disease to the local authority was enacted in Massachusetts in 1792, and that which requires the same duty on the part of the attending physician was enacted in 1827. Little attention, however, had been paid to the enforcement of these laws until toward the end of the 19th century.

Various attempts have been made in England to enact a similar statute, but these efforts were unsuccessful until 1889. By the terms of the law then enacted the notification of infectious diseases to the sanitary authority was made compulsory throughout London, while the principle of local option was applied to all other districts.

During the year in which this bill was under consideration by Parliament, intense opposition had been manifested by many of the members of the medical profession throughout England. Objections were offered not only by the people but also by the medical profession, but the bill passed and finally became a law.

The fallacy of the objections has been abundantly proven by the experience of the towns of England where the Notification Act has been adopted. The notification of each case is made by a certificate furnished by the attending physician, for which a fee of two shillings and sixpence is paid, except in a case in which the person giving the certificate is the medical officer of a public institution, when the fee is one shilling.

The diseases to which this act applies are smallpox, cholera, diphtheria, membranous croup, erysipelas, scarlet fever, typhus, typhoid, and puerperal fever, and any other infectious disease which may be added to this list by the sanitary authority of a district.

In 1899 the provisions of the act had been adopted in cities and towns containing more than twenty-eight millions of inhabitants out of a total of about thirty millions, and in that year, by the enactment of a new statute (62 and 63 Victoria, chap. viii.) the law became compulsory throughout the whole kingdom.

There can be no doubt that the law relative to notification has been productive of excellent results in the prevention of disease, especially in the cities and large towns. It has furnished local boards of health with the necessary information relative to the origin of outbreaks of infectious disease, and in many instances has enabled them to take timely steps for preventing its further spread.

In compiling certain data for the Paris Exposition of 1900 the writer collected the statistics of six registration States and nineteen cities outside of those States, including the ten largest cities of the Union, with the following result. The figures are mainly for the years 1894–98:

Diseases.	Reported cases.	Registered deaths.	Fatality, per cent.
Smallpox	9,222	2,385	25.8
Typhoid fever	69,758	13,284	19.0
Diphtheria and croup	195,783	44,411	22.7
Scarlet fever	127,847	9,211	7.2
Measles	217,755	6,424	2.8
Total	619,765	75,715	....

These results agree fairly well with those of the English local government board for the eight years 1890–97, which showed a fatality for typhoid fever of 18.05 per cent., for diphtheria of 23 per cent., and for scarlet fever of 4.9 per cent.

Another advantage of the practice of notification in recent years consists in the exact data which it furnishes relating to improved methods of treating disease, and the consequent saving of human life. In the thirty-third annual report of the State Board of Health of Massachusetts for 1901 it appears that the notified cases of diphtheria in the pre-antitoxin period, 1891–94, in reporting cities and towns were 13,332, and the deaths in the same places and time were 3,768, making a fatality of 28.3 per cent., while in the following seven years, 1895–1901, after the introduction of antitoxin the cases were 56,459 and the deaths 7,416, a fatality of only 13.1 per cent. The fatality of diphtheria in 1901 was only 10.5 per cent. (see also *Disease, Fatality of*). *Samuel W. Abbott.*

NOTOCHORD.—The notochord (*chorda dorsalis, Wirbelsaite*) is a rod of peculiar tissue, constituting the primitive axial skeleton of vertebrates. It begins immediately behind the pituitary body (hypophysis) and extends to the caudal extremity. It occurs as a permanent structure in the lower types, and as a temporary one in the embryos of amphibia and amniota, including man. Comparative embryology has shown that it is a greatly modified epithelial tube, which arises as a furrow in the median dorsal line of the entoderm, being, in position and mode of development, analogous to the ectodermal medullary canal or primitive tubular nervous system.[5]

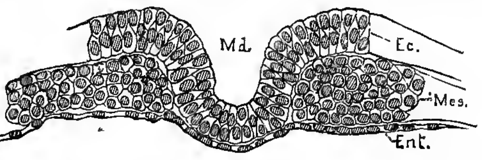

FIG. 3592.—Transverse Section of a Young Mole's Embryo. (After Heape.) *Ec.*, Ectoderm; *Md.*, medullary groove; *Mes.*, mesoderm; *Ent.*, entoderm. Site of the notochord is the central line of the entoderm.

