

Jesus, Hypatia, Bruno, Joan of Arc—the last mentioned burned, not as a captive, but as a sorceress.

Hence Mr. Arthur MacDonald, Specialist of the Bureau of Education on the Relations of Education to Crime, in his useful handbook just published by the Bureau, entitled "Abnormal Man," correctly defines such a man as one whose "mental or moral characteristics are so divergent from those of the ordinary person as to produce a pronounced moral or intellectual deviation." Any such deviation disturbs the bourgeois, offends good society, and brings upon itself the condemnation of the ministers of the law and the popular religion of a well-ordered community. The "abnormal men" include enthusiasts, reformers, men of genius, idiots and professed criminals. Mr. MacDonald deals with all these misgrowths with impartial hands, and presents a great and valuable mass of material for study about them, drawn from many writers on sociology and anthropology. His book is, therefore, an extremely useful contribution to our knowledge of these curious beings.

EXTENSION OF THE DAKOTA STOCK.

An interesting proof of the great value of linguistics in the study of ethnography is offered by the investigations of various observers into the extension of the Dakota or Siouan linguistic stock.

It was long supposed to be confined to the northwest, with an extension to the south among the Osages. The Mandans of the Missouri River spoke one of its dialects, and George Catlin, the artist, more than fifty years ago, expressed the opinion that they had migrated westward from the upper Ohio valley or farther east. But it was not until Mr. Horatio Hale, by an examination of the language of the tribe of Tuteloos, on the Roanoke River, in Virginia, proved that they spoke a clear dialect of the stock, that proof was at hand to show that portions of them lived in historic time on the Atlantic seaboard, and were encountered there by the doughty explorer, Captain John Smith.

There is some reason to believe that the Catawbias of the Carolinas are another branch; and in his late address before the Section of Anthropology of the American Association, Mr. James O. Dorsey offered evidence which places beyond doubt the supposition that the Biloxis, on the Gulf shore of Louisiana, are a colony of the same stock. He further advances the opinion, drawn from the nature of the linguistic changes which have taken place, that about 1,500 years have elapsed since these and the main body of the Dakotas severed their relations.

BIRDS WHICH SING ON THE NEST.

BY MORRIS GIBBS, KALAMAZOO, MICH.

AMONG birds, the females do not sing, and although many species have musical call-notes and agreeable tones in conversation, which are shared in by both sexes, still the true song is only rendered by the male bird. I am sincere in saying that the lady bird talks more than her mate about the house, but I will admit that when away from home she is very discreet in this respect. In attending to her duties of incubation she is very quiet, and it is seldom that a note is heard from her while on the nest. It has even been said that all birds are silent when incubating, so as to avoid observation. However, although most species are quiet when setting, there are a few which chirp loudly when so engaged, and some even burst into exuberant song.

Few observers are aware how assiduous are the attentions of the two birds to one another during incubation,

and the credit which is due to the father-bird in his devotion in covering the eggs in his mate's absence is not allowed him.

Of course, when a bird is heard singing on the nest we know that the notes come from the male, but many young observers are inclined to attribute the song to the female. Another source of error in failing to identify the sex occurs with those species in which the singing male assumes the plumage of the female until the second or third year.

The chipping sparrow sometimes sings his chattering refrain while upon the eggs. Yellow warblers are not rarely heard singing from the nest, but one has to wait patiently in a neighboring copse, at the proper season, in order to hear, see and be convinced.

I have once heard the Maryland yellow-throat's song from its concealed nest in the grass; in fact, I found the nest, from hearing the peculiar notes, almost at my feet. Several times the song of the house wren has reached me, coming from the cavity where the old bird was sitting solacing himself in his gloomy nesting spot.

Once, each, I have heard the notes of the black-billed cuckoo, scarlet tanager, orchard oriole, goldfinch and the hermit thrush, the latter the only thrush whose song has positively reached me from the nest. One would think that the brown thrush, cat-bird and robin, as great singers, would burst forth on the nest, but it must be borne in mind that these thrushes all prefer higher perches for singing, while the hermit is a ground nester and often sings on the ground.

But of all the species which are musical while setting, the warbling vireo heads the list, both for persistence and for beauty of song, according to my note-book. Anyone can listen to the song of the warbling vireo on the nest if the trouble to find a nest with eggs in May or June is taken. For when the mate takes his trick keeping the eggs warm, he cheers himself, and enlivens the surroundings by pouring forth his rippling, inspiring melodious warble. I have heard him sing from the nest in early morning; in the hottest part of the day, and in the early twilight, and I have heard him issue as many as twenty bursts of song during one spell on the nest, and have discovered the nest on more than one occasion by the sweetly modulated tell-tale song.

These ten species are all the birds which I have found to sing while on the nest.

—The sixth annual meeting of the Geological Society of America will be called to order at 10 o'clock A. M. Wednesday, Dec. 27, in the Hall of the Boston Society of Natural History, corner of Boylston and Berkeley streets. Prof. William H. Niles, the President of the Natural History Society, will welcome the Geological Society. It is proposed to hold the sessions of Thursday at Harvard University, in Cambridge. Titles and abstracts of papers should be sent to the Secretary immediately, as it is desired to issue the list of papers not later than Dec. 12. Matter for the programme distributed at the first session must be in the Secretary's hands by noon of Tuesday, Dec. 26. Until Dec. 22, the address of the Secretary will be Rochester, after that date at The Thorndike, on Boylston street, Boston. Excellent facilities will be given for use of lantern illustrations. In place of the formal lecture on Wednesday evening, it is proposed to hold a regular session for reading of papers. Following an early adjournment there will be an opportunity for social introductions. On Thursday evening the annual dinner of the Society will be held, probably at The Thorndike. No special railroad rates are obtainable. "Holiday rates" are given during the week on some lines.