

## THE CHACO IDIOMS.

STUDENTS of American languages are laid under further obligations to Mr. Samuel A. Lafone Quevedo by his recent publications on the Mbaya dialect, and those of the Matacos and Mataguayos. They are published in the Boletín del Instituto Geográfico Argentino, Tom. XVII. The last mentioned is drawn from the vocabularies of the traveler d'Orbigny, and is prefaced with a valuable introduction. The Mbayas are the Guaycurus of the older writers.

The tribes of the Gran Chaco have remained in the utmost entanglement and doubt until the numerous and careful studies of Lafone Quevedo have enabled us to classify them with a close approach to correctness. Here, as elsewhere, when it becomes possible to compare in detail a number of tongues, we find that many of their dissimilarities disappear, and the supposed diverse stocks melt into related groups of dialects.

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## ASTRONOMICAL NOTES.

WE learn from the February number of *Popular Astronomy* that Dr. See and Mr. Cogshall have discovered a number of new southern double stars at the Lowell observatory in the city of Mexico. Five objects are enumerated. Strange to say, three of these objects are bright stars with very faint companions of about the 13th magnitude, all situated at pretty nearly the same distance and position angle with respect to the principal star. The *a priori* probability of such a triple discovery is so small that we suspect the possibility of the observer's having been misled by a 'ghost.' We shall look with interest for a confirmation of these discoveries, if there is any other large telescope far enough south to examine these objects with any hope of success. Possibly the new McLean telescope, soon to be

mounted at the Cape of Good Hope, will be able to show these double stars.

THE *Astronomische Nachrichten* of January 15th contains an article by Dr. F. Cohn, in which he gives a new explanation of the systematic errors of heliometer measures. It has been found by various astronomers that measures of small distances made with this instrument require positive corrections. Dr. Cohn now points out that these peculiarities can be explained if we assume that all distances, both large and small, require the same systematic correction. This idea leads to the simplest explanation of these puzzling systematic errors that we have yet seen.

IN the January 26th issue of the same journal Dr. Wilsing considers the question of the absorption of light in astronomical objectives, and shows that, if the size of objectives be continually increased, a point is soon reached where the absorption more than counterbalances the increase in the light-gathering power. If the size of the objective be increased beyond this point the quantity of light reaching the focal plane will diminish.

WE have received a Doctor's dissertation by W. Ebert, in which the author deals with the possible disruption of the Solar System by the passage through it of a star having very great velocity. He comes to the conclusion that such an event would probably not produce disturbances of any great importance, unless one of the planets should happen to lie very near the course of the passing star.

H. J.

## SCIENTIFIC NOTES AND NEWS.

M. A. CHATIN has been elected President of the Paris Academy of Sciences in succession to M. A. Cornu. M. M. Cornu has been elected President of the Botanical Society of France.

M. FAYE, the eminent astronomer and meteorologist, who is now eighty-three years