DEVELOPMENT IN MAMMALS.—The notochord appears very early in the course of development; its differentiation from the entoderm begins at the time when the medullary groove is not fully marked out posteriorly, and is nowhere closed. The notochordal *Anlage* can be first detected in the entoderm just at the front of the primitive streak, as an axial band of cells, which at first in mammals is not well marked off from the mesoderm; as the medullary groove deepens it pushes down toward the midgut until it comes into actual contact with the notochordal epithelial band (see Fig. 3592), thus dividing the mesoderm into two lateral masses; this also leads to the temporary transverse stretching of the notochordal band, which thereby loses for a while its sharp demarcation. It soon re-acquires it, and becomes considerably thicker (Fig. 3593, *nch*) than the adjoining entoderm, and forms a distinct though shallow groove. Subsequently the band separates off, and the entoderm proper closes across under it so that the notochordal band lies between the entoderm and the floor of the medullary groove (or later canal), as shown in Figs. 3598 and 3604, *nch*. This separation does not take place at the anterior extremity of the chorda until somewhat later, so that for a considerable period its front end remains fused with the walls of the midgut (Fig. 3598). The separation from the entoderm is effected, at least in mammals, by the entoderm proper, showing itself under the notochord toward the median line, and when the cells from one side meet those of the other, they unite with them and form a continuous sheet of entoderm below the notochordal cells.

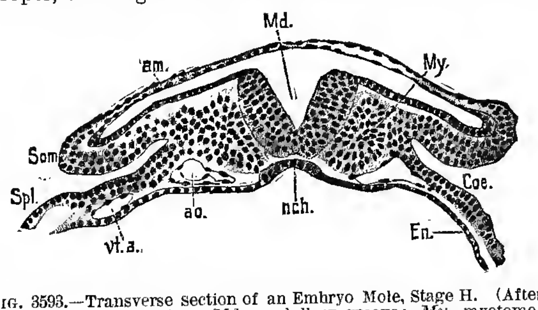

FIG. 3593.—Transverse section of an Embryo Mole, Stage H. (After Heape.) *am.*, Amnion; *Md.*, medullary groove; *My.*, myotome; *Coe.*, cœlom or body cavity; *En.*, entoderm; *nch.*, notochord; *ao.*, aorta; *vt.a.*, vitelline artery; *Som.*, somatic mesoderm; *Spl.*, splanchnic mesoderm.

The chorda is now a narrow band of cells, starting anteriorly from the wall of the alimentary tract and running backward to the blastoporic canal or its equivalent, the primitive streak; but, at the period when the canal is open, the chorda terminates in the entodermic epithelium lining the canal (Heape,[9] Pl. xxi., Fig. 50; compare also Vol. II., Fig. 505, *C*). The canal remains open for a time, and is called by some writers on mammalian embryology the chorda canal (*cf. infra*). For a certain period the chorda continues growing tailward by accretions of cells from the walls of the blastoporic passage,

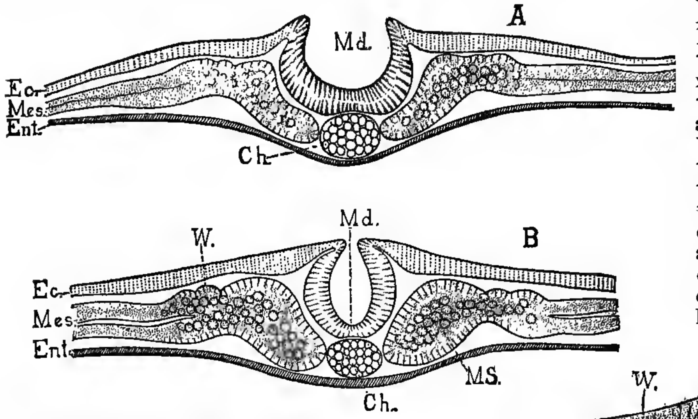

FIG. 3594.—Transverse Sections of an Embryo Chick, with Eleven Pairs of Myotomes. (After Waldeyer.) *A*, Some distance behind the last myotome; *B*, close behind the last myotome; *Ec.*, ectoderm; *Mes.*, mesoderm; *Ent.*, entoderm; *Md.*, medullary groove; *Ch.*, notochord; *W.*, commencement of the Wolffian duct; *MS.*, muscular segment or myotomes.

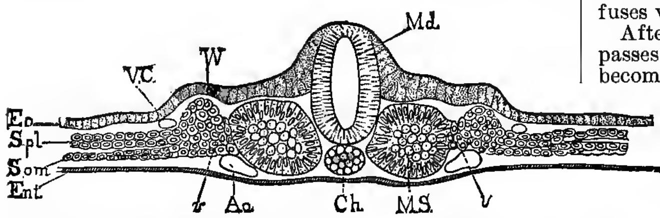

FIG. 3595.—Transverse Section of a Chick Embryo of the Second Day. (After Waldeyer.) *Som.*, The somatic mesoderm, and *Spl.*, the splanchnic mesoderm; *Ec.*, ectoderm; *Ent.*, entoderm; *V.C.*, vein; *W.*, Wolffian duct; *Md.*, medullary canal; *Ao.*, aorta; *Ch.*, notochord; *MS.*, myotome.

