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HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication. References to former articles or answers should give date of paper and page or number of question.

(8581) A. C. asks for a recipe to take an instantaneous picture similar to a tintype upon surface of a sea shell. What chemicals, etc., are required for the purpose? A. The surface of the shell must be coated with a sizing and then sensitized. You can obtain the materials and chemicals from any dealer in photo materials.

(8582) J. S. B. asks: In your issue for February 22, on page 124, you have an article on hydrate of potassium. You say that it burned in oxygen, forming potassium hydrate and water: then this equation would be true: $KH + 2O = KOH + H_2O$, which cannot be balanced. Can you make this clear? A. If the formula for potassium hydride is KH and it were burned in O, the product would be at first K_2O , potassium oxide. Upon cooling this would combine with water, which would be formed and yield KOH. This is the reaction: $2KH + O_2 = K_2O + H_2O$; and $K_2O + H_2O$ becomes $2KOH$. Chemists think that hydrogen does not form definite compounds with the alkaline metals.

(8583) A. B. McK. asks: Will you kindly give me what information you can on the following subject? Take a piece of steel and cut in two pieces. Make one as soft as possible and the other as hard as possible; now, what will be the difference in resistance in ohms, if any? A. Barus and Strouhal give the specific resistance of glass-hard steel as 45.7 and of soft steel at the same temperature as 15.9. This is the resistance in thousandths ohms of a bar one square centimeter in cross section.

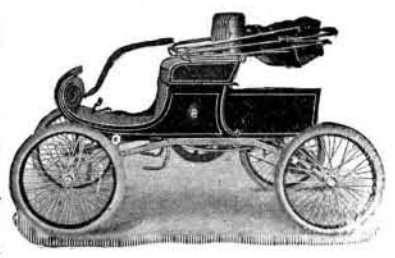
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