ren before the age of ten years. 2nd. Bony irregularities of the nasal fossæ become frequent after childhood, 70 to 80 per cent. of civilized adults being affected by them. 3rd. Bony irregularities of the nasal fossæ are not frequent among uncivilized races, only about 20 per cent. being affected by them.

Of course irregularities of the intra-nasal bones alone, would not produce nasal stenosis; but these bones are the foundations upon which the tissues rest, and it is through the latter in great measure that the irregularities are transmitted.

The question of the causes producing these intra-nasal lesions is a vexed one; but of the many observers who have carefully investigated the subject, Mayo Collier in his painstaking researches has probably come the nearest to the truth. He claims that they are largely due to the effects of atmospheric pressure, badly equalized, within the nasal cavities.

Collier's theory was largely founded upon experiments upon young animals previously made by Zeim, who proved that any obstruction of the nose produced serious consequences in the development of the skull. In several instances, he completely blocked one nostril of a young animal for a long time, effectually stoppingrespiration on that side. The result in each case was arrest of development on that side, falling in of the septum toward the same side, deviation of the intermaxillary and palate and frontal bones toward that side, producing a general collapse of the walls; while the unobstructed fossæ would be larger than natural, and more fully developed.

The reason of this is the rarifaction of the air in the closed nostril, caused by the rush of the inspired air through the open one, with the consequent air pressure on all sides of the cavity.

It is a well-known fact that the septum, which should be a perpendicular plane, is more frequently affected with irregularities than any other intra-nasal structure. It averages in the adult between 2½ and 3 inches in length and height, making a superficies in each nasal cavity of from 6 to 9 square inches, and during the early years of life is both thin and flexible.

Collier illustrates it in this way: Take a bent piece of glass tube, with mercury in the bend, connect this with a fairly thick piece of rubber tubing, and insert the free end of the rubber into one nostril. Then inspire air through the open nostril and at once the mercury will fall in one limb of the tube about an inch and rise to the same height in the other. This proves that the air inspired through one nasal cavity exhausts the air in the other, to the extent-pressure of about an inch of mercury. Now the weight of the atmosphere at sea level equals about 29 inches of mercury, and has a pressure of 15 lbs. to the square inch. An inch of mercury, therefore, will equal a pressure of half-a-pound to the square inch; and as the septum on the closed side has an area of from 6 to 9 square inches, this would make the pressure on the septum of the closed cavity equal to 3 or 4 lbs. on each inspiration. Of course this would be in a case of complete unilateral stenosis In the majority of cases the stenosis is only partial, but granting that the rarifaction was only one-half, or even one-tenth, we can easily see how great an injury the 1,000 inspirations per hour would have on the affected side.