

ART. XII.—*Case of United Twins.* By PHILIP HARVEY, M. D., of Burlington, Iowa. (With two wood-cuts.)

CASES of monstrosity possess a high degree of interest, both in a practical and speculative point of view. The one that I am about to relate is a case of twins, females, which were united by the parietes of the thoracic and abdominal cavities, from their necks to the common umbilicus.

I was sent for between eight and nine o'clock A. M., of Saturday the 14th inst., by the midwife in attendance, to see Mrs B., a German lady, residing near this city. She had then been in labour about nine hours, and the pains were vigorous and frequent. It was a primiparous case, the woman young and healthy, and rather under than over the middle size. On examination I found three legs protruding into the world nearly as far as the hips, and was informed they had been in that situation, with but little progress, for two or three hours. A careful scrutiny failed to detect the bond of union between the two children; indeed, from the rarity of such an occurrence it could hardly have been anticipated. Supposing them to be separate, I considered the proper plan of procedure would be to return one body as far as possible into the uterus, while the other was being brought down and extracted; but all efforts proved inadequate either to make the one advance, or the other recede. One funis could be felt, in which there was no pulsation, neither could any be perceived in the posterior tibial arteries; and the limbs being flaccid, and two of them somewhat livid, I had no doubt the children were both dead. I therefore deemed it justifiable and proper to divide one of the bodies above the ilia, in hopes that the pelvis of one being out of the way. I might be able to bring down the other and effect a separate delivery. To make this division I used the nail blade of a pocket knife, the cutting part being short and easily guarded by the finger from injuring the mother. This operation was attended with no difficulty. I was now able to make out that the two bodies were closely united face to face, so that above the umbilicus there appeared to be but one common trunk. The mass proving to be still immovable, I next attempted a division of the bond of union as high as could be reached; by this means the connection was so loosened that the prominence of one child could adapt themselves to depressions of the other, when, by the use of a good deal of tractile force, the thorax was brought into the inferior strait, the arms were then brought down and finally delivery was effected. These proceedings occupied about three hours, during which time the pains were strong and frequent; though I do not think they contributed much to the expulsion of the birth.

We sometimes meet with emergencies, in which it becomes necessary for art to take the case out of the hands of nature, in consequence of the entire

inadequacy of the latter; I viewed this as one of those emergencies. The labour was of ordinary duration for a first child, having lasted about twelve hours; and though the woman undoubtedly suffered much, her recovery was as rapid as could be expected under the most favourable circumstances.

Irregularities of conformation may be divided into deficiencies, redundancies, fissures, closures, and coalitions; the present instance belongs to the last of these divisions. In all respects, but the abnormality of structure, the children were finely developed and of the full ordinary size of twins; their weight being nearly eleven pounds. They were attached together

Fig. 1.



Fœtus.

from the neck to the umbilicus (see Fig. 1), not by a movable band, as in the Siamese twins, but by the ribs and clavicles of each child being continued to a common sternum on either side. In fact the two sets of ribs, sterna, clavicles, and soft parts were so arranged as to form one large thoracic cavity common to both; they were thus firmly and almost immovably united. There was but one funis; that contained four arteries and one vein; this was inserted into the lower and central part of the connection. The livers were united and contained two gall-bladders; the other abdominal viscera were distinct and regular. The double thorax contained two sets of lungs,

smaller than usual, weighing only an ounce and a half; a large double thymus gland; but only one heart. This weighed about an ounce, was flattened and suspended diagonally across the centre of the thorax. The structure of this viscus was perhaps the most interesting feature of the case. Instead of being a combination of two hearts, as might have been expected, it was quite unique in its anatomy, the heart of a nondescript, and capable of subserving the purposes of uterine life only. It contained but one auricle, into which opened two systemic and two pulmonary veins. The auricle communicated by two auriculo-ventricular openings, each guarded by a pair of mitral valves, with a large muscular ventricle, from which issued two aortæ of ordinary size, with perfect semilunar valves. On each side of this large ventricle was a smaller one, communicating freely with the larger, and having no corresponding auricle. A small pulmonary

artery, destitute of valves and not more than a tenth of the size of the aortæ, passed from each of the smaller ventricles. (See diagram, Fig. 2.)

Fig. 2.

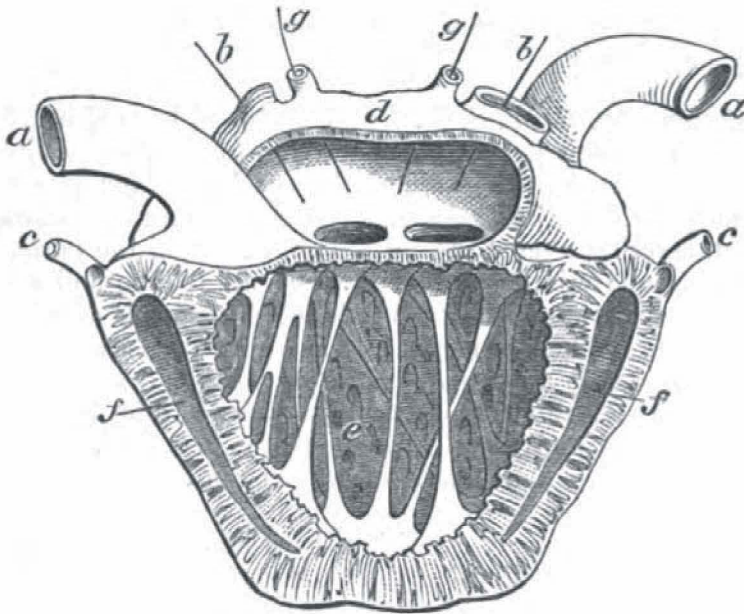


DIAGRAM OF THE HEART.—*a, a.* Aorta. *b, b.* Ventræ cavæ. *c, c.* Pulmonary arteries. *d.* Auricle. *e.* Large ventricle. *f, f.* Small ventricles. *g.* Pulmonary veins.

The physiology of a heart of this kind would show the circulation to be permanently sub-reptilian in character. Those wonderful changes in the circulatory organs that take place after birth in ordinary cases, and compel the entire current of the blood there to flow on its twofold mission, through the pulmonary and systemic vessels, could not have occurred in this instance. Only a small proportion of the blood could have reached the lungs; much too small for the respiratory purposes of a high organization. Cold blooded life alone could be sustained with such a heart; hence these twins were non-viable.

It is to be regretted that popular and parental prejudices stood in the way of the preservation of this singular *lusus naturæ*.

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