

*Case of Double Fœtus.* By CHARLES D. MEIGS, M. D., Professor of Midwifery in Jefferson Medical College, Philadelphia. (With a plate.)

IN the number of this Journal for July, 1855, I gave some account of a specimen of hepatodym children presented to me by Dr. G. W. Bœrstler, of Lancaster, Ohio. The account was illustrated by two lithographs from Root's daguerreotypes.

The present case is illustrated by a drawing on stone, by Mr. Daniels, a clever artist, now much occupied in this city.

I am indebted for the fine specimen to the great liberality of Dr. S. M. Ross, of Darlington, to whom my sincere thanks are due for so great a kindness.

The figure, Pl. II., exhibits a faithful representation of the double fœtus, seen in front.

The genital organs are female.

The right eye of the right and the left eye of the left fœtus are perfect; while the right eye of the left and the left eye of the right fœtus are fused together into one single eyeball, covered by a compound palpebra with three canthi; the fused inner canthus being in the middle of the lower eyelid. All traces of the outer canthi of this compound eye are lost.

In the fusion of the heads, the left and right ears of the right and left fœtuses are lost, with the exception of the small tubercle seen in the middle of the faces. The left fœtus has a double hare-lip, and the right one a common hare-lip. The calvaria are deficient in both the children, so that they are anencephalous. There was also failure of development of the spinous processes and bridges of the cervical and dorsal vertebræ, giving rise to spina bifida of both the dorsal and cervical ranges, while the lower lumbar and sacral vertebræ are perfectly well developed.

This circumstance is interesting, showing, as it does, that the simplicity apparent in the two well-formed arms and legs, and the single trunk, is nevertheless a real duality of individuals. The dark dermoid excrescence that covers the top of the head is too imperfect to contain any hair-follicles; so

that only a few scalp hairs are seen, as in the figure, growing from the very upper part of the forehead.

There is but one navel and umbilical cord; yet, doubtless, on dissection, one would find a double ductus venosus, since it is impossible to conceive of absolute simplicity in the liver. On the contrary, the liver, however intimate the union of the livers of the two children, must retain the characteristics of its duality. Neither of these children, in an embryo state, could have existed without its omphalo-mesenteric system of vessels. Indeed, I cannot conceive of a liver as antecedent, in time, to the omphalo-mesenteric apparatus, but rather as secondary to it. The liver is really constructed by the mesenteric or portal system, aided by the hepatic, a branch of the cœliac artery. This being the case, I take it for granted that the livers, however complex they may be, making this a hepatodym, must be two, not only in name, but in fact. The compound or dual face, with its two independent mouths, shows that there are two fauces, a pharynx for each, and a more or less distinct œsophagus; and, possibly, separate stomachs.

I have not dissected the specimen, because I consider it most valuable as a museum specimen, and because Prof. Serres, in his *Anat. Transcendente*, has given us the anatomy of analogous forms so completely as to leave us nothing to desire.

In my paper on Dr. Bœrstler's specimen (this Journal, July, 1855), I accounted for the singular place and appearance of the posterior leg by showing that the peculiarity was due to a partial loss of the anterior portions of the left and right fused acetabula. In the present instance, the duality of the face is due to the mode in which the cephalic regions of the two embryonal membranes were approximated; that is, the faces were somewhat averted: perhaps horizontal antero-posterior diameters of the two faces might leave an angle of twenty degrees. This was enough to ruin by engrafting the left and right eyes, and totally to destroy the left and right ears. What a riddle would result if these horizontal antero-posterior diameters of the two faces could have been parallel! In that case, it might be impossible, from external inspection, to say whether the being were single or double. We may conceive that two embryos should come together, side by side, in the womb, and be so accurately in contact that each should lose by default one absolute half of its form; having two eyes, one nose, mouth, and chin, two perfect ears, and a head in all external characteristics well and completely formed.

But there is a bound set to the human imagination. Salmacis might clasp her lover in her arms, and implore the gods to make of them one body; but the pranksome deities of Greece and Rome had no powers equal to such transformation: indispensable duality of the livers is an insuperable bar to the metamorphosis that the nymph prayed for.

As I have declined to make a dissection of this specimen, I am not able to say what is the state of the sacrum—as to whether single or double. I can detect no signs of a third or fourth leg anywhere beneath the integuments;

and, as the two acetabula are apparently completely lost in the mutual arrests, I infer that no vestige of a left leg for the right, or a right leg for the left foetus exists.

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