blastocœle, common gut, or common body, within which the independent organs may or may not unite. When the embryos fuse slowly the contained organs appear to be antagonistic, for one is often absorbed completely, or the interaction results in a united but very atypic gut, skeleton, body, etc. The details of these changes are exceedingly interesting, but can be given only in the fuller publication.

28 (637)

The production of typical monstrosities by various means.

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Typical abnormalities have been produced by subjecting developing eggs to the action of certain salts, such as lithium chloride, and the implication, if not the conclusion has been made that a certain specificity obtained between these salts and the resulting abnormality. Herbst for example produced definite atypic gastrulæ, by subjecting sea urchin eggs to lithium chloride in sea water. Stockard produced definite atypic conditions of the eye and brain formation in *Fundulus*.

That the same results may be obtained in other ways seems to demonstrate that the extra-gastrulate condition of the sea urchin, for example, is due not so much to any specific action of the lithium chloride, as to a factor common to each of the following. Extra-gastrulate embryos were produced in fairly large numbers by such anesthetics as chlorotone and alcohol, by changing the concentration of the sea water in opposite directions, either by dilution or by concentration of the sea water, by the action of carbon dioxide and lastly various sugar solutions.

Similarly other well-defined atypic blastulæ, gastrulæ or plutei, though not always produced by each of these solutions, were found in many of them, thus giving color to the view that a disturbance once set up results in a typical reaction conditioned not so much by the nature of the disturbance as by the mechanism (the egg) involved.