and after the canal is permanently obliterated the chorda may still continue its lengthening by acquisitions, at its caudal end, of additional cells from the primitive streak; such cells may, however, properly be regarded as coming from the entodermic lining of the blastopore. We can, then, distinguish three portions of the notochord: the first arising from the entoderm of the midgut; the second from the entoderm of the blastoporic canal; the third presumably from the entoderm of the obliterated blastopore in the primitive streak. Braun and others have sought to attribute essential importance to these differences, but, it seems to me, improperly. It is more reasonable to say that the chorda arises in the amniota, as in the lower forms, directly from the entoderm, but presents certain secondary modifications in its development.

Lieberkühn has directed attention to a special peculiarity in the early development of the notochord in mammals. There appears at first a passage—half canal, half furrow—which extends nearly the whole length of the primitive streak; it may be described as a tube running along the median line, and having an irregular series of openings into the entodermic cavity. The canal is lined by epithelium, which is thickened on the dorsal side to form the *Anlage* of the notochord. In transverse section the chorda appears according to the level of the section to constitute part of a furrow or a canal (compare also Heape,[9] *loc. cit.*, p. 441, Figs. 40 and 41). Lieberkühn calls this canal mesoblastic, and Kölliker follows him; but this opinion seems to me based upon misconceptions. It is more reasonable to suppose that the canal is really the blastoporic canal, which is preserved for an unusually long period. We know that the blastopore first appears well forward, and as the primitive streak grows by concrescence of the ectental line the blastopore moves backward, its anterior portion fusing with the general entodermic cavity. There is no difficulty apparent in assuming that such fusion occurs quite late in mammals; this interpretation is confirmed by the fact that the canal becomes later a furrow throughout its entire length in

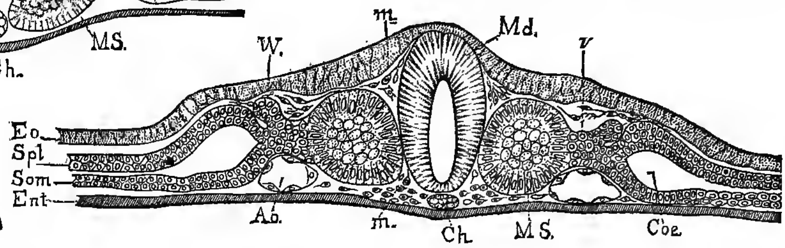

FIG. 3596.—Section of a Chicken Embryo of about Thirty-six Hours. (After Waldeyer.) *Ec.*, Ectoderm; *Som.*, mesoderm of the somatopleure; *Spl.*, mesoderm of splanchnopleure; *Ent.*, entoderm; *W.*, Wolffian duct; *m*, mesoderm cells; *Md.*, medullary canal; *v*, vein; *Coe.*, cœlom; *MS.*, myotome; *Ch*, notochord; *Ao.*, aorta.

front of the blastoporic canal proper, so that its cavity fuses with that of the entoderm proper.

After it is once formed as a band of cells the notochord passes through various changes of form, but ultimately becomes a cylindrical rod with tapering extremities. It attains considerable size in the embryos of most vertebrates, but in those of placental mammals is always small, particularly so in the mole (Heape[10]). It is probable that in mammals the notochord, when first separated from the entoderm, is a broad, flat band, as if compressed be-

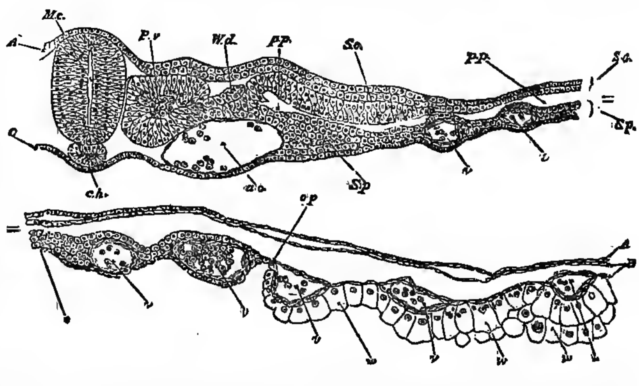

FIG. 3597.—Section through the Dorsal Region of a Chicken Embryo of Forty-five Hours. *A*, Ectoderm; *c*, entoderm; *Mc.*, medullary canal; *P.v*, myotomes; *W.d*, Wolffian duct; *p.p.*, pleuro-peritoneal space or cœlom; *So.*, somatopleure; *v*, *v*, blood-vessels; *Sp.*, splanchnopleure; *op*, inner edge of the area opaca, *w*, *w*, *w*, entoderm of the area opaca; *ao*, aorta; *ch*, notochord. (After Balfour and Sedgwick.)

tween the medullary canal and entoderm (*cf.* Kölliker, *loc. cit.*, Figs. 194 to 197, and *loc. cit.*, Fig. 94; also Heape,[10] Pl. XIII., Figs. 36 to 42). The band then draws together, diminishing the transverse and increasing the vertical diameter, until it has acquired a rounded form; finally its outline becomes circular in cross section.

