SNAKES--HARMLESS AND POISONOUS

By Dr. A. I. Ostenburger

THE SUGGESTION that many snakes are harmless will perhaps be received with some doubt by many readers, yet it is a fact well-known to herpetologists and herpetological specialists who make a study of reptiles and amphibians—that relatively few of the snakes in the United States are poisonous. In spite of the many stories appearing in the newspapers every summer, there are relatively few deaths each year in the United States as a result of bites of poisonous snakes. Most of the deaths in the world from this cause occur in India, Brazil, and Australia. In Europe, the number is relatively somewhat larger, probably owing to the fact that much of the work of reaping and binding of grain crops is done by hand.

Of the approximately 2,300 known species of snakes occurring in the world, only about 250 species have a poison apparatus well enough developed to render the snakes dangerous. This does not include the sea snakes (really water cobras), or "sea serpents," as they may be rightly called. It may be disquieting to learn that we have with us in this world even so small a number of potentially poisonous species as 250 but as a matter of fact, many of these—perhaps a third—can be disregarded, either because of their very small size or because of their extreme rarity. This leads then to the interesting fact that of all the known species of snakes, less than 7.5 per cent need be considered as dangerously venomous to human beings.

Of the 193 species of snakes found in North America, only twenty-five are poisonous. These are the two species of coral-snake, the copperhead, the cottonmouth moccasin, the two forms of the massasauga, the pigmy rattler, and eighteen species of large rattlesnakes. However, nine poisonous species of the large rattlesnake (genus Crotalus) can be disregarded; three of them occur only on certain isolated islands off the coast of Lower California and Mexico, three occur only near the southern end of the peninsula of Lower California, and the remaining three have extremely local distribution areas. This leaves but sixteen poisonous species that are at all common in North America. Of these, the two massasaugas, the pigmy rattler and three species of the large rattlesnakes are of such small size relatively that they need not be considered. This leaves, then, but ten poisonous snakes that are really important for our consideration. In other words, only five per cent of the North American snakes are to be feared as poisonous.

Technically, our poisonous snakes are of two kinds—the pit vipers, represented by the copperheads, the cottonmouth moccasins and rattlesnakes, and the coral snakes, which really are miniature "cobras." The pit vipers always can be distinguished by the presence of a distinct pit between the eye and nostrils. Our harmless snakes always lack this pit. The snakes of the group including the cobras, on the other hand, generally have no external features that make their easy identification possible. Fortunately for those of us who live in the United States, the coral snakes can very easily be recognized by the bright coloration of black, yellow, and red rings extending around the body. However, not all snakes with black, yellow and red rings are coral snakes. Certain harmless snakes, such as the scarlet-snake (Cemophora) and at least one of the King snakes exhibit the same colors. But in the arrangement of the colors, the coral snakes are unique: the black rings are always bordered on either side by yellow and the colors never occur in any other arrangement. Perhaps enough has been said to substantiate the statement that many of the common ideas regarding the appearance of poisonous snakes do not hold. It is a popular misconception that a snake is necessarily poisonous if it has a triangular-shaped head, or a short and thick body.

There are probably more untrue stories about snakes than about any other single subject in the whole field of knowledge. Of the stories of popular origin which one hears, only an extremely small number are authentic. One hears many weird stories about the hoop snake, yet such a snake does not exist. The blue racer is said to be the fastest serpent but this is untrue. The spreading viper, or puff adder (correctly called the Hog-nose snake, because of the shape of his "nose"), although he hisses and blows when disturbed, does not have a poisonous breath; he does not even have halitosis.

A rattlesnake does not possess a rattle for every year of his life, nor is he rendered harmless by removing the particular pair of fangs that happen to be functioning at any one time. He does not always rattle when disturbed or approached, as is popularly supposed, and he usually does not even strike. Incidentally a rattlesnake cannot strike any great distance—specifically, not over one-half his length under ordinary circumstances and never over two-thirds of his length.

