eighty-two or thereabouts. And this is a new longevity record. It should be noted that this rat received no thyroid substance in the diet or in any other way, from the time the thyroid was removed up to the time of his death.

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THE VENOM OF NEW BORN PIT VIPERS

PROFESSOR ALBERT M. REESE, in his notes on "The Venom of New Born Copperheads,"[1] solicits information upon the age at which pit vipers acquire their power of injecting venom.

Professor George E. Beyer, in his "Contributions on the Life Histories of Certain Snakes,"[2] gives two very personal observations in connection with the poisonous qualities of the young of these snakes.

In speaking of a one-day-old water moccasin, *Agkistrodon piscivorus*, he makes the following statement: "To test their poisonous qualities I permitted one of them to bite me, but outside of the peculiar penetrating sensation attendant upon all venomous snake bites, and not unlike a bee sting, I did not feel other results."

In the same paper, speaking of *Sistrurus miliarius* he shows how he was mistaken in rating the toxic qualities of very young venomous snakes. During the noonday hour of August 20, 1894, exactly eight days after the birth of a brood of the young ground rattlers, he picked up one and presented the first joint of the little finger of his right hand for a bite. The snake bit with a vengeance, producing a momentary sensation resembling the sting of a bee; at the same time a lightning-like pain seemed to shoot up to the shoulder. In a few minutes the local pain extended to the second joint, the wound became discolored and edema set in. Increased swelling and pain gradually extended to the wrist and forearm. He carefully describes the symptoms which continued to be serious until half past eleven, when he went to bed. By daybreak the swelling had extended well down the right side and upwards, involving the same side of the face. The pectoral region was extremely painful. After 10 A. M. the reaction set in and the symptoms gradually subsided, but an uncomfortable feeling throughout the entire system remained up to thirty-six hours, and the inflammation did not disappear entirely until after three days. He concludes by stating that no remedy had been applied from beginning to end.

The evidence at hand seems conclusive that the venom glands of pit vipers are completely functional eight days after birth, but it seems doubtful that they secrete venom to any extent until some time after the first day.

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[1] SCIENCE, April 2, 1926.

[2] *The American Naturalist*, Vol. XXXII, No. 373, January, 1898.

SYMBOLS FOR MUTATIONS IN MICE

IN an attempt to standardize the symbols used for the mutations in mice, the Mouse Club, at its meeting in New Haven on December 27, 1925, agreed on the following symbols.

The following factors were recognized as orthodox and the symbols appearing herewith were voted into the code.

Agouti series:
- A^y—dominant yellow, A^w—White Bellied Agouti, A—Agouti, a—non-agouti.

Albino series:
- C—Full color, c^{ch}—Chinchilla dilution, c^d—Detlefsen extreme dilution, c—albinism.
- B—black, b—brown.
- D—dark coat, d—dilute coat (blue dilution).
- H—Normal head, h—haemoragic head.
- P—Dark eye, p—pink eye.
- R—Rodded or normal retinae, r—rodless retinae.
- S—Self coat dominant to recessive spotting, s—recessive spotting.
- S^E—Normal size ears, s^e—short ears.
- T—Normal length tail, t—short tail (tailless).
- V—Normal walking or running, v—waltzing.
- W—Black-eyed-white, w—recessive self allelomorph.

The following characters were passed as non-orthodox and will not be accepted until more work has been done upon them, but the symbols here recorded have been reserved tentatively for them.

- F—Normal foot, f—haemoragic foot.
- J—Normal jaw, j—haemoragic jaw.
- K—Normal tail, k—kinky tail.
- DP—Normal pupil, dp—dilate pupil.

Strong's carcinoma factors for immunity, A^{st}—1 factor, B^{st}—2 factor, C^{st}—factor were discussed, but no decision was reached concerning their status.

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EDUCATION IN MANITOBA

THE June 4th issue of SCIENCE contains a review of A. H. R. Buller's Researches on Fungi, Vol. III, the review concluding with the following statement: "Manitoba seems very remote even to an American, yet when an English trained botanist makes it his home and turns out such stimulating and exact work we realize more fully than ever that the man rather