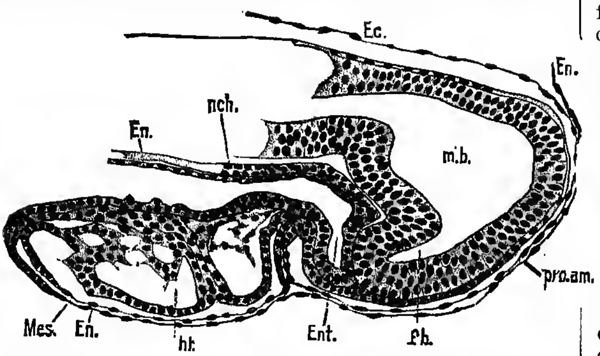

FIG. 3598.—Longitudinal Section of the Head End of a Mole Embryo, Stage H. (After Heape.) *Ec.*, Ectoderm; *En.*, entoderm; *pro.am.*, pro-amnion; *mb.*, mid-brain; *fb.*, fore-brain; *Ent.*, entodermic cavity; *ht.*, heart; *Mes.*, mesoderm; *nch.*, notochord.

This series of changes begins near the anterior end of the chorda, and progresses both forward and backward.

The mesoderm early grows in between the entoderm and the notochord, which, however, for a considerable time remains close to the medullary tube (Fig. 3600). Later the mesoderm penetrates between the notochord and medulla. The layer of mesodermic cells immediately around the notochord, which are of the well-known anastomosing type (Fig. 3601), forms a special sheath, which at first comprises only a single layer of cells, at least in batrachia (Götte,[6] p. 357, Fig. 187). This is the commencement of the so-called outer chorda sheath; it subsequently becomes much thicker. In the lower types it is an important axial structure (Fig. 3602, *s'*); in most cases it is replaced by cartilage, and in all the amniota the cartilage is replaced by the osseous vertebræ, the invertebral ligaments, etc. The formation of the vertebral column involves the disappearance of the notochord as described below.

HISTOGENESIS.—After the notochord has been formed as a rod of cells, its cells undergo a process of histological differentiation unique in vertebrates. The cells at first become greatly compressed in the line of length of the chorda; and hence appear quite thin in longitudinal sections (Fig. 3603, A, *nch.*)—hardly greater in diameter than their own nuclei. Thus, in the chick, by the third day some of the central cells become vacuolated, while the peripheral cells are still normal; at first, as in the frog, there seems to be only one large vacuole in each cell (Fig. 3603, B). Around the vacuole is a peripheral layer of granular protoplasm, in which the nucleus lies embedded, while the vacuoles themselves are filled with a perfectly clear and transparent material, which is supposed to be fluid in its natural condition. During the fourth day (chick) all the cells become vacuolated, with the exception of a single layer of flattened cells at the periphery. In the anura, it is said, there is no distinct peripheral layer of protoplasmic cells. The vacuoles go on enlarging until by the sixth day they have so much increased at the expense of the protoplasm that only a very thin layer of the latter is left at the circumference of the cell; at one part of which, where there is generally more protoplasm than elsewhere, the remains of a nucleus may generally be detected. Thus the notochord becomes transformed into a spongy reticulum, the meshes of which correspond to the vacuoles of the cells and the septa to the remains of their cell walls (Foster and Balfour). As Götte has pointed out, the process is accompanied by an expansion of the cells, which is the main factor in the widening and lengthening of the notochord, which goes on *pari passu* with the growth of the surrounding tissue.

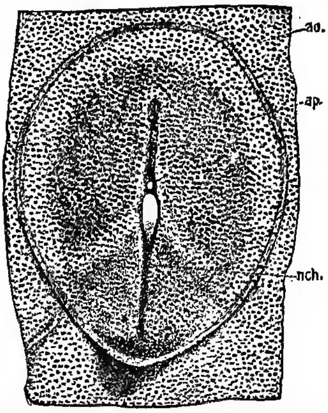

FIG. 3599.—Germinal Area of a Guinea-pig at Thirteen Days and Twenty Hours. (After Lieberkühn.) *ao.*, Area opaca; *ap.*, area pellucida; *nch.*, *Anlage* of the notochord as a canal with several irregular openings on the entodermic side. × 24 diameters.

