

the principle interest shown by second-stage fossil collectors was a "stock-taking" of ancient life, we might call this the inventory stage. This "inventory," however, necessitated the giving of names, the description of types, and the classification of the whole—it was in consequence a "systematic" stage.

The third stage we may call the problem stage, and here, for the first time, we meet with collectors whose purpose is the development and illustration of biologic laws and the modern concept of organic evolution. The material collected must throw light on derivation; on distribution in space and time; on the effect of comparatively fixed or changing environments; and on the advancement or ultimate failure of the groups under investigation. To solve these and other biologic problems, the student must acquire a more thorough knowledge of ancient structure and function, and this can only be acquired through material capable of illustrating minute anatomical detail—both external and internal. Specimens are now saved, not so much for their individual completeness, as for their evidence concerning details of structure. A display series representing this stage is rarely to be seen outside of our larger museums.

The first stage is frequently represented to-day by the contents of a boy's pocket; the second stage by the amateur collection of fossils; and the third stage by the mass of fragments and sections found in the paleobiologist's work-shop. The first stage is of little educational value to the average adult. The second stage, however, is of great value to the general public (where it has access to such collections); to the student of geology, for by its means he comes to recognize forms that enable him to identify strata of the earth's crust; and to the student who desires to enter the field of paleontology, or to become acquainted in a general way with the past evolution of life. The third stage is of vital importance to the world's progress in more ways than we have room to enumerate, and in ways yet unknown to the searchers themselves.

We should recognize the fact that collectors in their individual development usually recapitulate these historic stages, and that a collector may become arrested in his development during the first or second stages. He may branch out at one of these levels and become a "new species," but as his work is usually typical of a stage, we shall find it convenient to speak of him as a collector of the first, second or third *types*.

The work of collectors of the first and second types is, in needless ways, antagonistic to the work of those of the third type. For instance, the inexperienced collector makes a surface find, and with chisel and hammer proceeds to secure his specimen. He begins with great care to cut a groove around