Zoophytes, and among the greater portion of the Hydroid Polyps very frequently, further also among some worms (Planarian Worms, Ring-Worms, Moss Animals, Tunicates). Most branching animal-trees or colonies, which are exceedingly like branching plants, arise like those plants, by the formation of buds.

Propagation by the *formation of buds* (Gemmatio) is essentially distinguished from propagation by division, in the fact that the two organisms thus produced by budding are not of equal age, and therefore at first are not of equal value, as they are in the case of division. In division we cannot clearly distinguish either of the two newly produced individuals as the parental, that is as the producer, because, in fact, both have an equal share in the composition of the original parental individual. If, on the other hand, an organism sends out a bud, then the latter is the child of the former. The two individuals are of unequal size and of unequal form. If, for instance, a cell propagates itself by the formation of buds, we do not see the cell fall into two equal halves, but there appears at one point of it a protuberance, which becomes larger and larger, more or less separates itself from the parental cell, and then grows independently. In like manner we observe in the budding of a plant or animal, that a small local growth arises on a part of the mature individual, which growth becomes larger and larger, and likewise more or less separates itself from the parental organism by an independence in its growth. The bud, after it has attained a certain size, may either completely separate itself from the parental individual, or it may remain connected with it and form a stock or colony, whilst at the same time its life may be quite independent of that of its