The histogenetic process is stated to be essentially similar in mammals (W. Müller, 337–338). There is the central layer of vacuolated cells and the peripheral layer of protoplasmic cells. The latter are, however, ultimately converted into vacuolated

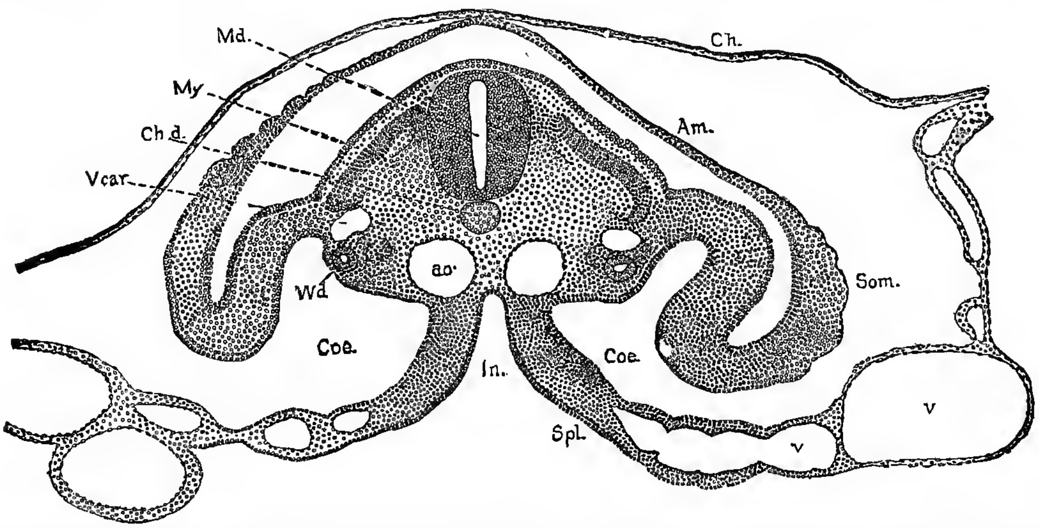

FIG. 3600.—Section through the Rump of an Embryo Chick of the Third Day. *Ch.*, Chorion; *Am*, amnion; *Som.*, somatopleure; *v*, *v*, *v*, blood-vessels; *Coe.*, cœlom; *Spl.*, splanchnopleure; *In.*, intestine; *ao.*, caudal branch of the aorta; *Wd.*, Wolffian duct; *Vcar.*, vena cardinalis; *Ch.d.*, chorda dorsalis; *My.*, myotome; *Md.*, medullary canal.

cells. The cell walls are perforate, having fine pores, that correspond probably to intercellular bridges of protoplasm. The inner chorda sheath appears early and is to be regarded as an anhistic basement membrane secreted by the notochordal cells.

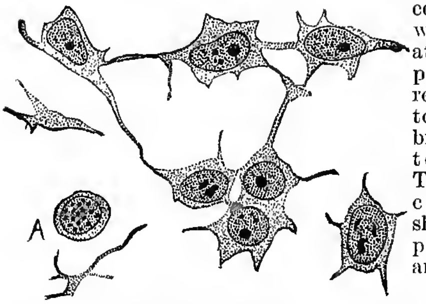

FIG. 3601.—Mesoderm of Chick of the Third Day, from close to the Otocyst. *A*, Nucleus with the chromatin loops seen in optic section, being in karyokinesis.

SHAPE AND RELATIONS TO OTHER PARTS.—As soon as the head bend (first cerebral flexure) appears (Fig. 3604) the notochord becomes correspondingly bent, and its anterior extremity lies close to Rathke's pocket (Fig. 3604, *hy.*)—the evagination of the oral epithelium, which is destined to form the pituitary body or *hypophysis cerebri*. The notochord never extends farther forward than this, hence the skull and head may be divided into two parts, the præ-pituitary and the post-pituitary regions. The latter region alone contains the notochord. Romiti finds that in the chick the end of the notochord is united, at the end of the fourth and during the fifth day of incubation, with an irregular solid cord of cells, which grows out from the epithelium of the hypophysis. The cord soon disappears. Its significance is quite unknown. Romiti suggests that it may produce a strain resulting in the pulling out of the hypophyseal evagination. This notion seems to me untenable. The cranial portion of the notochord has not only the bend shown in Fig. 3604, but also follows the other curves of the head; it takes a sinuous course besides within the base of the cranium; finally, in the region corresponding to the middle third of the spheno-occipital cartilage, it makes a great dip ventralward. The sheath of the notochord in the cranial region is converted into the spheno-occipital cartilage; at the dip just mentioned, however, the notochord lies entirely below the cartilage, close against the wall of the pharynx (Froriep, Romiti). Writers before Froriep had represented the chorda as having disappeared at the bottom of the dip.