Nor should all snakes be exterminated. Rather it should be emphasized that a large proportion of both our harmless and poisonous snakes are distinctly beneficial. The blue racer, supposedly possessed of unbelievable speed and agility, and indeed thought by many to be poisonous, is entirely harmless and has a distinct economic value to the farmer, and thus to all of us. A large percentage of his food consists of grasshoppers, field mice and other animals that are injurious to man. And so with the bull snake, the so-called chicken-snake, the whip snakes and many other entirely harmless varieties; their food habits make them deserving of the protection of man. Even the much hated rattlesnake has much in his favor, for he lives largely on the very destructive small rodents.

Wilson and Lodge
A great intellectual duel

An address by Josephus Daniels

A COMPARISON of Woodrow Wilson and Henry Cabot Lodge as statesmen and scholars was the subject of the address which Josephus Daniels, former secretary of the navy, made to a large audience of students and faculty members on October 23.

"Woodrow Wilson was the first president to go almost direct from the school room to the White House," said Mr. Daniels. "In the years before and during the war the Democratic party of our country was led by a school master, Wilson, and the Republican party was led by a scholar, Henry Cabot Lodge."

The friction and controversy between these two furnished the most famous duel between intellectuals in the history of our nation. They were directly opposed in their convictions and theories of government.

"Lodge was the most illustrious student in Harvard university during his student years there and before he was thirty was conceded to be the most successful Harvard graduate. At this age he had served both as professor and editor of the International Quarterly and the North American Review."

"At Princeton Wilson was doing the same thing that Lodge was doing at Harvard. Both were preparing to become in 1914 the chief debaters in the most important question of the hour. Both were intellectual aristocrats."

"Lodge was a disciple of Hamilton. He believed that some men were born to..."
ride on the backs of lesser men and that ability imposed the duty of ruling honestly and sincerely for the people. He despised the political idea of gaining personal advantage or of practicing dishonesty.

"Wilson, on the other hand, had been educated in Virginia and applied the doctrines of Jefferson to his beliefs. He became the outstanding exponent of Jeffersonian and Jacksonian principles. Andrew Jackson inspired his chief admiration, for Wilson's philosophy was a philosophy of action. In every crisis of his life he was daring to the point of audacity.

"Lodge saw in George Washington the nationalist patriot. Wilson saw in Washington the Virginia planter, the man who put country above politics and welded together a cabinet composed of men of different views."

Wilson believed that the bulk of the people was the only repository of power. He did not love people in the mass for he had a scholastic aloofness, but he did love people in the righteousness of popular judgment. Perhaps it was because of this variance of their beliefs that they did not meet until after Wilson became president.

"As you see, Wilson and Lodge were then alike in scholarship, learning, experience and scholarly tastes. They differed in political creed.

If you wish to get to the heart of a man test him in the time of youth," Mr. Daniels declared. "Men unfold themselves in college more than at any time of life. I would rather accept his classmates' judgment of a man than that of his business associates.

"The most serious time of life is in the years of college when men measure their fellows by the standards of true worth. The difference in the characters of Lodge and Wilson, as deduced from this method of judging, is again great."

"When Lodge became a candidate for congress on the Republican ticket the Democratic chairman received a large sum for the support of the Democratic candidate. It was sent anonymously but the chairman discovered it had been sent by Lodge's classmates to defeat him. Though he was recognized as an intellectual power by them they never liked him.

"At Princeton Wilson was the most popular student. He had many friends. Never in his life from boyhood to death did he become estranged from any of his early companions. It was only his political friends with whom he quarreled. To his old classmates he turned for advice and aid.

"There comes to every man and every woman a time when he must make an important decision. It is the time of crucial testing. In 1884 the supreme test came to Lodge. The Republican party was then torn by the candidacy of Mr. Blaine for president.

