character represented by the absence of all factors. But in avoiding this anomaly, calculation is made more difficult and the only object gained is to lend an unwarranted appearance of reality to what is merely a convenient formula for expressing the observed relations.

G. N. COLLINS

WASHINGTON, D. C.,
June 30, 1913

SWEDENBORG

TO THE EDITOR OF SCIENCE: At the top of the second column of page 100 of SCIENCE for January 17, 1913, I note the following statement by one of your correspondents: "But Swedenborg would be laughed out of a modern court of science."

I find in a brief Life of Swedenborg, by J. Stuart Bogg (Frederick Warne & Co., London and New York, 1911), that Swedenborg was a wide traveler, a friend of learned men, a student of astronomy, metallurgy and anatomy, an inventor, a practical-minded, useful member of the Swedish House of Nobles, assessor in the Royal College of Mines and an author of numerous scientific works. Among his inventions were a plan for a submarine boat and a plan for a flying machine based on the now known principles of heavier-than-air machines. He declared that a very slight force would be sufficient to keep such machines up, but he knew nothing, of course, of gasoline motors. In the domain of astronomy he originated a method for finding terrestrial longitude by means of the moon. In the House of Nobles he took an active interest in such matters as the finances of the country, the liquor traffic and the mines. Among his scientific publications were works on chemistry, metallurgy, astronomical methods, observations connected with the physical sciences, and the economy of the animal kingdom. Until he was fifty-five years of age he was wholly occupied in these scientific and practical pursuits and was respected by scholars and patrons of learning at home and abroad.

In a prospectus which lies before me of a new edition of Emanuel Swedenborg's Scientific Works, I see that "Swedenborg's discoveries and theories in various departments of science have awakened an increasing interest among specialists during the past century," that they led the Royal Swedish Academy of Sciences to appoint a Swedenborg committee in 1902, and that this academy had in 1907 already published Vol. I. of the new edition in the original Latin and Swedish.

In view of these facts it seems strange to me that any one should affirm that "Swedenborg would be laughed out of a modern court of science." Is it possible that those who would laugh him out have never read his scientific works at all? If so, perhaps they could profitably reflect on the following quotation from Herbert Spencer:

> There is a principle which is a bar against all information, which is proof against all argument, and which can not fail to keep a man in everlasting ignorance; this principle is contempt prior to examination.

ANDREW H. WARD

A NEW VARIETY OF JUGLANS CALIFORNICA WATSON

THERE recently appeared in these columns a brief note by N. B. Pierce entitled "A New Walnut." It included a very brief general description which could not be accepted as a diagnosis in the usual meaning of that term. Yet Dr. Pierce stated that he thought it desirable to give the new form a name at that time and that he intended to publish a full description later. But Dr. Pierce did not see fit to cite the diagnostic description of this form which was published (but without reference to a scientific name) in Jepson's "Silva of California."[1] Had he done so the name he proposed would stand, even though unsatisfactory to one who has studied the form carefully.

However, I take it that *Juglans quercifolia* Pierce is a *nomen nudum* and that it still remains to publish a scientific name and diagnosis *together*. Therefore, I take pleasure in recording the same as follows:

New Variety: Juglans californica var. *quercina*. Diagnosis by the undersigned in

[1] Jepson, W. L., "Silva of California," Univ. Calif. Memoirs, Vol. II., 1910, p. 54.