how important the algae are as reef-building organisms to-day, and remarks that Lithothamnion-structure is easily obliterated by percolating waters so as to form a structureless limestone. He concludes: "It is freely admitted that in these pebble-like structures from the Cambrian and Ordovician limestones, no organic structure has been found sufficiently well preserved to prove conclusively that they are of algal origin, but their similarity to such structures now forming is very suggestive." In discussing the orientation of the edgewise conglomerates, he follows Hahn's and Grabau's theory that the deformation and regrouping is largely due to "submarine slumping." The "Strephochetal conglomerates" mentioned by Seeley (9) are probably not true conglomerates. Seeley writes (op. cit. p. 152): "The spherical or elongated masses breaking down from a weathering rock appear like rolled fragments or calcareous concretions, and such without doubt they are in many cases. Yet a careful study of these will disclose the fact that a portion of these nodular forms have definite structure." Thus, the stratigrapher is apt to be led astray by certain fossiliferous rocks, which, upon a macroscopic and hasty examination, have all the earmarks of a true intraformational conglomerate, but which really owe their structure to a certain type of organism included in them. It is possible, however, that true intraformational conglomerates may be formed by the activities of organisms. The writer collected an interesting specimen from the lower Beekmantown at Bellefonte, which would seem to suggest another mode of origin, but somewhat along the lines suggested by Brown. The specimen shows a narrow band of unstratified and peculiarly shaped phenoclasts (see fig. 2). The phenoclasts themselves are only slightly fossiliferous and are fine-grained, showing no definite crystal structure, and have peculiar and varied outlines. The interstices are filled with a cement largely composed of algae and the debris of small shells, the former preponderating. The shape of the phenoclasts and the presence of the algae in the cement would seem to show that the fine-grained, uncrystallized muds deposited in intermittent layers upon the sea floor were broken while still in a plastic state by the action of the algae. The processes of primary deposition of the limy mud, floculation, and redisposition of the "conglomerate mass" were practically coterminous with the primary lithification of the limestone under discussion. Sardeson (10) in discussing the pseudo-brecciated structure of the Ordovician limestones of Manitoba, originally described by Wallace (11), makes the following statement: "In the bed number 3, lumps, cakes and lenses of pure, light-coloured, fine-grained limestone lie isolated in a brown, fucoidal shale, and the evidence is then clear that the