"When this candidacy was announced Lodge said that Blaine was crooked and corrupt, but the Republican party would disgrace itself if Blaine was elected. Lodge was determined to defeat him. The latter however received the nomination and Lodge retired for a month's hunting trip. When he returned he had accepted his party's nomination for congress and was pledged to support Blaine. In the election both went down to defeat.

"Many will excuse this move of Lodge's with the explanation of 'political obligation.' We all know what political obligation is and we have met it often. But there never was a political obligation on the part of Democrat or Republican to support the man he had called corrupt."

"This then is the measure of Henry Cabot Lodge. In the time of test he failed his own conscience. He could not meet the supreme test of life and no matter how bitter he later fought he died a defeated old man."

Woodrow Wilson met his test in 1910 when he was offered the nomination for the governorship of New Jersey. It was given to him by as crooked a set of politicians as was ever in the Democratic party.

"Wilson became governor and immediately came a trial such as no man in our day has had to meet. Only one Democrat, a man named Martin, had entered the primary. He was not a strong party man. Then Jim Smith, with the strong party machine behind him, decided to throw Martin out and put himself in. Wilson refused to desert Martin and his so-called 'disloyalty' to his party caused a furore over the country. Wilson felt it his duty as the party leader to see that candidates get their nominations legally and he stood by his convictions.

"Later when he ran for president he didn't carry a city with a political machine in America. Party politics were against him. But the country people saw a great man standing alone and fighting for a principle. Because in the testing time he had not failed his judgment the people trusted him and proved their trust by electing him.

"The violent opposition between Wilson and Lodge died down during the war years. When the United States was in danger Lodge became a great patriot and supported the president. When the armistice was signed the friction began again.

"When Wilson went to Paris without him as the leader of the opposition party Lodge was offended. They had been such personal enemies that Wilson knew they could not work together. Neither had the grace of forgiving. Such a thing should never happen in public service.

"When Wilson went to Paris he took no senators at all with him for he did not believe that the legislative and executive bodies should function together on a treaty. Since each senator must pass on a treaty he should not help to make it. As for taking Lodge, he knew that if such happened the meeting would become a debate, not a conference.

"When Wilson returned with the covenant of peace the duel which followed between them was such as has never been witnessed in our senate before. The world of that day said that Lodge was the victor and Wilson the vanquished but it is doubtful if history will repeat that judgment. A righteous cause was not lost but it was denied.

"For all his brilliancy and accomplishments Lodge has been left with no place in history. He served only as the second party to a duel.

"When I last saw Wilson it seemed that all the glory of peace had gone from him. People had turned away from idealism into a world of materialism. Yet from this desertion he smiled and told me, "Do not be discouraged, our principles will yet live.'"

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WOMEN AS ENGINEERS

There is a place for women of talent in the engineering profession, in the opinion of Dean J. H. Felgar, of the college of engineering. One woman graduate in civil engineering from this university succeeded at bridge-building and later obtained a good position with the Baltimore & Ohio railroad. Of the three co-eds now enrolled in the college of engineering, one is a junior civil engineer and the other two are freshmen in the school of architectural engineering. Architectural engineering is one of the best fields in engineering for women, according to Dean Felgar.

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FETED

From Italy came conquering Joe Benton, '21 mus., known to Italian opera goers as Giuseppe Bentonelli, to visit his parents, Mr. and Mrs. O. H. Benton of Norman. Half hour lessons in voice at $40 a lesson have made life interesting for Oklahoma's celebrated tenor. He did a variety of things before becoming an opera star, even reading proof on a Paris newspaper. Feted by music-loving Oklahomans who revelled in the powerful, beautiful voice of the Sooner tenor, Mr. Benton gave the first number on the university fine arts program October 2. His performance revealed an opera singer of the first magnitude.

An exceptional linguist, Mr. Benton observed on his return to America: "Americans have the cleanest bodies and the most slovenly language of any people in the world."