

theories but to make money. If the geologist will show the miner how to find ore, he will dig the necessary holes, but he cannot afford to do so for the purpose of ascertaining academic facts. Old Mining is distinctly utilitarian and makes friends with young Geology only when the latter shows sympathy with the purpose of his labour. That sympathy American and Canadian geologists have tendered to a marked degree, and if in Europe geology still adopts toward the miner a pose more polite than practical, it is no wonder that the economic development of the science remains relatively insignificant.

J. EDMUND WOODMAN.

Another recent student of the subject is Mr. J. Edmund Woodman, formerly Professor of Geology in Dalhousie University, Halifax. On May 18, 1903, he presented a paper on the Moose River district, and on March 18, 1905, another on the 'Distribution of Bedded Leads in relation to Mining Policy.' Both of these were read before the Nova Scotia Institute of Science. He proposed the name of 'Meguma' for the gold-bearing series, and divided it into a lower quartzitic division called the 'Goldenville,' and an upper or black slate division called the 'Halifax.' In the first of these two papers Mr. Woodman uses the term 'crenulation' to label the barrel structure. He shows that the crenulation is not always parallel to the stratification. Even undoubted cross-veins will exhibit this structure, although less frequently than those of the bedded type. In the second paper he states that in the Nova Scotian gold region there are 26 well-marked anticlinal crests, and exactly one-half of them show domes that have been tested by mining. Any one anticline, owing to cross-folds, may have several domes, but five is the largest known number on the same anticline. He states that only "one or two cases of gold-bearing bedded veins are so far known to exist in the trough of a syncline; and from the mechanics of the mountain-building and attendant vein phenomena, it is not to be expected that such deposits will occur along the synclinal axes to any extent." Hence "it is probably safe to neglect these folds entirely in exploring for new deposits." He emphasizes the association of gold-bearing quartz with the slate, and asserts that "no prospector wastes his time on country definitely known to be all whin." His use of the term 'whin' for quartzite is regrettable, especially as he refers to the fact that this word "was originally employed by Hutton, in Scotland, to designate certain sheets of trap, and in Cornwall still has a similar meaning."