DISAPPEARANCE.—The disappearance of the notochord in man commences with the second month of fœtal life. The first step is an alteration of the characteristic histological structure, accompanied by shrinking of the tissues, so that a clear space appears around it (see Fig. 3605). The inner chorda sheath is lost. The cell walls disappear, the tissue becomes granular, and breaks up into multinucleate, irregularly reticulate masses (Fig. 3606), which are gradually resorbed (Leboucq). In mammals the resorption progresses more rapidly in the cores of the vertebræ than in the intervertebral spaces, and again more rapidly at the ends than in the centre of each vertebra; hence the chorda persists a little longer in the centre of the vertebra, and considerably longer in the intervertebral spaces; in these last the final remnants of the chorda may be detected in man even after birth. The cavity between the vertebral cartilages is a new structure, and is not the space left by the notochord, as has been sometimes asserted. It appears, however, that the resorption of the chorda may leave a small space, which becomes included in the intervertebral cavity. A peculiar feature is the frequent persistence of calcified cartilage immediately around the notochord in ossifying vertebræ.

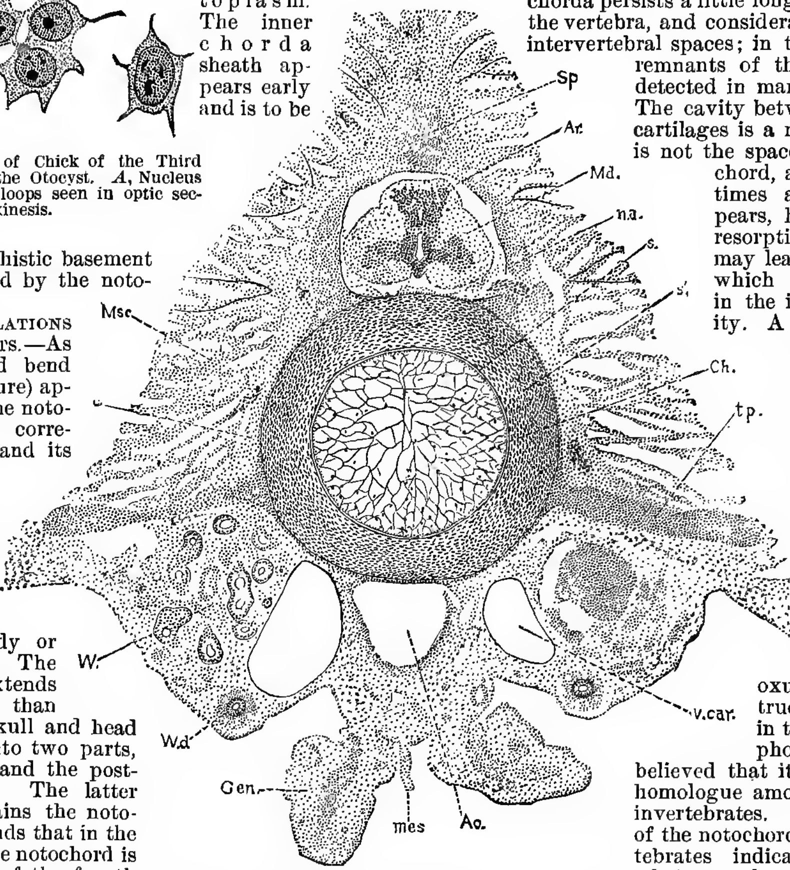

FIG. 3602.—Transverse Section of an Advanced Embryo of a Shark, *Scymnus lichia*, through the Abdominal Region. (The dots represent nuclei.) *Sp*, Spinal process of the vertebra; *Ar.*, arachnoid space; *Md.*, spinal cord; *n.a.*, neural arches of the vertebra; *s.*, inner sheath of the notochord; *s'.*, outer sheath of the notochord; *Ch.*, notochord; *t.p.*, transverse process of the vertebra; *v.car.*, cardinal vein; *Ao.*, dorsal aorta; *mes*, mesentery; *Gen.*, genital fold; *W.d*, Wolffian duct; *W.*, Wolffian body with tubules; *c*, young cartilage; *Msc*, muscles developing.

MORPHOLOGY.—The notochord was for a long time supposed to be exclusively characteristic of vertebrates. It is now known to exist in amphioxus, which is not a true vertebrate, and in the tunicata. Morphologists have long believed that it must have some homologue among the organs of invertebrates. The development of the notochord in the lower vertebrates indicates very plainly what must have been the general character of such an homologous invertebrate organ. In certain fishes and amphibia the notochord has been ascertained to arise as a furrow along the median dorsal line of the entoderm; the furrow deepens and then closes over to form a canal separate from the entodermic canal proper; but the notochordal canal retains for a time its anterior and posterior connections with the entoderm.

