks.*

### ✧ Corrigenda ✧

March, 1944, p. 109, fifth line from bottom of page should read:—

"Dig Down in Your Jeans" fund ..... \$1,777.59

March, 1944, p. 109, second line from bottom of page should read:—

BULLETIN, including editing ..... \$7,041.25