Phos. Magnesia	1.
Soda	1.5
Gelatine	.28.

but these proportions, it is almost needless to say, vary in almost every case, according as the teeth are hard or soft, the earthy constituents being found in much greater abundance in the former than in the latter.

Althongh the ossification of these organs does not begin to take place till about the fifth month of intra-uterine existence, their rudimental formation in the jaw is observable at a much earlier period. Mr. Goodsir, in a paper on this subject, published in the Edinburgh Medical and Surgical Review of January 1839, says that he commenced his microscopic investigations in an embryo of the 6th week, at which period "he observed a groove formed by two semi-circular folds of mucous membrane extending around each jaw; as this widens from behind forwards, a ridge running in the same direction rises from its floor and divides the original groove into two others. The *outer* one forming the duplicature of mucous membrane from the inside of the lip to the outside of the alveolar processes." The inner one he calls "the *primitive dental groove*, in which the germs of the future teeth make their appearance.

At about the 7th week after conception the first temporary molaris makes its appearance in the bed of this groove in the shape of a "free granular papilla of an ovoidal form," the long diameter of which is antero-posterior. By the 8th week the temporary cuspidatus is observed in like manner; by the end of the 9th week the germs of the incisores appear. During the 10th week the 2nd temporary molaris is observable, thus completing the deciduous set of teeth.

The sides of the groove now gradually approach each other, forming a follicle which invests each tooth. The papillæ of the respective teeth now begin to assume a particular form, the incisores that of the future teeth: the cuspidati become simple cones, and the molares flatten transversely.

At this period (the 14th week) the primitive dental groove contains the germs of the temporary teeth. This groove is now situated higher up in the jaw than before, and may now, says Mr. Goodsir, "be denominated the *secondary dental groove*, from the fact that it is here that provision is made for the production of the permanent teeth."

This is brought about, says our author, by "a depression of a crescent shape immediately behind the inner opercula of the follicles," The opercula in the mean time close the mouths of the follicles, but without adhering to them, beginning with the central incisores, then with the lateral, then the cuspidati, and so on to the second molares.

The *secondary groove* being now closed up, the follicles are converted into sacs, the papillæ into the pulps of the temporary teeth, and the crescent formed depressions into *cavities of reserve*, from which the pulps and sacs of the permanent teeth are produced.

An intervening space is now observable between the pulps and the sacs, in which is deposited a "gelatinous granular substance," which at about the 5th month of gestation is found to have extended over the whole of the interior of these organs, and is believed to be destined for the formation of the enamel, which interesting process will shortly come under notice.

The outer membrane of this sac is plentifully supplied with blood from small twigs sent off from the dental arteries, which anastomosing "ramify on the entire surface of the membrane."