A B

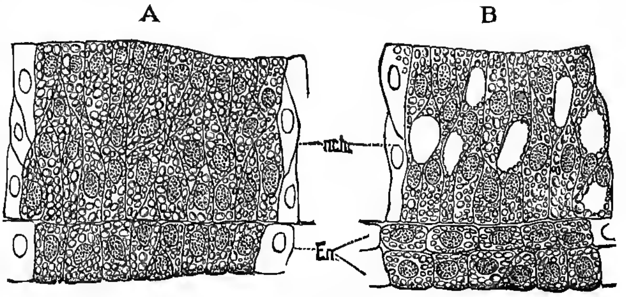

FIG. 3603.—Longitudinal Sections of the Notochord of Bombinator. (After Götte.) *A*, Before the appearance of the vacuoles; *B*, after the appearance of the vacuoles: *nch.*, notochord; *En.*, entoderm. (The cells, as is usual in amphibian embryos, are charged with yolk granules.)

Ultimately the lumen is obliterated, the ends become detached, and so arises the solid isolated chorda. In the higher vertebrates the course of development is similar, although several of the primitive features in the formation of the chorda are obscured. Ehlers[3] has pointed out that in various invertebrates there is a similar canal, the "Nebendarm" of German writers, which is derived from the entoderm and connected anteriorly and posteriorly with the entodermal cavity. It is a very plausible suggestion, which homologizes the vertebrate notochord with the invertebrate "Nebendarm." Hubrecht has sought to homologize the notochord with the proboscis of Nematodan worms. There is not a single fact which seems to me to justify, even remotely, this attempt at guesswork phylogeny.

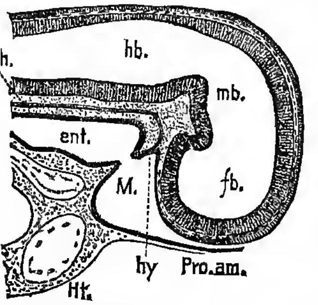

FIG. 3604.—Rabbit Embryo of 6 mm.; Median Longitudinal Section of the Head. (After Mihalkovics.) The connection between the mouth, *M.*, and pharynx, *ent.*, is just established; *nch.*, notochord; *hb.*, hind-brain; *mb.*, mid-brain; *fb.*, fore-brain; *Pro.am.*, pro-amnios; *hy.*, hypophysis cerebri; *Ht.*, heart.

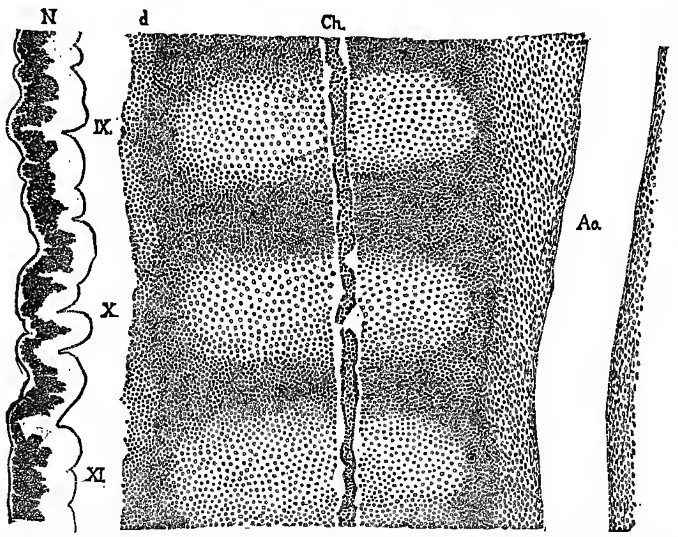

FIG. 3605.—Human Embryo of about Thirty-five Days; Longitudinal Section of the Ninth to the Eleventh Vertebræ, as numbered IX. to XI. *N*, Nervous system, wall of the spinal marrow; *d*, meningeal layer; *Ch*, notochord; *Ao*, aorta.

LITERATURE.—Very numerous embryological articles contain references to the chorda; below is given a list of the principal authorities. The best discussion is given by Balfour, in his "Comparative Embryology";[2] the best observations on its origin in mammals by Heape.[9, 10] For its histology see W. Müller; for its histogenesis see Götte;[6] for its anterior anatomical relations see Mihalkowics, Froriep,[4] Rabl-Rückhard, and Romiti; for its atrophy in mammals see Leboucq; for its evolution see Ehlers.[3]

Charles Sedgwick Minot.

