Abnormal Incisor Growth of Rodents. C. E. Newlin, Indianapolis.

The omnipotent and omniscient hand of Mother Nature in providing for the varied wants and conditions of her children is nowhere better shown than in the constant and rapid growth of the incisor teeth of that order of little animals known as Rodents. Securing their food as they do by gnawing the hard bark, roots and nuts, their incisor teeth would soon be worn off to the very gums if it were not for the constant and rapid growth of these teeth. To show the rapidity of this growth is the object of this short paper.

It is no unusual thing to kill a squirrel or rat that by some accident has lost one of its incisor teeth. The opposing tooth, having no direct opponent to hold the food against it, often becomes abnormally long, often becoming very inconvenient to the owner in procuring its food. But usually the remaining tooth is brought into more or less use in procuring food, and is thus kept ground off to some extent, though I have sometimes found them quite long.

I have in my possession the skull of a Ground Hog, *Actomys Monax*, which shows such abnormal growth of all the incisors that I thought it might be of interest to the members of the Academy to call their attention to it.

The specimen that was the unhappy possessor of this skull in life was killed in a meadow on a farm near Shannondale, Ind., by Wm. T. Beck, now of Crawfordsville. He noticed his dog attacking some animal and going to its assistance found a Ground Hog offering poor resistance, and killed it by crushing the back of its head with his fork handle. Picking it up he noticed the two white tusk-like teeth projecting up over its nose. He cut its head off and took it to his woodshed and laid it upon a cross-beam over the door, and there the insects did what they could to preserve it by denuding it of its flesh. The teeth became loose, and in handling it the longest lower incisor dropped out and was broken. But I had a dentist carefully reproduce the part broken off with paste dentine, and wired the skull together. Otherwise it is just as it was when it thwarted his wood-chuckship in his struggle for existence. The right lower incisor is $3\frac{3}{4}$ inches long and correspondingly abnormally large in circumference. The lower incisor on the left side seems to have come in contact with the left upper incisor to some extent and did not grow so long. Both lower incisors extend up over the nose and securely locked his mouth, so that securing food was almost impossible. This was possible at all only on the left side and then only by separating his lips and biting off clover leaves, etc., with his back molar teeth. He had done this so long that the lips on that side remained wide apart, exposing all the back teeth, while the lips on the opposite side grew fast together and fast to the gums.

The left upper incisor grew in a circle, and when it came to the roof of the mouth became deflected until it found the suture of the palatal surface of the superior maxillary and passed through this up into the nasal passage and continuing its growth in the circle turned downward through this bone again into the mouth, completing over a circle and a quarter. The pleasant sensations he must have experienced while this growth was taking place must have been entertaining at least. The right upper incisor was forced to the right and missed the superior maxillary, and performed the same circular growth between the lip and gum. Each of the upper incisors are about 3½ inches long. The right one shows by the abrasions on it where it came in contact on its side with the lower incisor in the earlier stages of its abnormal career, but the contact was not sufficient to arrest its growth.

The animal was weak and almost starved when killed, and I think no animal could live long on the small amount of food that could be procured after these teeth reached one-half their present length. Thus I reason that the growth of the incisor teeth of rodents must be very rapid, and I would place the time that elapsed after the accident happened this unfortunate creature, by which his teeth were so dislocated as not to oppose each other, and the time that he was killed could not have been more than a few months, under a year at the farthest. This rapid growth seems to be reasonable, too, when I consider the growth necessary to counteract the tremendous wear to which the incisors of a rodent are subjected. If this were not so, many a little fellow would find himself frequently in the condition of the fabled rat that gnawed the file.

The Bobolink (Dolichonyx oryzivorus) in Indiana. By A. W. Butler.

The Bobolink was one of the fanciful birds of my boyhood. The accounts of it which came to me, both by tongue and pen, interested me greatly. I longed to see the bird and hear him sing. At first I concluded it was to be found abundantly—a characteristic feature of the landscape—each spring. Year after year I watched for it, but it did not come. I consulted others who enjoyed the company of birds, and learned they had not seen it. The natural conclusion was I must see it in some other locality; but finally, before my purpose was carried out, it came to me. I saw my first Bobolink in the spring of 1881. On May 5, when walking by a timothy meadow within the town of Brookville, Ind., I saw a half dozed males, dressed in their distinctive colors, arise, one after another, from the