Lines of Work in Government Forestry,' by Gifford Pinchot; 'The Forestry Conditions of Washington State,' by Henry Gannett; 'The Five Civilized Tribes and the Topographic Survey of Indian Territory,' by Charles H. Fitch; 'The Bitter Root Forest Reserve,' by Richard U. Goode.

On motion of Mr. Hyde, the following resolution was adopted:

"WHEREAS, through the increasing consumption of forest products, the destruction of forests and the vast extension of means of transportation, questions hitherto of restricted bearing are rapidly assuming grave international importance, and

"WHEREAS, the National Forest Association of Germany has undertaken to collect throughout the world forest information and statistics of commercial importance.

"*Resolved*, That the National Geographic Society express its deep sense of the value to mankind of the work thus begun, and pledge its countenance and support to the investigation, and

"*Resolved*, That a committee of three be appointed by the Chair to communicate these resolutions to the National Forest Association of Germany, and to take such other steps as may be necessary to carry them into effect."

In conformity with the resolution, the Chair appointed Mr. Gifford Pinchot, of Washington, Chairman, and Messrs. William H. Brewer, of New Haven, and Arnold Hague, of Washington, as a committee to take requisite action on behalf of the National Geographic Society.

W J M

CURRENT NOTES ON ANTHROPOLOGY.

THE CASTINGS FROM BENIN.

WHEN the English captured the city of Benin last year they found and sent to the British Museum some three hundred remarkable bronze castings. These present animal and human figures with various ornaments in relief, the line strong and the workmanship of singular beauty.

The origin of this work has greatly puzzled ethnologists. Carlsen (*Globus*, 1897, No. 20) and Mr. C. H. Read, of the British Museum, think they are the work of some European bronze founders who settled in the sixteenth century. Mr. H. Ling Roth (*Reliquary and Illustrated Archæologist*, July, 1898) attacks this position with some good arguments, but closes his paper with the negative decision that "the question of the origin of this Bini art remains unsolved."

CRANIOLOGICAL INFORMATION DESIRED.

DR. MIES, whose address is 'Schildergasse, 21, Cologne, Germany,' has issued a leaflet requesting particulars as to the greatest breadth of normal adult skulls. Those who can furnish him such information should apply for his leaflet, which is ruled and numbered so that the measurements can be entered in the briefest and most perspicuous manner.

ETHNOGRAPHY OF THE UPPER PARAGUAY.

FOR an American ethnologist it is as agreeable to discover a new linguistic stock as it is for the zoologist to discover a new genus of mammals. This good fortune happened to Mr. Guido Boggiani on the river Paraguay. He obtained a vocabulary from a tribe called Guanas (a Guarani term meaning 'fine people' and applied to various tribes), living near the river about lat. 23° south. It turned out entirely different from any other known tongue. He proposes for it the name 'Ennima stock.' After comparing its words with those of all the stocks anywhere near it, I find no affinities except a few, and these doubtful, with some of the Tsoneca dialects of Patagonia.

The position of the Ennima as well as the other tribes on the upper Paraguay are described and figured by Mr. Boggiani in an article in the *Boletin* of the Argentine Geographical Institute, Vol. XVIII., 1898.

MOTIVES OF SUICIDE.

IN *Globus*, July 16th, Dr. Richard Lasch refers to such motives for suicide as love,

sorrow, fear, melancholy, despair, illness, etc., and adds another—revenge. By numerous quotations he shows that in many primitive peoples, and those partly civilized, a person would kill himself to spite another. This he explains by the belief that the soul of the suicide would have the power to torment his enemy during the latter's life; not only this, but the death of the suicide would be attributed by his kinsfolk to the enemy and the penalty of blood-revenge would be demanded.

Doubtless this is true at times, but the theory is rather too finely spun. Suicide from an obscure motive of this nature is not rare in civilized lands where such beliefs and customs do not exist. Lovers kill themselves that their cold lady-loves may grieve (which they generally do not); children kill themselves that their parents may be sorrowful. Foolish, but human!

D. G. Brinton.
University of Pennsylvania.

NOTES ON INORGANIC CHEMISTRY.

From the twenty-eighth annual report of the Deputy Master and Comptroller of the Mint, 1897, *Nature* has taken a memorandam by Professor Roberts-Austen on the treatment of the surface of medals of silver and bronze. For centuries silver medals have been issued in England with the tables or flat surfaces smooth and mirror-like, while a more or less frosted surface has been given to the portions in relief. Owing to the ready discoloration of the polished surface, in France it has been customary often to use unpolished dies and to give the medals a dead surface by rubbing with pumice. More recently the sand blast has been used for this purpose. This surface may be further treated by immersion in a soluble sulfid, or better in a platinum solution, when a black surface is obtained which may be more or less removed by rubbing with brush and pumice. Very beautiful shadow effects may be obtained, and many medals were thus treated at the (British) Mint in 1897 for the first time.

In the case of bronze metals much of the beauty of the earlier medals was due to the fact that instead of being struck they were cast, and a thin layer of oxid was acquired in the process. Most modern 'bronze' medals are really copper 'bronzed' or artificially colored on the surface. The production of this color is by various methods, but generally by boiling with dilute solutions of certain salts, of which verdigris and sulfate of copper are the most important. The finest work in this line is that of Japanese artists, and its beauty seems to be chiefly due to the quality of the verdigris used. This verdigris, known as 'Rokusho,' is produced by the action of plum-juice vinegar on plates of copper containing certain metallic impurities. Very fair effects in bronzing are obtained with ordinary European verdigris, and this process is used in the British Mint. In France medals are struck of true bronze, with a high percentage of zinc, and the color is improved by gentle heating, producing superficial oxidation, but no true patination.

At the recent meeting of the American Association in Boston a paper was read by Charles L. Reese on quartz crystals from Diamond Post-office, near Guntersville, Marshall county, Ala., which contain inclusions of petroleum. Some of the cavities of these crystals measure as much as 2.3x1.8x1 mm. On warming, the petroleum globule bursts and wets the walls of the cavity. The contents of the cavities were identified as petroleum by the yellow-green fluorescence, the stain of the crushed crystals on filter paper, and the characteristic odor and smoky flame. Petroleum also occurs in the neighborhood where the crystals were found.

J. L. H.