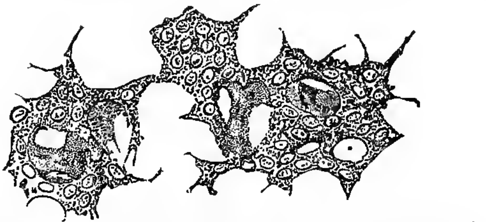

FIG. 3606.—Degenerating Notochord Tissue, from the Central Portion of the Intervertebral Disc of a Cow's Embryo. (After Leboucq.)

[1] Balfour: A Monograph on the Development of Elasmobranch Fishes, London, 1878. (Reprinted Works, i., pp. 203-520.)
[2] Balfour: Comparative Embryology, vol. ii.
[3] Ehlers, E.: Nebendarm und Chorda dorsalis. Nachr. Ges. Wiss., Göttingen, 1885, pp. 390-404.
[4] Froriep: Kopftheil der Chorda dorsalis bei menschlichen Embryonen, Festschrift für Henle, 1882, pp. 26-40, Taf. iii.
[5] Gegenbauer, Carl: Ueber das Skeletgewebe der Cyclostomen (Histologie der Chorda, S. 47-49). Jena Zeitschr. Nat. Wiss., v., 1869, pp. 43-53, Taf. i.
[6] Götte, Alex.: Entwickelungsgeschichte der Unke (especially pp. 349-361), Leipzig, 1875.
[7] Hasse, C., und Schwarck, W.: Studien zur vergleichenden Anatomie der Wirbelsäule, etc. Hasse's Anat. Studien, i., p. 21.
[8] Hatschek, B.: Studien zur Entwickelungsgeschichte des Amphioxus. Arbeiten Zool. Inst. Wien, iv., Heft i., Taf. xiii.
[9] Heape, Walter: The Development of the Mole (Talpa Europea); the Formation of the Germinal Layers and Early Development of the Medullary Groove and Notochord. Q. Jour. Micr. Sci., 1883, pp. 412-452, Pls. xxviii.-xxxi.
[10] Heape, W.: The Development of the Mole. Q. Jour. Micr. Sci., xxvii., pp. 123-163.
[11] Hensen: Zeitschrift f. Anat. u. Entwickelungsges., i., p. 366.
[12] His, Wilhelm: Erste Anlage des Wirbelthierleibs, 4to, Leipzig, 1868.

NOVA SCOTIA.—Nova Scotia is one of the maritime provinces of Canada to the northeast of the State of Maine, lying in latitude 43° to 46° N. and longitude 60° to 66° W. It is a long, rather narrow peninsula, with a great extent of coast line, parallel to the mainland, extending in a direction from northeast to southwest. It is 350 miles in length, including Cape Breton, and varies in breadth from 50 to 100 miles. Its area is 20,550 square miles and it has a population of 450,396. The surface is undulating and is traversed by several ranges of hills. It has a cool, marine climate, and is a favorite summer resort for visitors.

The following table, condensed from the more elaborate ones in the article on Nova Scotia in the previous edition of the HANDBOOK, conveys an idea of the summer and autumn climate of this region, the seasons when one would visit Nova Scotia as a resort. As will be seen, the mean summer temperature is about 61° F., similar to that of the British Isles at this season, the highest temperature being about 80° F. and the lowest between 43° and 46° F.

The relative humidity is high and there is considerable rain. Fogs are also not infrequent. The number of fair days is, moreover, not large for the summer.

CLIMATE OF HALIFAX.—LATITUDE, 44° 39′; LONGITUDE 63° 36′. MOSTLY FOR THE YEAR 1883 ONLY.

	June.	July.	Aug.	Sept.	Oct.	Year.
Temperature (degrees Fahr.)—						
Mean average	57.26°	63.40°	63.77°	57.56°	47.99°	42.74°
Average range	18.67	17.19	19.78	18.63	15.95	
Mean of warmest	68.82	70.85	73.26	65.66	54.23	
Mean of coldest	50.15	53.66	54.48	47.03	38.28	
Highest or maximum	80.4	81.7	81.2	76.8	73.4	
Lowest or minimum	43.2	46.7	45.6	40.5	29.0	
Humidity— Mean relative	85%	86%	86%	83%	84%	84%
Precipitation— Average in inches	3.32	3.54	5.34	3.86	5.81	48.52
Wind— Prevailing direction	S. E. & W.	S. E.	S. W.	W., S. W.	W.	
Average hourly velocity in miles	4.51	4.88	4.88	5.78	6.97	6.75
Weather— Number of fair days	16	19	16	21	15	172
Number of days on which rain fell	17	16	12	14	15	145