

Publications Committee

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UNIVERSITY OF TEXAS.

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GEOLOGIC MUSEUM.

It is the aim of the Professor of the School of Geology to establish at the University an Educational Museum which will represent in the broadest sense the geologic conditions—structural, economic, organic, and general—of the earth, and to illustrate these features as far as possible by Texas material accompanied by maps, models, and labels.

This Museum will exhibit not merely the extraordinary, but also the far more important and too little valued ordinary features of our State, so that any person—citizen or stranger—will find compactly arranged in the halls of the University a complete and instructive synoptical exhibit of all the diverse natural features of Texas. The Museum will also be a medium of exchange with similar institutions outside the State. The attention which will be attracted abroad by properly prepared and representative specimens from our State, conveying clear and accurate scientific information that can be disseminated in no other manner, will attract the earnest interest of a class of intelligent people who can not be otherwise reached.

Such a Museum, to be complete, will include the following departments:

I.

Structure and Composition of the Earth.

1. Elements composing the minerals and rocks of the earth's structure.
2. Minerals composing the rocks.
3. Occurrence and arrangements (structure) of materials composing the earth.
4. Surface conditions of the earth's structure.
 - a. Physiography, or the forms of the surface.
 - b. Agencies (epigenic) producing surface conditions, including (1) meteorologic or atmospheric, illustrated by statistical charts and diagrams of the occurrence and distribution of rainfall, temperature, humidity, hydrography, and relative altitude; (2) organic agencies, present and past, accompanied by complete illustrations of the geologic work of plants and animals, including man.

II.

Cultural Geology, or Geologic Conditions influencing Man.

1. Specimens and graphic representations showing the relations and natural conditions (environment) to civilization.
2. Products of the earth directly used by man.

a. Specimens illustrating stratigraphic conditions of agriculture, including the origin, distribution, amelioration, and adaptability of residual and transported soils; natural fertilizers, conditions for water supply, and drainage, including the geology of artesian wells and irrigation.

b. Structural material: Building-stone, sands, clays, cements, brick, mineral paints, lumber supply, etc., and flint and sands for glass making.

c. Raw material for the manufacture of commercial products, especially ores, fluxes, and woods.

d. Abrasive material: Buhrstones, grindstones, emery novaculite, etc.

e. Products and conditions facilitating transportation, including material for building macadamized and other wagon roads, railways, and the improvement and preservation of navigation.

f. Fuels, illuminants, and sources of mechanical power; coals, lignites, coke, wood, asphaltum, charcoal, petroleum, natural gases, water-power.

g. Products useful in decorative and fine arts, curios, etc.: Lithographic stone, modeling china, and porcelain clays; artist's pigments, statuary marbles, ornamental stones, gems and rare mineral forms.

To establish this Museum economically, the University must rely upon the generosity and patriotism of the people of the State and the liberality of other educational institutions which have expressed a willingness to exchange most valuable material for objects rare to them, which can be procured at a comparatively slight expense in Texas. The material promised from these outside sources already bids fair to be so great that a hearty response will be necessary upon the part of the people of Texas to show that our home interest is equal to it.

EDUCATIONAL SERIES FOR HIGH SCHOOLS.

The functions of the Museum will, also, be distributive as well as collective, and its utility not confined to the University building, but disseminated throughout the State, it being the intention to select from its duplicates typical educational series for distribution to all high schools connected with the University wherein the natural sciences are taught; and the professor in charge takes pleasure in announcing that he is already prepared to send installments of properly labeled specimens for these educational series.

It is hoped that each of the great industrial classes and professions—agriculturalists, mechanics, builders, railroad men, and teachers—will aid in making this collection, and to help them in so doing the following instructions concerning methods of making and shipping collections have been formulated:

Suggestions for Collecting and Shipment of Specimens.

1. Endeavor to send specimens showing every phase of the subject it is intended to illustrate. If of consolidated rock material, send hand specimens, 3x5x1½ inches (approximately), from a freshly broken ledge and from its weathered surface. If a soil, send the underlying rock (including clays, sands, etc.,) as found below the surface wash in the wells of the region. Send at least one cubic foot of the soil, free from leaves and organic matter, stating, if possible, the native vegetation that grows upon it.

2. If specimens are worth sending at all, they should be sent in abundance. A test sample should be sent by mail, and, if desirable, directions will be sent for collection of a representative suite of the specimens.

3. Send ordinary objects—the stone used in buildings of the vicinity, the soils that are cultivated, woods that are used, etc.

4. Waterworn specimens—specimens whose natural occurrence and origin is unknown—are usually worthless.

5. Wrap each specimen carefully in many layers of old newspaper, inserting a label giving *locality*, date, and name of collector, and tie with string. Pack in box or barrel, and ship by freight to the Professor of Geology, University of Texas, Austin, Texas, U. S. A.