fœtuses are fraternal twins. The amount of siderotic material per siderocyte is generally small; in most cases a single granule is found, except in the earlier stages, where up to four granules per siderocyte are common. It seems safe to predict that a feature common to mouse, rat and man will be found to be widely spread among higher mammals.

Age in weeks of pregnancy	Sex	Siderocyte Percentage	Cells counted
33	♂	3·65	2,000
36	♀	1·15	2,000
36	♂	0·14	5,000
40	♀	0·10	2,000
40	♀	0·25	2,000

It is perhaps worth pointing out that in this case the study of an inherited disease of the mouse has led to the discovery of a normal embryonic feature of apparently wide distribution, including man.

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Pterygoquadrate Connexions in the Embryos of *Ichthyophis glutinosus* (Apoda)

THE pterygoquadrate in the embryos of *I. glutinosus* Linn. shows the ascendens and the otic processes; in the orbitotemporal region the basal process is not developed, and, therefore, the union of it with the basitrabecular process as seen in Siphonops (70-mm. larva, Edgeworth, Fig. 386) is absent. The relation of the processus ascendens with the orbital cartilage has been variously described. According to Edgeworth[1] and Winslow[2], a connexion is established in embryonic stages, while Peter[3], who examined a slightly older stage than that of Edgeworth, does not show it. Prof. E. S. Goodrich suggested to me (*in litt.*) that this difference may be due to the two authors examining two different species of Ichthyophis, but this may not be so, for both secured their material from Dr. F. Sarasin. In my sections of a 30-mm. embryo of *I. glutinosus* at any rate the ascendens connexion is not present, thus resembling Hypogeophis.

On the other hand, the uniform occurrence of the otic connexion in Ichthyophis (the processus oticus of the pterygoquadrate uniting with the stapedial process of the stapes) is noteworthy, though Edgeworth[1] and Goodrich[4] quoted to the contrary. This connexion is noticed in all the embryos examined by me, and in the adult it becomes a joint. In Hypogeophis also Marcus, Stimmelmayr and Porsch[5] described a transient otic connexion. But according to de Beer[6], the definite chondrocranium in Ichthyophis with no connexions of the pterygoquadrate with the cranium conforms to the primitive autodiastylic type, whereas in Hypogeophis, with the temporary otic connexion, the larval cranium is 'amphistylic'. As an otic connexion was also noticed by me in all the embryos of *I. glutinosus* examined[7], the chondrocranium does not conform to the autodiastylic type.

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A New Antibacterial Agent produced by a Mould

IT has been shown in this department that penicillin, a substance produced by the Penicillium discovered by Fleming[1], has very remarkable chemotherapeutic properties[2]. Consequently, it became of interest to see whether other species of moulds produced substances with similar properties. Of a considerable number of air-borne moulds studied, two were found to produce substances very similar to penicillin, both in its chemical and biological behaviour. Recently, however, a mould, probably belonging to the genus Aspergillus, was found to produce a powerful antibacterial agent with chemical properties different from penicillin and with an antibacterial range considerably greater than that of penicillin. In addition to the Gram-positive organisms known to be inhibited by penicillin, the growth of a number of Gram-negative organisms, such as *Bact. coli*, *B. dysenteriæ* (Shiga), the typhoid and paratyphoid bacilli and *Vibrio choleræ*, is inhibited by the culture filtrate, of this mould. An extract of this new antibacterial substance has been prepared from the culture filtrate, and it was found that it inhibited the growth of both the Gram-negative and Gram-positive organisms in a dilution of approximately 1 : 200,000. It remains to be seen whether this substance bears any relation to the bactericidal agent in culture filtrates of *Aspergillus flavus*, described by E. C. White[3].

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Rotifer vulgaris and Tetanus Toxin

DURING an estimation of anti-tetanic serum, 0·02 c.c. of a filtrate of a meat broth culture of *Clostridium tetani*, 0·01 c.c. of which filtrate, injected intraperitoneally, had previously killed a mouse in eighteen hours, was slowly added to 0·03 c.c. of water from a rain-gutter