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A CLASSIFICATION OF NATURAL RESOURCES[1]

ALONG with the new vogue of Malthusian doctrine there is a marked renewal of interest in the duration of certain natural resources. Research and discussion along this line are bound to be increasingly detailed and searching. One of the prime needs is a workable classification of resources so that issues will not be confused by the grouping together of items which should receive diverse treatment. The primary object of this paper is to distinguish the major divisions in such a classification. There follow some reflections on the outlook for human society in a fully populated world with diminishing resources. The probable effect of these conditions on international relations is then briefly considered.

Natural resources should be considered in at least four primary classes, two of which are exhaustible and two inexhaustible. Let us, for convenience, designate these classes by the four letters, A, B, C and D.

(A) Materials and sources of power which exist in superabundance for all foreseeable time, such as common salt, brick clay, sunlight and nitrogen.

(B) Resources permanent in their nature but limited in amount, like soil and water power.

(C) Resources that are reproduced in crops, renewing themselves regularly and permanently if not exterminated, *e.g.*, fish, forests and various animals.

(D) Limited accumulations not replenished at an appreciable rate. When gone, they are gone forever. Here belong important mineral resources, particularly coal and most of the ores.

As resources are classified here, the problem is different for each class. The duty before us is not the same for any two classes. There was an old style of thrift which taught people merely to save. "A penny saved is a penny earned." But sometimes a penny saved is a penny lost.

Class A, unlimited and inexhaustible resources, tempts the inventor, but is often forgotten by the conservationist. To develop these to the utmost is a duty. Directly or indirectly their use relieves pressure elsewhere.

Nitrogen is the best example of such a resource. Its compounds are all soluble or otherwise unstable, and hence, though incessantly produced in great quan-

[1] Address of the vice-president and chairman of Section E—Geology and Geography—American Association for the Advancement of Science, Washington, December, 1924.