for the possible benefit of an acre of corn during the crop season would be equivalent to 1 horse-power for 22 seconds; and the heat evolved by $1,000 worth of radium on an acre of land in 100 days would be less than the heat received from the sun on one square foot in 30 seconds.

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SPECIAL ARTICLES

NEW REPTILES FROM THE TRIAS OF ARIZONA AND NEW MEXICO

BEGINNING the later part of March, 1914, the University of Wisconsin paleontological expedition spent two months in Arizona and New Mexico collecting Triassic vertebrates. The time was divided chiefly between two localities, Wingate, New Mexico, nine miles east of Gallup, and along the Little Colorado River some fifty miles northeast of Flagstaff, Arizona. In both localities material was collected which should add substantially to our knowledge of the Triassic vertebrate faunas of the west.

Conspicuous among the collections are Phytosaur remains of various types. One nearly complete skull, apparently the largest yet discovered, will probably prove to be a new form.

One of the most interesting finds from the Wingate region is that of a nearly complete pelvic girdle of distinctive form. The sacrum consists of two closely united vertebræ with moderately biconcave centra. The neural arches are massive and are surmounted by stout, comparatively short spines with considerably expanded tops. The sacral ribs unite broadly with the arch and centrum, each rib being supported by a single vertebra. Distally the ribs are greatly expanded in an antero-posterior direction and are considerably thickened below and apparently down curved along the inner side of the ilium.

The upper portion of the ilium is expanded both laterally and in an antero-posterior direction into a broad, horizontal shelf. The ischia meet along the median line in a trough-like union that extends back in a horizontal tongue-shaped process. The pubes take a comparatively small part in the floor of the pelvic opening as the lower anterior portion of these elements extends directly down in a broad plate-like expansion at right angles to the vertebral column. The lower outer corner of the pubic expansion is swollen into a foot-like process, possibly to bear a portion of the weight of the creature when at rest.

All three elements enter the imperforate acetabulum in a firm union. The acetabulum is large and deeply concave and set off by a prominent raised boundary. It is directed out and down and considerably back. The girdle measures about 450 mm. from the top of the sacral spines to the lower border of the plate-like expansion of the pubis. The greatest width, at the lateral expansion of the upper portion of the ilia, is approximately 370 mm.

The massive construction of the girdle has suggested the name *Acompsosaurus wingatensis* for this new form. It is to be hoped that other material in the collections will add a knowledge of other parts of the skeleton. Figures and a more complete description of *Acompsosaurus wingatensis* will follow in another place.

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SOCIETIES AND ACADEMIES

THE BIOLOGICAL SOCIETY OF WASHINGTON

THE 539th meeting of the society was held in the Assembly Hall of the Cosmos Club, Saturday, April 3, 1915, called to order by President Bartsch at 8 P.M., with 65 persons present.

On recommendation of the council, Mr. Ben Miller was elected to active membership.

Under heading Brief Notes, Dr. L. O. Howard called attention to a wasps' nest he had lately seen which was marked by a conspicuous blue streak. In making this nest the wasps had evidently made the blue streaked part out of a blue building paper, instead of making their pulp from the natural wood. Messrs. Bartsch and Lyon referred to the red-headed woodpeckers in the grounds of Freedmen's Hospital, stating that a few birds had remained during the winter of 1914–15, though none had wintered during 1913–1914. The species is abundant in the hospital grounds this spring. Messrs. Bartsch and Bailey