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## NOTE ON STELLIFORM CRYSTALS, WITH SPECIAL REFERENCE TO THE CRYSTALLIZATION OF SNOW.

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As this *Journal* is not addressed exclusively to the scientific reader, but to the members of the Canadian Institute at large, it is necessary to offer a brief explanation of the more important questions involved in the general study of crystal-forms, before adverting to the special object of the present communication.

The forms assumed by natural bodies are of two general kinds:— (1) *Accidental*, depending not so much on the actual nature of the body, as on surrounding conditions; and (2), *Essential or Regular*. Accidental forms are most rare (if indeed ever truly present) in Organic Nature. Every plant and animal, and each portion of a plant and animal, has its one fixed and determinate form, never really departed from, except in the case of monstrosities. Amongst minerals, on the other hand, accidental forms, or such as are common, under certain circumstances, to all minerals, are of frequent occurrence. The Mineral Kingdom, however, possesses also its definite or essential forms. These, whether transparent or opaque, are termed *crystals*.

So far, therefore, as regards the regular or essential forms of Nature, two form-producing powers appear to exist, *viz.*, vitality and crystallization. Forms which arise from a development of the vital force,