

hardly shining; color pale red-brown, varying to whitish. Female with very numerous waxy filaments projecting from the surface; gland-orifices minute, circular. Antennæ 8-jointed, the last joint very short, and bearing a few straight hairs, as in *P. dendrobii*. Third joint variable, sometimes rather longer than the second, sometimes decidedly shorter. Legs absent. Anal ring apparently without hairs, but with a strong chitinous projection on each side. Mouth-parts well developed.

On boiling the insects in soda, the scale was entirely dissolved, and the insects became colorless and transparent.

T. D. A. COCKERELL.

Agricultural Experiment Station, Las Cruces, New Mexico, Aug. 29, 1893.

A SMALL TRAGEDY.

In contrast to the "snake story," given in *Science* (Jan. 20, '93), the following incident may be of interest:

Several months ago a small spotted snake was captured and placed in the "snake box;" it is thought to be a common "milk snake," and is, perhaps, twelve or fourteen inches in length. It was somewhat injured when captured; the boys say its back was broken. It is quite evident that it was hurt, from the depression or deformity at one point, and, from this portion to the extremity of the body, it had great difficulty in shedding its skin. For days and days it was, as it were, half dressed, or undressed, as we may choose to consider this condition.

A few days ago another snake was placed in the same box—what kind it was I am unable to say—but it was a small (not more than eight or ten inches in length), agile, quite slender little thing, of a plain slate or dove color.

What was our surprise when it was discovered that the spotted snake was in process of swallowing the smaller one. It was horrible, and yet we could not refrain from observing it. In a very short time the little snake entirely disappeared, even to the tip of the tiny tail, and the spotted snake appeared to have enjoyed the meal. The boys claim that it has eaten several small toads; it is now in company with a snake considerably larger than itself. They seem disposed to be "friendly," thus far, and no doubt enjoy each other's society.

Mrs. W. A. KELLERMAN.

Columbus Ohio.

THE CACKLE OF HENS.

It is claimed that the cackling of hens "is very liable to attract the attention of any ovivorous bird or beast to the probable presence of an egg."

It is quite probable that ovivorous birds or beasts may understand that the hen's cackle is the announcement of the presence of an egg, but the hen is wise even in her apparent imprudence. She lets it be known that an egg is somewhere, but she does not tell where. How many, many times she sends the farmer's wife or children on a hunt for eggs they fail to find. Of course, when hens are well cared for, and ample and sufficient nests are provided, they lose their cautiousness, but when they are left to take care of themselves they will "steal" their nests, as the people say; that is, they will go off in the weeds, or seek some sheltered spot, and there make a nest. When an egg is laid, in a "stolen," nest, the hen makes a quick run, quite a distance from her nest, before she makes a sound, so that her cackle would not discover her eggs to any enemy, for one gropes, as in the dark, in search of stolen nests, no matter how loud may be the cackle.

Mrs. W. A. K.

Columbus, Ohio.

THROWING STICKS.

I HAVE just made a discovery that has given me great pleasure. In the Anthropological Building at the World's Columbian Exposition is a Cliff Dweller's Exhibit, exposed by the State of Colorado. Other loan exhibits are in the building from that region, and outside is an attractive realistic representation of the industrial products of the same people. In looking carefully through the Colorado State alcove I discovered two examples of the Mexican atlatl or throwing stick. The shaft is a segment of a sapling of hazel wood. At the distal end is a shallow gutter and a hook to receive the end of a spear shaft. At the proximal end or grip, in the more perfect specimen, about four inches from the extremity is a loop on either side of the stick, one for the thumb, the other for the fore-finger. The remaining three fingers would be free to manipulate the spear shaft. These loops were made by splitting a bit of raw hide, sliding it down the proper distance on the

JUST PUBLISHED.

Imp. 8vo., Cloth, 430 pp. By Kegan Paul, Trench, Trubner & Co., London.
Price, 31s. 6d. (less discount.)

Comparative Philology of the Old and New Worlds in its Relation to Archaic Speech. By R. P. GREG., Esq., F. S. A., F. G. S.

With an introduction on Race and Language, giving a resume of the opinions of many of the principal writers on those subjects, accompanied by copious vocabularies and numerous tables of comparison for similar words and their cognate forms as for most of the chief families of languages, both ancient and modern, conveniently arranged for purposes of comparison.

An immense number of words are given, and especially for Turanian (including Chinese, Accadian and Egyptian), as well as for African and American ones.

The general results tend to show that there still exists in most languages, whether dead or living, a certain element of what may be called an Archaic Residuum, more or less common to all.

You Ought to Read

The Popular Science News and Boston Journal of Chemistry.

Only one dollar till July, 1894.

A scientific newspaper for unscientific readers.

Address POPULAR SCIENCE NEWS CO.,

5 Somerset St., Boston, Mass.

PISO'S CURE FOR
CURES WHERE ALL ELSE FAILS
Best Cough Syrup. Tastes Good. Use in time. Sold by druggists.
CONSUMPTION

ABOUT
MAGIC LANTERNS
ASK US
WE MAKE THEM.
J. B. COLT & CO.
16 BECKMAN ST. 189 LA SALLE ST.
NEW YORK CHICAGO, ILL.

BUILDING BOOKS.
DRAWING INSTRUMENTS.

1893 Catalogue of Books on Building, Painting, and Decorating, also Catalogue of Drawing Instruments and Materials, sent free on application to

Wm. T. Comstock,
23 Warren St., New York.

RESTORE YOUR EYESIGHT

Cataracts, scars or films can be absorbed and paralyzed nerves restored, without the knife or risk. Diseased eyes or lids can be cured by our home treatment. "We prove it." Hundreds convinced. Our illustrated pamphlet, "Home Treatment for Eyes" free. Don't miss it. Everybody wants it. "The Eye," Glens Falls, N.Y.

THE WINNIPEG COUNTRY;

OR,

ROUGHING IT WITH AN ECLIPSE PARTY.

BY

A. ROCHESTER FELLOW.

(S. H. SCUDDER.)

With thirty-two Illustrations and a Map.
12°. \$1.50.

"This is a sprightly narrative of personal incident. The book will be a pleasant reminder to many of rough experiences on a frontier which is rapidly receding."—*Boston Transcript*.

"The picture of our desolate North-western territory twenty-five years ago, in contrast with its civilized aspect to-day, and the pleasant features of the writer's style, constitute the claims of his little book to present attention."—*The Dial*.

N. D. C. HODGES, 874 Broadway, N. Y.

THE CHEAPEST AND BEST
Photo ENGRAVING CO.
67 PARK PLACE, NEW YORK
ENGRAVING FOR ALL ILLUSTRATIVE AND ADVERTISING PURPOSES