

late August and early September, were observed during late September and early October, after prolonged rains, to be putting out new branches which came into flower. Some of the stems of those which were dead formed distinct and strong rosettes from the root stock as lateral branches. If these survive the winter the rosettes will probably form stems and the plants will come into flower a second season, that is, the third season from the rosette stage. It would then be a perennial with the habit of a perennial root stock and annual flowering shoot. Several of the individuals which were putting out new branches in late September and early October were potted in early November and removed to the greenhouse where they have continued to produce new shoots, often slender and crowded, sometimes suggesting "witches' brooms." These branches arise from the old brown stalk which to all external appearance one would consider dead but on cutting the stem chlorophyllaceous tissue is seen. The very dark sky during December and January has been unfavorable for growth or flowering, and perhaps accounts to some extent for the spindling growth and lack of flowers during this period. On some of these plants the new growth occasionally wilts down, indicating perhaps that the old stems are somewhat deficient in conduction. After reading Mr. Gates's article (Jan. 24, 1913) I stepped into the greenhouse to see my perennial *Oenotheras* and lo, there was one flower.

This plant (of *Oenothera nutans*) continued to flower in the greenhouse until the middle of April when it was transplanted into the garden. The cold weather following proved to be too great a change from the warm air of the greenhouse and the stems died to the ground, but a small rosette which had formed from the root stock remains alive to this day (May 2). Three of those individuals which formed rosettes during the autumn and were kept over in the garden or in a cold frame have been transplanted to the garden. They are doing well and will probably produce stems and flowers this summer. These individuals, therefore, of *Oenothera nutans* have taken on a perennial habit.

These two species, No. 2, *Oenothera nutans* Atkinson and Bartlett, and No. 1, *Oenothera pycnocarpa* Atkinson and Bartlett are described in the May number of *Rhodora*, 1913.

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THE LOWER CALIFORNIA PRONGHORN ANTELOPE

THE Pronghorn of Lower California has recently been separated by Mr. E. W. Nelson as a sub-specific race. (*Proc. Biol. Soc. of Wash.*, Vol. 25, page 107.) The characters given have to do mostly with color and color pattern, while the horns are mentioned as shorter, rougher, more upright and less diverging than in either of the other forms, *americana* and *mexicana*. No mention is made of skull characters.

A fine series of six adult males and several females were recently sent to me from California, L. C., the type locality of the new form. One of these males is now in the collection of the Biological Survey at Washington; the others are in the Museum of Comparative Zoology.

I have not compared the skins of these specimens, but careful measurements of the six skulls do show a real divergence when compared with five large male specimens from the Laramie Plains, southeastern Wyoming, in the Museum of Comparative Zoology. They are on an average longer in the face, and considerably narrower. The most significant measurements are: length of nasals, length of anterior nares, and smallest width between orbits. The nasal length of the California animals runs from 101 to 110 mm., while the Wyoming specimens show from 84 to 97 mm. Likewise the width between orbits scarcely overlaps in the two series. An arbitrary index of nasal length plus length of anterior nares, divided by width between orbits, gives for the *peninsularis* series 1.73, and for the *americana* series 1.51.

The occipito-nasal length is very much more uniform in the series of *peninsularis* than in that of *americana*, and is somewhat greater.

One specimen from Calmali, original No. 65, shows such an abundant horn development that it ranks fifth largest as to length of horn in Rowland Ward's list (sixth edition). The horns, sixteen and one eighth inches long, show a remarkably divergent tendency, there being seventeen and one half inches between them at the fork. The base measurement is six and one quarter inches, and the general form is clean and symmetrical, not stumpy, knobbed and aberrant-looking like some of the others from the same locality. There seems to be, however, in all the California horns a tendency to a very sharp angular bend at the terminal portion, instead of a gentle or even curve. Therefore this new race of Pronghorn has a characteristic skull modification and can at times produce fine typical horns, in spite of its seemingly unfavorable environment.

The type locality of *A. americana* is an indefinite one and is referred to the Plains of the Missouri. The five *americana* skulls used for comparison were taken near Percy, Wyoming, and are Nos. 43, 46, 49, 50, 52 in the Museum of Comparative Zoology.

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THE AMERICAN PHILOSOPHICAL SOCIETY

THE annual general meeting of the American Philosophical Society was held in the rooms of the society in Philadelphia, April 17 to 19, inclusive, and constituted a most notable series of sessions. There were a large number of papers presented, their general character being of a high order of merit and the scope of subjects included wide.

The meeting was opened on Thursday afternoon, President W. W. Keen, LL.D., in the chair, when the following papers were read:

The Biographies of Suetonius: JOHN C. ROLFE, Ph.D.

The Etymology of the Word "Ill": HERMANN COLLITZ, Ph.D.

While most etymologists agree in regarding the word "ill" as a loan word from Scandinavian, no plausible etymology has as yet been given of the old Norse word ("illr") from which it is derived. The traditional etymology of the latter word, identifying it with English "evil," is untenable, for

phonetic reasons. Both the form and the meaning of this word, however, may be accounted for by regarding it as the Scandinavian equivalent of the English word "idle."

The Treaty Obligations of the United States relating to the Panama Canal: CHARLEMAGNE TOWER, A.B., LL.D.

Former Ambassador Tower discussed the basis upon which the Hay-Pauncefote treaty was concluded with Great Britain, and pointed out the legal obligation of the United States arising therefrom. He went back to the earliest discoverers and navigators and brought up to the present time the history of the governments of Central America, to show our connection with the enterprise of constructing the canal.

He quoted the Clayton-Bulwer treaty, signed in Washington in 1850, by which the governments of the United States and Great Britain declared that neither would ever obtain or maintain any exclusive control over the ship canal, would fortify or colonize, or exercise any dominion over Nicaragua, Costa Rica, the "Mosquito Coast" or any part of Central America.

Also, that neither Great Britain nor the United States would take advantage of any intimacy or alliance that it might have with any government through whose territory the canal should pass, to acquire or hold any rights or advantages in regard to commerce or navigation which should not be offered on the same terms to the citizens or subjects of the other.

By the Hay-Pauncefote treaty of 1901, Mr. Tower said that, being desirous to facilitate the construction of a ship canal to connect the Atlantic and Pacific Oceans, by whatever route might be considered expedient, and to remove any objection which might arise out of the Clayton-Bulwer treaty to the construction of such canal under the direction of the United States, without impairing the general principle of neutralization, the two nations agreed that the Hay-Pauncefote treaty should supersede the former treaty.

It was agreed also that the canal should be built by the United States, which should enjoy the exclusive right to provide for the regulation and management of it. To make the understanding between the two nations plain, the following specific stipulation was entered into:

"The United States adopts as the basis of the neutralization of such ship canal, the rules substantially as embodied in the Convention of Constantinople, for the free navigation of the Suez Canal, and further, 'The Canal shall be free and